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Childhood Poverty in Vietnam: A Review



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1. Introduction

Childhood poverty is a complex, multi-dimensional and context-specific problem. This complexity of childhood poverty is not easily captured by available quantitative data. Rather than trying to break new ground, this paper aims to systematically review the literature on child poverty in Vietnam in the context of a more general debate on poverty in Vietnam. Discussion will focus on quantitative perspectives and is broadly divided into four areas: health, nutrition, education and child labour. The overall main findings from literature can be summarised as follows:

Economic growth has had a large impact on income poverty, including from the point of view of children, but its effects are not strongly felt in all dimensions. It has not played an important role in reducing child malnutrition, at least in the 1990s (Glewwe et al. 2002) but has brought down child labour significantly (Edmonds and Turk 2002).

Despite broadly improving indicators, there are signs of growing disparities. Most evidence points to a growing divergence in rates of child mortality, malnutrition and access to education between poor and non-poor, rural and urban children and between ethnic Vietnamese and ethnic minorities (Wagstaff and Nguyen 2002; Thang and Popkin 2003; Bhushan et al. 2000).

Child labour continues to appear to have negative effects, even if not necessarily in all dimensions of child deprivation studied. It does not appear to have short-term effects on child health, but the risk of illness increases in the long-term (O'Donnell et al. 2004). Children who work are less likely to attend school and to have lower education attainment, although working in childhood appears to lead to higher earnings (Beegle et al. 2004).

This evidence is largely based on a small number of surveys with relevant indicators to childhood poverty. These include the Vietnam Living Standard Survey (VLSS) 1993-1998; the bi-annual Vietnam Household Living Standard Survey (VHLSS) 2002-2004-2006; the Demographic and Health Survey (DHS) 1997-2002; the Multiple Indicator Cluster Survey (MICS) 1995-2000-2005; the UNICEF baseline survey on the situation of children and women in ten targeted areas; and finally the Young Lives longitudinal panel data survey which has been tracking 3,000 children since 2000. Of all these surveys, only the VLSS and the VHLSS are panel data surveys and only the Young Lives survey is longitudinal. The rest are all cross-sectional data.

Compared to the voluminous studies on poverty in Vietnam, little is known about the extent and causes of childhood poverty and how childhood poverty affects later outcomes. Based on results from the literature review and data analysis, a number of key issues appear under-researched. We highlight the need for more analysis to better understand:

- how poverty in childhood affects children's later outcomes
- how poverty is transferred from one generation to another
- which children are moving out of childhood poverty and why
- how much intrahousehold resources are allocated to children
- how macro-policies can impact childhood poverty and well-being in Vietnam.

The report is organised as follows. Section 2 briefly sketches the context of socio-economic reform in Vietnam. Section 3 summaries some key datasets with respect to sample size, sampling frame and relevance to analysis of childhood poverty. Section 4 talks about

methodological issues in measuring childhood poverty while section 5 presents trends over time and across regions. Section 6 surveys existing literature and section 7 concludes by identifying gaps and offering suggestions.

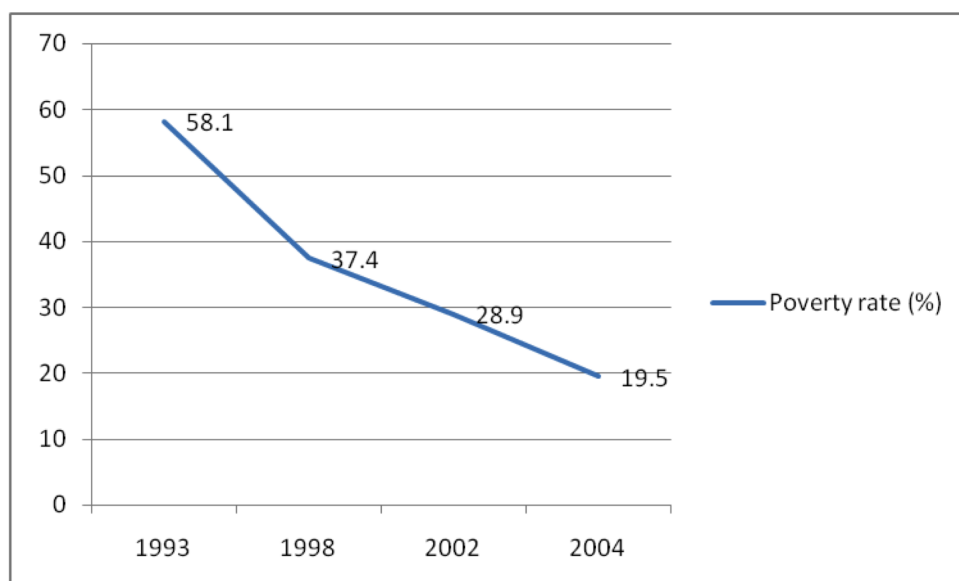
2. Socio-economic picture since ‘Doi Moi’

The *Doi Moi* reform process which started in 1986 has moved Vietnam away from a centrally-planned towards a market-oriented economy. With decollectivisation of agriculture and the redistribution of land, food production increased dramatically from 19.5 million tons in 1988 to 39.5 million tons in 2005.

A land law approved in 1993 has also played a substantial role in reducing poverty. It has allowed for land use rights to be legally transferred, exchanged, mortgaged and inherited. There is some evidence that land allocation has become more efficient as a result (Ravallion and van de Walle 2003). The USA lifted its trade embargo on Vietnam in February 1994, opening many trade and investment doors. Vietnam’s growing integration into the global economy is indicated by the signing of a bilateral trade agreement with the USA in 2001 and joining the World Trade Organisation (WTO) in 2006.

Over the past two decades Vietnam has achieved considerable success in poverty reduction and rapid economic growth. In the period 1990-2004, GDP tripled with an average annual growth rate of 7.5 per cent. The poverty rate – as measured by per capita consumption – dropped from 58.1 per cent in 1993 to 19.5 per cent in 2004 (Figure 1). As a result, around 24 million people were lifted out of poverty. The poverty gap measure indicates that those who are still in poverty are becoming less poor. In the same period there was an increase in consumption, taking the average poor person from 32 per cent below the poverty line to around four per cent.

Figure 1. *Poverty rate in Vietnam, 1993-2004*



Source: VLSS 1992/93, 1997/98; VHLSS 2002, 2004.

Even though relative inequality as measured by the Gini index for per capita expenditure has shown only a modest increase (from 0.33 in 1993 to 0.37 in 2004), the gaps in poverty reduction by rural-urban, by region and by ethnic groups have widened. The Northern mountainous area, the Northern Central Coast and the Central Highlands all have high poverty incidence rates of over 30 per cent. Together, these three regions are home to nearly 57 per cent of the poor population. Poverty is increasingly concentrated among ethnic minority groups. Between 1993 and 2004, the poverty rate of ethnic minorities reduced from 86 per cent to 61 per cent compared to a drop from 54 per cent to 14 per cent for the Kinh-Hoa (majority) group. The gap in welfare between the majority and the rest has grown over the decade, resulting in a situation where ethnic minorities account for 39.3 per cent of all poor people, despite representing only 12.6 per cent of the total population.

Figure 2. *Poverty rate by rural-urban residence, 1993-2004*

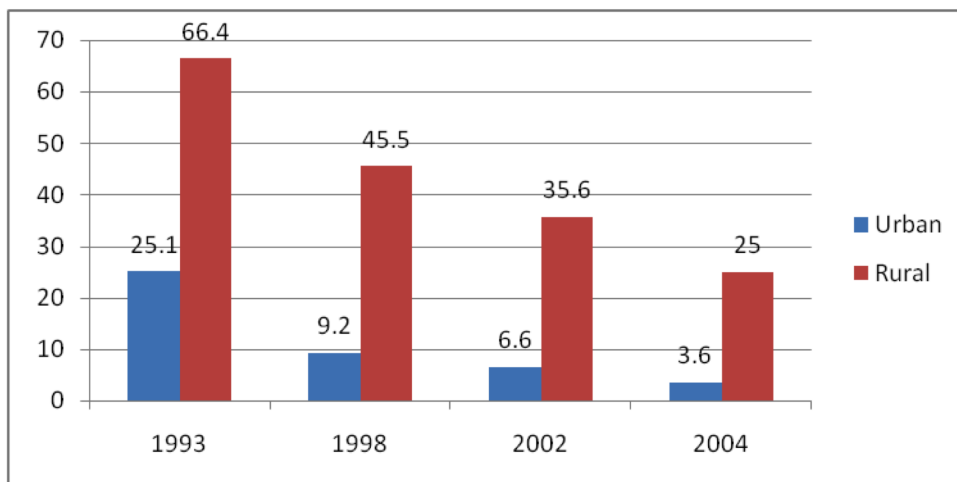


Figure 3. *Poverty rate by region, 1993-2004*

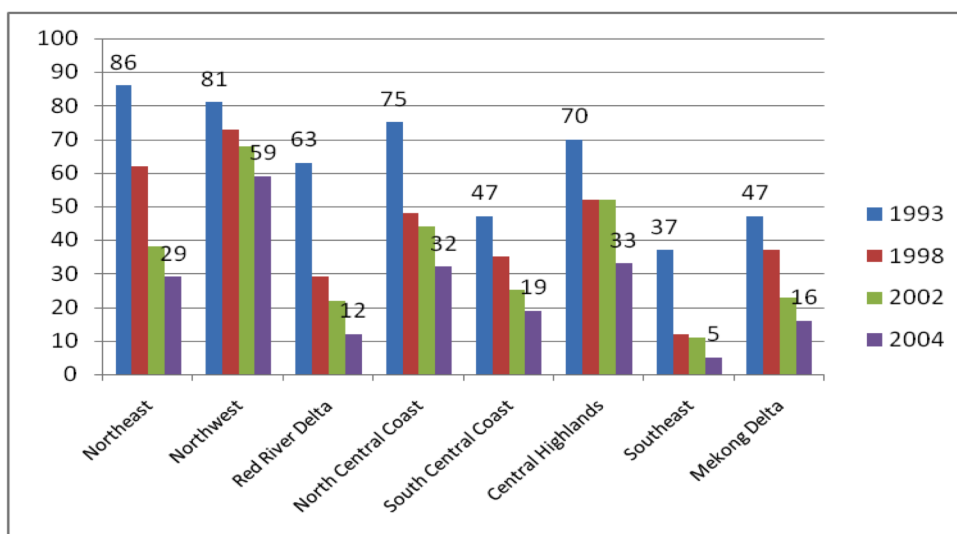
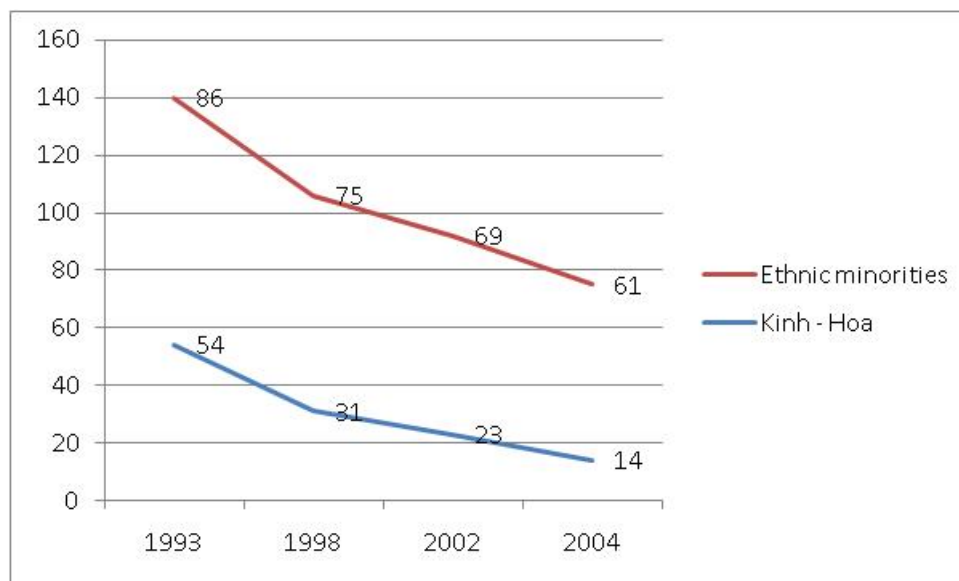


Figure 4. Poverty rate by ethnicity, 1993-2004

Source: VLSS 1992/93, 1997/98; VHLSS 2002, 2004.

These diverging trends in poverty are taking place in spite of various assistance programs to improve the living standards of the poor. There are two national targeted programs which are particularly relevant. The first is the Hunger Eradication and Poverty Reduction (HEPR) programme. Coordinated by the Ministry of Labour, Invalids and Social Affairs (MOLISA), it includes policies on free health care, tuition fee exemptions, special support to ethnic minorities, support to vulnerable people, housing support and support with production tools. It also includes eight projects on credit, agricultural extension, infrastructure, production assistance, training of cadres, settlement of migrants into new economic zones, resettlement in poor communes and developing models for replication. The second is Program 135 which is managed by the Committee for Ethnic Minorities and Mountainous Areas (CEMMA) and focuses mainly on infrastructure investments in extremely disadvantaged communities. According to a World Bank report (*Vietnam Development Report 2007*), the effectiveness of these various programmes differs considerably. It is high in the case of tuition fee exemptions, but the outcome of other interventions is more uncertain. While local identification of the poorest households is reasonably well done, the distribution of programme inputs across localities is not necessarily commensurate with needs.

Vietnam has also done well on a number of social indicators (Table 1). In the field of education, Vietnam continues to make impressive gains in access at all levels, to build more schools and to recruit more teachers. A system of targets is in place to reward and recognise those provinces that mobilise children to attend schools. These successes have shifted the focus of the reform agenda towards improving the quality of education and reaching remaining pockets of out-of-school children. Public spending on education has increased steadily, not only due to overall growth in the economy, but also relative to other sources of state expenditure, reaching 18 per cent of the budget in 2005 (*Vietnam Development Report 2007*).

Table 1. *Social Indicators 1993-2004*

| Non-Income Indicators | 1993 | 1998 | 2002 | 2004 |
|--|-------------|-------------|-------------|-------------|
| Education | | | | |
| Primary Enrolment Rate (Net) | 87 | 91 | 90 | 95 |
| Lower Secondary Enrolment Rate (Net) | 30 | 62 | 72 | 90 |
| Upper Secondary Enrolment Rate (Net) | 7 | 29 | 42 | 63 |
| Health | | | | |
| Health insurance and free health care card | n/a | 16 | n/a | 38 |
| Access to Infrastructure | | | | |
| % of rural population with access to a health centre | 93 | 97 | 99 | 100 |
| % of population with access to clean water | 26 | 41 | 49 | 59 |
| % of population with access to hygienic latrines | 10 | 17 | 25 | 32 |
| % of population using electricity as a main source of lighting | 49 | 78 | 87 | 93 |
| Ownership Rates of Consumer Durables | | | | |
| % households owning a radio | 40 | 47 | 26 | 19 |
| % households owning a TV | 22 | 56 | 68 | 78 |
| % households owning a bicycle | 65 | 73 | 69 | 70 |
| % households owning a telephone | n/a | 7 | 13 | 21 |
| % households owning a motorbike | 11 | 20 | 40 | 45 |

Source: 'Vietnam Poverty Update Report 2006', Vietnam Academy of Social Sciences.

The health sector in Vietnam has also achieved considerable successes in primary health care outcomes over the past decade. Some of the health-related targets in the Millennium Development Goals have already been achieved or surpassed at national level. The Vietnam DHS for 2002 reports infant mortality to have declined to 18 per thousand live births, compared with 30 per thousand in the 1997 survey. The corresponding numbers for under-five child mortality are 24 and 40 per thousand. A system of fee exemptions was set up for the poor, first through the distribution of health care cards and subsequently through the creation of provincial health care funds to cover the medical expenses of the poor. More recently, children under six years of age have been provided with free access to health care. Nevertheless, it remains of concern that in spite of the exemptions policy health care costs remain unaffordable for many among the poor. Indicators suggest that a large number of Vietnamese are not receiving adequate health care. The available evidence suggests that the poor are less likely to use formal health care services than the rich, relying instead on traditional medicine and self-medication (*Vietnam Development Report 2007*).

Internal migration is a key feature of the current economic context in Vietnam. Evidence from a report by the Vietnam Academy of Social Science has shown that there has been great improvement in both geographical and occupational mobility in the labour market since *Doi Moi*. According to the 1999 census, 2.9 per cent of the 69 million persons over five years of age in 1999 had lived in a different province in 1994. More than half of these are young migrants (under 25 years old) and there is an increasing trend of female. Economic factors such as incomes and employment opportunities may have more of an effect than non-economic factors in determining current migration in Vietnam (Dang, Tacoli and Hoang 2003). Vietnam retains a dual labour market. A large majority of the labour force is made up of farmers, the self-employed and informal sector workers, with no labour regulations applying to them. At the other end, a rigid set of labour market rules which used to cover the state sector has been extended to formal private sector enterprises.

3. Data sources relevance to childhood poverty

While this general picture of the Vietnamese economy and key social indicators is well documented, the picture and understanding of childhood deprivation seems less complete. Some selected key data sources in Vietnam are summarised in Table 2 below with respect to their sample size, coverage, sampling frame and relevant aspects in measuring childhood poverty. These include the VLSS, the bi-annual VHLSS, the DHS, the MICS, the UNICEF ten-district survey and the Young Lives longitudinal survey.¹

All of these surveys are conducted by the General Statistical Office (GSO), the main government agency mandated to collect data. While the data from these surveys can reveal broad aspects of childhood poverty, they do not have indicators such as the worst forms of child labour or the amount of child trafficking. These household surveys do not include such highly vulnerable groups as orphans, abandoned children, the children of unregistered households, or street children.

Table 2. *Overview of main surveys on poverty in Vietnam, 1992-present*

| Survey | Sample size | Sampling frame | Type of questionnaires | Relevance to childhood poverty | Weaknesses |
|------------------|--|--|--|---|---|
| 1 VLSS 1992/1993 | 4,800 households. | Nationally representative survey. Random three-stage stratified cluster sampling including 120 communes and 30 districts. | 3 types of questionnaires for rural areas: household questionnaire, community questionnaire and market price questionnaire. Urban areas only have household questionnaire. | Includes detailed information on per capita income/expenditure, early childhood education, household characteristics, anthropometry of all household members and child labour. | Cross sectional data. Not based on interviews with children. No information on a child's ability such as test scores. Not strong on infant health, nutrition education or child rights. |
| 2 VLSS 1997/1998 | 6,000 households, of which 4,800 are from the VLSS 1992/1993 to form a panel data. | Nationally representative survey. Random three-stage stratified cluster sampling. | Four types of questionnaires: community questionnaire, school questionnaire, health centre questionnaire and price questionnaire for rural and small urban centres. Urban areas only have household questionnaire. | Provides detailed information on household income and expenditure, early childhood education, child labour, household characteristics, anthropometry of all household members, together with schooling variables such as enrolment, staff, facilities, finance and exam scores. | No interviews with children directly. Not strong on infant health, nutrition, education or child rights. |
| 3 VHLSS 2002 | Big sample size of 30,000 households. No link to previous surveys. | Nationally representative survey. Random three-stage stratified cluster sampling. Sampling from 3% of 1999 Census (master sample). | Three questionnaires: short household questionnaire (excluding most of consumption expenditure information), long household questionnaire (including detail consumption expenditure information) and community | Has detailed information on household income and expenditure, early childhood education, child labour, household characteristics, education and health expenditure, school fees and exemptions. | No link to previous VLSS. Not based on direct interviews with children. No information on anthropometry and no school or health centre questionnaires. |

¹ There is a nutrition survey conducted annually by the National Institute of Nutrition and the Ministry of Health, which might be potentially relevant to childhood poverty research. However, it is not included here due to lack of information on this dataset.

| Survey | Sample size | Sampling frame | Type of questionnaires | Relevance to childhood poverty | Weaknesses | |
|--------|---|--|--|---|---|---|
| 4 | VHLSS 2004 | Big sample size of 46,500 households. Part of this is linked to the VHLSS 2002 to form a panel data. | Nationally representative survey. Random three-stage stratified cluster sampling. Sampling from 3% of 1999 Census (master sample). | Similar to VHLSS 2002, with two additional modules for long household questionnaire on non-farm self employment activities and for community questionnaire on credit and savings. | Similar to VHLSS 2002. | Children not directly interviewed. No information on anthropometry, school or health centre questionnaires. |
| 5 | DHS 1997-2002 | 7,048 households and 5,665 married women aged 15-49. | Nationally representative survey. Random two-stage stratified cluster sampling covering 205 clusters in Vietnam. | Follow a standard DHS format with three types of questionnaire: household questionnaire, individual women questionnaire and community/health centre questionnaire. | Strong on some social indicators such as infant health and mortality, pregnancy care and delivery, fertility, infant feeding and nutrition, access to water and sanitation, and anthropometry. | Cross-sectional data. Children not directly interviewed. No information on household income and expenditure, child rights or children in special circumstances. Only education questions concerned children aged five and older. |
| 6 | MICS 1995-2000-2005 | 7,628 households. | Nationally representative survey. Random two-stage stratified cluster sampling covering 240 clusters in Vietnam. Sample frame comes from the 3% 1999 Census (master sample). | Four types of questionnaires: household questionnaire, questionnaire for women of child-bearing age, questionnaire on children under five (answered by mother or carer), and community questionnaire. | Not only information on health, education, nutrition status, anthropometry of children were collected but also information on child rights such as birth certificate registration, number of orphanages and number of recreational areas. | Cross-sectional data. Not based on interviews with children. No information on household income and expenditure. |
| 7 | Baseline survey on the situation of children and women in 10 UNICEF Area-Focus-Approach districts | 3,280 households. | Covering 96 communes in the ten poorest districts (Lao Cai, Ha Giang, Lang Son, Yen Bai, Lai Chau, Son La, Quang Tri, Hue, Kon Tum, Tra Vinh). Sampling frame follows random sample selection. | Five types of questionnaires: household questionnaire, questionnaire for child-bearing age women, questionnaire on children under five (answered by mother or carer), income and expenditure questionnaire and community questionnaire. | Similar to MICS questionnaire with the additional information on household income and expenditure. | Cross-sectional data. Children not directly interviewed. Not nationally representative. |
| 8 | Young Lives | 2,000 one-year old children and 1,000 eight-year old children. | Covering five provinces: Lao Cai, Hung Yen, Da Nang, Phu Yen and Ben Tre. 'Sentinel site' approach, over-samples poor households. | Three types of questionnaires: household questionnaire, community questionnaire and child questionnaire. | Longitudinal data - children are followed over 15-year period. The only survey in Vietnam which interviews children directly and measures children's ability based on test scores. Provides information on household characteristics, infant health and nutrition, education, anthropometry, child labour and social capital. Strong on risk measures such as shocks and coping strategies. Combines qualitative and quantitative data to analyse the cause of childhood poverty rather than producing a set of indicators. | Not nationally representative. Small sample size. Outcomes are hard to quantify in order to alert policy-makers. Information on household income and expenditure only available for the 2nd round survey (2006) but not the 1st round (2002). |

4. Methodological issues in measuring childhood poverty

This section briefly discusses indicators used to describe the state of childhood deprivation. The first indicator, monetary child poverty, provides a simple link with the standard indicator used in the poverty debate in Vietnam. Monetary child poverty, either based on income or consumption, conceptualises child poverty as children living in low-income families or households. While definitely limited for a full understanding of childhood poverty, low income can well be considered to have a strong link with the well-being of children and their opportunities for development.² Child poverty is then expressed as the number of poor children (i.e. children living in poor households) as a percentage of all children.

One obvious question arises as to who are counted as poor households. In Vietnam, there are two different ways of calculating national poverty.³ The first, which was developed by the World Bank and adopted by the GSO, is based on household survey data, whereby a poverty line is comprised of a food and non-food component. The food poverty line is the value of a typical Vietnamese food basket that is needed to meet minimum food requirements which, by international standards, should generate 2,100 calories per adult per day. In 2004, this value was equal to VND 159,788.00 (approximately US\$10.50) per capita per month. The general poverty line is derived by adding a non-food component to the food poverty line and was equivalent to VND 173,101 (approximately US\$11.50) per capita per month. Adjustments are made for differences in regional and rural and urban prices. The poverty lines are adjusted over time to reflect price changes of the goods in the basket. According to this method, the poverty rate has fallen from 58.1 per cent in 1993 to 19.5 per cent in 2004.

The second method, which is used more by the government when allocating resources to provincial level, is derived from nationwide counting exercises led by MOLISA. Under the MOLISA approach, a household is also considered poor if its income per capita is below a specified poverty line.⁴ However, both the determination of the poverty line and the measurement of income are problematic. The poverty line is not based on the local cost of a well-defined bundle of goods and services, necessary to sustain a healthy life. Income is seldom measured in an accurate manner. In practice, local officials have a very good sense of which households in their area are richer and which ones are poorer, but where to set the line separating poor from non-poor depends on local conditions. The reported poverty rates often try to reflect success in meeting government targets (usually, reducing poverty by two percentage points per year). Local officials are also given freedom to set higher poverty lines if they have resources available to assist larger number of poor people. Lists of households are updated annually and community meetings held to decide who is to be declared poor and

2 The term 'income' as used here represents monetary household welfare measured either by income or (preferably) consumption.

3 See World Bank Vietnam Development Report 2007, chapter 2, for more detail and discussion.

4 In 2005, the poverty line was set at VND 200,000 (US\$13.33) per person per month in rural areas and VND 260,000 (US\$17.33) per person per month in urban area. The poverty line has been frequently adjusted.

who has 'moved out of poverty'. These meetings often make household income measurements unnecessary. The commune and ward-level poverty rates that emerge from this exercise are aggregated at the district level, and then at the provincial level, and finally at the national level. Because these poverty counts are affected by a range of local conditions and are to some extent subjective, the resulting poverty rates are not comparable across administrative units. According to MOLISA, the national poverty rate was 23.2 per cent in 2004 but by 2007 was down to 14 per cent.

The main advantage of the use of the monetary poverty concept is its quantifiability. It offers not only the opportunity to measure the incidence of poverty but also to quantify the depth and severity of poverty (Foster et al. 1984). The output consists of clear figures that can be used for national policy and poverty monitoring and international comparisons. The poverty incidence and gap are especially appealing measures as they are well-known and easily interpretable.

This method also presents some clear disadvantages, though. Firstly, it is a one-dimensional measure of poverty, which does not include other dimensions of well-being such as health, education, freedom of expression and feelings of inclusion. Secondly, the disaggregation from household to individual (child) level is based on strong assumptions – e.g. equal intrahousehold resource sharing. This assumption is unlikely to be correct for many 'poor' and 'rich' households with children. In 'poor' families across the world, parents often sacrifice their own needs in order to ensure that their children can have some of the things they need (that is, children are often allocated a disproportionate share of household resources). Conversely, in 'rich' households parents may spend less than expected on young children so as not to 'spoil' them (Gordon 2003). And thirdly, these methods all rely on household level data, which, almost by definition, do not cover some of the most vulnerable groups of children such as orphans, abandoned children, children of unregistered households or street children.

Monetary poverty assessments, while providing a good first indication of the situation at hand, are often complemented with other measures and approaches which include other dimensions of poverty. The one-dimensional income approach has evolved into a multi-dimensional conceptualisation of poverty which is cognisant of the fact that poverty comprises not only the material dimensions of deprivation, but also the social, as deprivation in one area (e.g. nutrition) can affect well-being in another (e.g. health or ability to learn).

Although multidimensionality is theoretically recognised, it is not easy to implement in practice. Various approaches provide a conceptualisation of child poverty but do not move beyond this theoretical framework. The different datasets mentioned in section 3 can provide a picture on many different aspects of childhood poverty, depending on whether it has been conceptualised as social deprivation (health, nutrition, education, shelter, etc.), as basic human rights (survival, development, protection, participation), or as the state of children's well-being (thinking, feeling, values and social inclusion). In the remainder of this paper I will present first the state of child poverty using monetary indicators, and offer a discussion of a number of other indicators, to the extent they have featured in the debates on childhood poverty in Vietnam, more specifically health, nutrition, education and child labour. Clearly, there is scope for a much more detailed and richer discussion of child poverty in further research based on broader indicators and evidence on child well-being and rights, but given the state of the literature on Vietnam, they are beyond the scope of this review.

5. Trends in childhood poverty

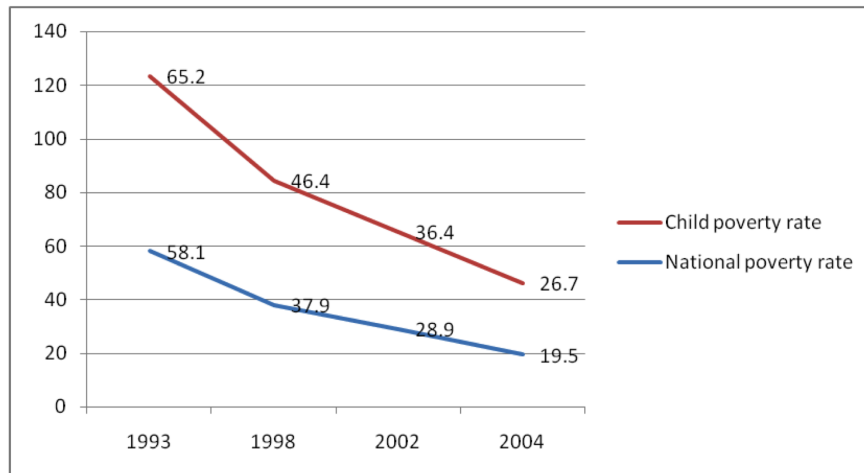
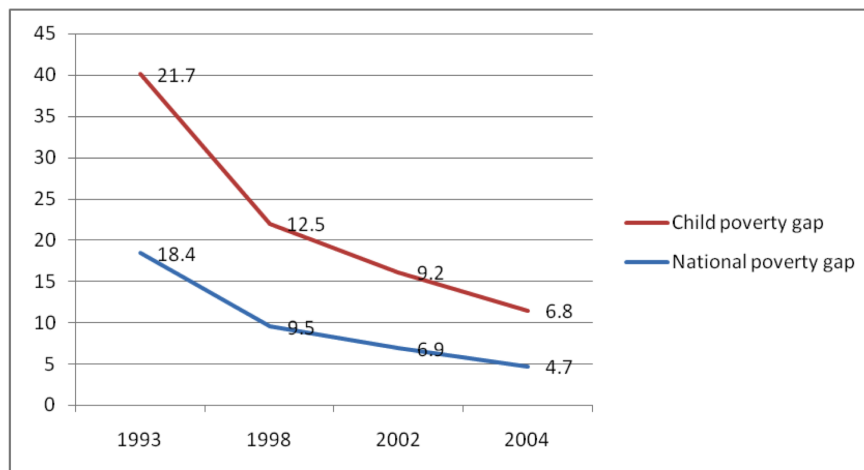
Using data from four recent household surveys in Vietnam, Phong and Linh (2007) show that the child poverty rate has reduced dramatically together with the national poverty rate over the last decade. In this study, a child is considered poor if he/she lives in a household with per capita expenditure below the national poverty line, which works out to be VND 1,160,000 per year in 1992/1993, VND 1,790,000 per year in 1997/1998, VND 1,917,000 per year in 2002 and VND 2,077,000 per year in 2004.

Figure 5 illustrates that there has been a dramatic reduction in the child poverty rate from 65.2 per cent in 1993 to 26.7 per cent in 2004. The child poverty rate is always higher than the national poverty rate, as explained by the fact that poorer households tend to have larger family size. The household survey data also reveal that the child poverty gap – how far the per capita expenditure of an average household with children falls below the child poverty line – has been narrowing over time. Poor families with children are moving closer to the national poverty line. In 2004, an average poor household with children had an expenditure per capita of 6.84 per cent below the national poverty line, compared to 21.73 per cent in 1992 (Figure 6). Given the figures in Figure 5, this implies that the poverty gap of the average *poor* household has gone down from about 33 per cent to 25 per cent.⁵

As with national poverty reduction, the progress in child poverty reduction has not been distributed equally with respect to rural/urban, regional and ethnic minorities groups. Further breakdown shows a major disparity between rural and urban child poverty in Vietnam (Figure 7), a gap which is widening. In 1992/1993, the rural child poverty rate was just over double the urban child poverty rate. By 2004, this ratio had increased to nearly six times.

In terms of regional breakdown, the region with the biggest drop in its child poverty rate is the Red River Delta (Figure 8). The Northeast is the region with the consistently highest rate of child poverty in the past 15 years. In 2004, the child poverty rate in the Northwest region was 67.9 per cent, eight times higher than the Southeast. Since the Northwest region is also the home of many ethnic minority groups the child poverty rate among ethnic minorities has also remained high.

5 This follows from the definition of the poverty gap (P1) and the poverty head count (P0): $P1=P0*PGAP_POOR$, or the poverty gap of the poor is equal to the average poverty gap divided by the head count index.

Figure 5. *Child poverty rate in Vietnam, 1993-2004***Figure 6.** *Child poverty gap in Vietnam, 1993-2004*

Source: Phong and Linh (2007), the poverty rates are calculated by authors based on data from the VLSS 1992/1993, 1997/1998, VHLSS 2002, 2004

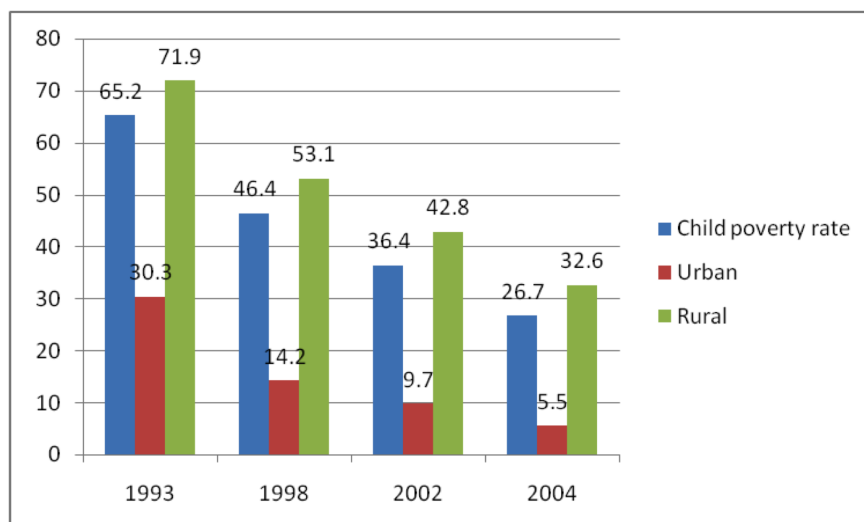
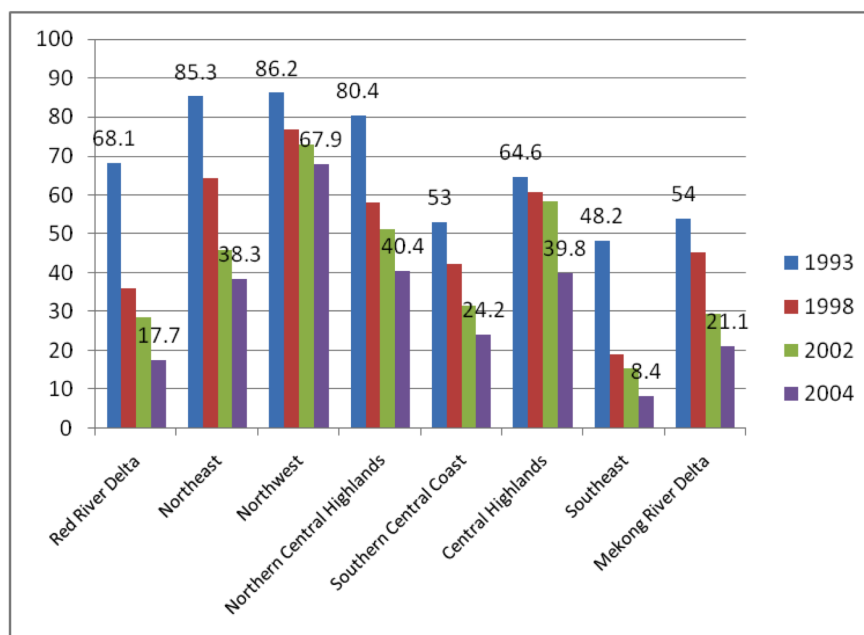
Figure 7. *Child poverty rates by rural-urban, 1993-2004*

Figure 8. *Child poverty rates by region, 1993-2004*

Source: Phong and Linh (2007), the poverty rates are calculated by authors based on data from the VLSS 1992/1993, 1997/1998, VHLSS 2002, 2004

The non-income indicators also reveal a very similar picture to the income approach on child poverty. Over the past decade, there has been considerable progress in health, nutrition and schooling status of children in Vietnam. For example, the under-five mortality and infant mortality levels were halved between 1992 and 2002 (see Figure 9). The stunting prevalence also dropped from 48.8 per cent in 1992 to 33.1 per cent in 2000 (based on VLSS 1993 and MICS 2000 data). The net school enrolment rate has improved at all levels of education (Table 1). Overall, both monetary and non-monetary indicators show considerable progress. Meanwhile, just as with the monetary indicators, there is suggestive evidence that this progress has not been equally distributed among all groups in the economy. A comprehensive disaggregated analysis is currently beyond the scope of this paper pending the release of the 2006 MICS data, but a review of the literature, as presented in the next section, points to this disparity.⁶

⁶ At the time of writing, the data from the 2006 MICS are not available yet, but are likely to provide a relevant update of the trends and the breakdown by region, rural/urban and ethnic group.

6. Literature on childhood poverty

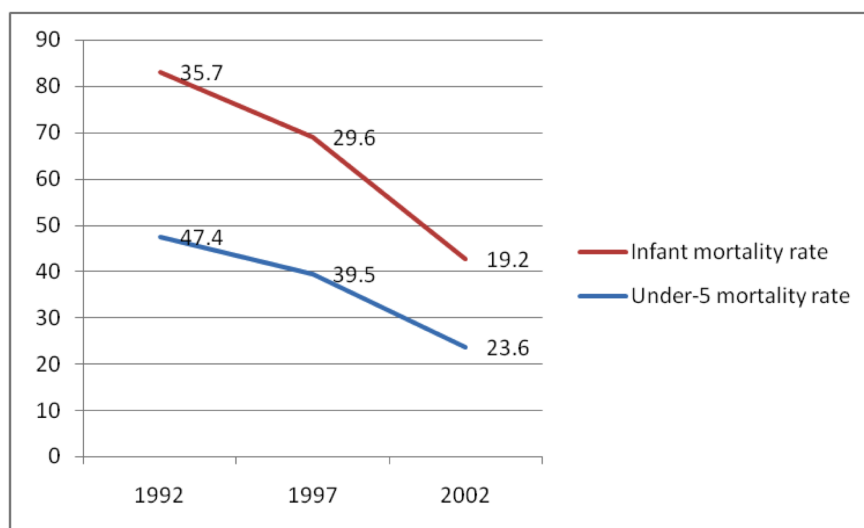
The specific literature on childhood poverty in Vietnam is scant. As the World Bank describes in its Vietnam Development Report 2007, 'there has been more progress in generating raw household and enterprise data of high quality than in analysing it. Official use of this information is limited, and the conduct of rigorous statistical and econometric analysis is still uncommon among academics and policy advisors'. Most of the studies in Vietnam are either on child rights or on household poverty. Children are often viewed as an extension or sub-category of households. Vietnam is also weak on information dissemination. Many studies, workshop proceedings or project papers remain unpublished. Hard copies, especially those from the early 1990s, are hard to locate.

The overall finding from the available literature is that there has been growing disparities in child mortality, malnutrition and access to education between poor and non-poor children in Vietnam (Wagstaff and Nguyen 2002; Thang and Popkin 2003; Bhushan et al. 2000). Economic growth has not played an important role in reducing child malnutrition (Glewwe et al. 2002) but has brought down child labour significantly (Edmonds and Turk 2002). Child labour does not appear to have short-term effects on child health but the risk of illness increases in the long-term (O'Donnell et al. 2004). Children who work are less likely to attend school and to have lower educational attainment (Beegle et al. 2004). Finally, children from ethnic minority are a major concern in almost all the studies.

This section surveys existing literature on childhood poverty in Vietnam, backing up this evidence. It is broadly divided into four areas of focus: health, nutrition, education and child labour.

6.1 Health

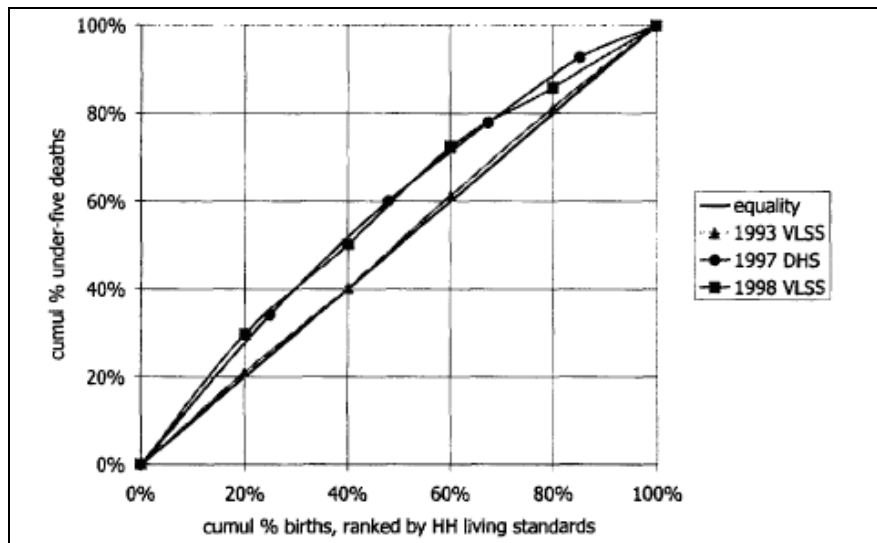
Despite the dramatic decline in both infant mortality and under-five mortality rates over the period 1992-2002 (Figure 9), Wagstaff and Nguyen (2002) suggested that poorer Vietnamese children do not appear to have seen any appreciable improvement in their survival prospects in recent years. Progress has been much faster at the top end of the income distribution.

Figure 9. Trends in under-five and infant mortality rates, 1992-2002

Source: DHS 2002, 1997 final reports

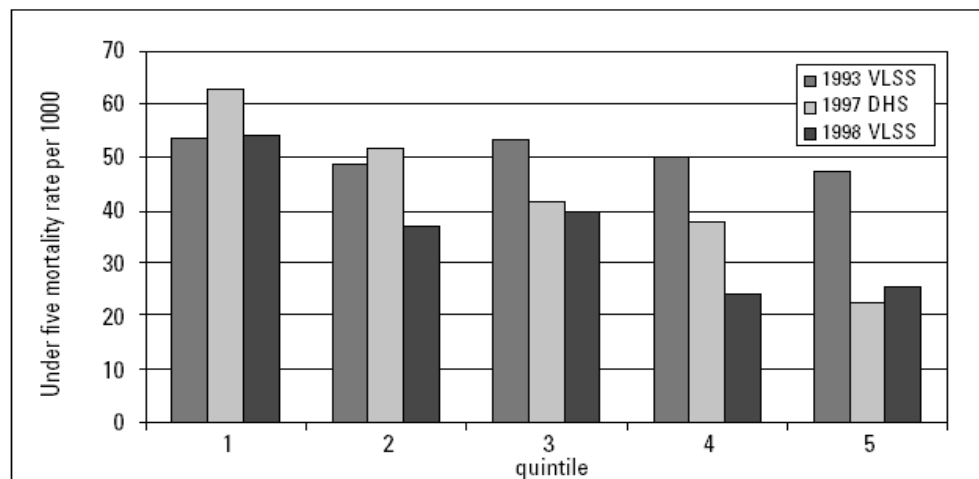
Using data from the DHS 1997 and VLSS 1998, Wagstaff (2000) suggested that by international standards, inequalities in infant and under-five mortality between poor and better-off children were extremely low in Vietnam based on VLSS data covering survival and deaths among children over the period 1983-92. In contrast, over the periods 1987-96 and 1988-97 there were marked inequalities between the poor and better-off (Wagstaff and Nguyen 2002).

This inequality in child mortality reduction can be illustrated clearly by a concentration curve (Figure 10) i.e., by ranking live births by the living standards of the child's household, and then plotting on the horizontal axis the cumulative percentage of live births so ranked and on the vertical axis the cumulative percentage of deaths (infant or under-five). If deaths are concentrated among poorer households, the resultant curve - the *concentration curve* - will lie above the diagonal, or *line of equality*. The further above the line of equality it lies, the greater the degree of concentration of deaths among poorer households.

Figure 10. Concentration curves for under-five mortality, Vietnam⁷

Source: Wagstaff and Nguyen (2002)

The concentration curve for under-five mortality in Vietnam has shifted from being very close to the diagonal line in 1993 to above the line of equality in 1997-1998. To put it differently, increasingly more deaths were concentrated among the poorer households in 1993-1998. Reductions in child mortality have not been spread evenly, being heavily concentrated among the better-off. Indeed, the poorest 25 per cent of children saw virtually no improvements in their survival prospects at all in the mid-late 1990s (see Figure 11).

Figure 11. Improvements in under-five mortality

Source: Wagstaff and Nguyen Nga (2002).

VLSS = Vietnam Living Standards Survey • DHS = Demographics and Health Survey
Quintile '1' is the poorest. Quintile '5' is the richest.

⁷ In this graph, HH is used to mean household, as understood in the context of the VLSS.

Wagstaff and Nguyen (2002) develop a survival model to find the causes of this differential decline in child mortality. They conclude that a number of factors have been at work, including reduced access by the poor – but not the better-off – to health services and education for females. They argue that a lack of progress among the poor will jeopardise Vietnam’s chances of achieving the international development goals for child mortality.⁸ They suggest that programs aimed at narrowing the gap between the poor and non-poor may have large beneficial effects on the various determinants of child survival.

Bhushan et al. (2001) in their study on ‘Human capital of the poor in Vietnam’ also documented a widened gap in infant mortality rate between the poor and non-poor during the 1990s. As can be seen in Table 3, the reduction in the infant mortality rate has also been much larger among the non-poor (nearly 10 per cent) compared to the poor (nearly six per cent) over the period 1993-1998. Among ethnic groups, the Kinh-Hoa group (majority) has the lowest rate of infant mortality at 39 per cent and 31 per cent respectively in 1993, while some other ethnic groups such as the Hmong have infant mortality rates which are three times higher.⁹

Table 3. *Infant mortality rate for poor and non-poor households in Vietnam, 1992-1998 (%)*

| Item | VLSS 1992-1993 | VLSS 1997-1998 |
|----------|----------------|----------------|
| Non-poor | 34.4 | 24.5 |
| Poor | 39.4 | 33.6 |
| Total | 35.8 | 26.9 |

Source: Asian Development Bank report, ‘Human capital of the poor in Vietnam’

Overall, this evidence points to important disparities in the progress regarding child and infant mortality. Nevertheless, the studies available seem to be based on 1990s data. A key issue for future research surely has to be to investigate whether these diverging patterns are persisting in more recent data sets.

6.2 Nutrition

This topic draws considerable attention as Vietnam still has one of the highest rates of child malnutrition in the region. While the data show that in the period 1990-1999 the global average of underweight children under the age of five was 28 per cent, 29 per cent in low and middle-income countries, 49 per cent in South Asia and 19 per cent in East Asia and the Pacific. In Vietnam it was 46 per cent, indicating that the country lags considerably behind other developing countries, including its neighbours (Thang and Popkin 2003). This has serious consequences since malnutrition in early childhood can impair a child’s brain development and her/his capacity to learn as well as bringing about physical impairment such as blindness caused by vitamin deficiency. Girls undernourished in childhood are more likely to have underweight children of their own.

⁸ The authors used a hazard model to estimate child survival demand at three levels: individuals, households and community. They then employed the Oaxaca decomposition method to show how various determinants of child survival have changed over time for the poor and the non-poor.

⁹ Based on a UNICEF study in 2000, cited by Neeffjes (2002), Save the Children UK, Hanoi.

Thang and Popkin (2003) use VLSS 1997-1998 data and multivariate logit regression analysis to show that inequality - as measured by total per capita expenditure level of the household, minority status and area of residence - all significantly influence stunting and underweight prevalence. According to their analysis, children from rural areas, those in poor households and those from ethnic minority backgrounds have about 17.6, 10.9 and 14.1 per cent greater prevalence of malnutrition than those coming from urban residents, non-poor households, and the majority Kinh group. Thang and Popkin (2003) go further and point out that even among the poor, the rural poor are far more likely to be malnourished than the urban poor.

The differential rate of malnutrition can be shown further by the fact that the prevalence of stunting among 0-5 year old children from the poorest quintile was about 2.5 times higher than among those from the richest quintile in 1997. The rate of decline between 1992 and 1997 in stunting has been greatest among households in the richest quintile (39.5 per cent), and amounts to more than double that observed in households in the poorest quintile (16.6 per cent). The tendency is about the same for other malnutrition indices. Thang and Popkin (2003) conclude that there is a strong positive relationship between poverty and prevalence of child malnutrition and that this holds not only at the household but also at the provincial level.

On the other hand, some other studies, possibly using more careful statistical methodologies, find quite the opposite result: that there exists only a weak relationship between household income and child nutrition (Ponce, Gertler and Glewwe 1998; Glewwe, Koch and Nguyen 2002). These authors estimate the impact of economic growth on child nutrition in Vietnam using panel data¹⁰ from the two household surveys in the 1990s in order to control for unobservable household fixed effects.¹¹ They conclude that household expenditures account for only a small proportion of the improvement in children's nutrition status. Other community factors, such as distance to a private pharmacy or providing commune health centers with 'sanitary toilets' and ample supplies of oral rehydration salts, could also have substantial positive impacts on child health.

In a similar attempt to explain the determinants of child nutrition in Vietnam, Haughton and Haughton (1997) used a pooled regression model and fixed effect equation to control for unobservable household-level heterogeneity. They found that there is no evidence of gender bias in nutrition but birth order is important. In other words, higher-order children are more malnourished, both stunted and wasted. Father's education has more effect on a child's nutrition than mother's education, a phenomenon the authors could not explain. Children born into ethnic minority families are significantly more likely to be stunted. Such children will be 0.2 standard deviation lower on the scale.

Overall, the evidence appears to suggest that given a likely relatively limited link between income and malnutrition, economic growth has not been able to deliver large scale reductions, even though the reductions have been considerable. This evidence is based on data from the 1990s. A key issue is to consider further whether and how malnutrition has come down for the poorer segments and how income growth and other factors have contributed in more recent years.

10 They compared children of five years or younger in the first survey with those in the second survey since stunting does not vary much over time.

11 In order to address these econometric problems, Glewwe, Koch and Nguyen (2002) use two categories of instruments: types of agricultural land allocated to the households and sources of non-labour income.

6.3 Education

While net enrolment rate expanded rapidly at all levels of education and among all income groups in the period 1993-2004 (Table 1), the increases were proportionally larger for the non-poor than for the poor. Unlike enrolment in primary school, secondary-school enrolment has shown a significantly widening gap between the poor and the non-poor. Likewise, at the provincial level, increases in enrolment in lower secondary schools have been much more substantial for richer provinces than for poorer provinces. Enrolment in lower secondary schools is nearly universal for children from the richest income quintile (who are largely urban and have educated parents), but is well below 50 per cent for the poorest children. The gap is more striking for upper secondary education, which is now close to universal in the richest quintile (Bhushan et al. 2001).

This report also points out that perhaps the key reason for the growing gap in education at the higher levels is the increasing importance placed on fees and contributions to schools. A key issue is that education may become more unaffordable for the poor – a view taken by the Asian Development Bank. The cost of education has been rising for all households. In 1992–1993, education accounted for around 5 per cent of the non-food household budget; by 1997–1998, it had doubled to 10 per cent of non-food expenditures. Since the poor have substantially smaller incomes, they are contributing less to education and quite possibly receiving lower-quality education in return. There is some evidence of this: poor children are increasingly less likely to have access to textbooks and they are increasingly more likely to have untrained teachers. The cost of secondary education, especially upper secondary school, is far too costly for the poor and far exceeds the value of their per capita annual non-food consumption.

Moreover, there are also systematic associations between important aspects of children's progress in school and household income: children¹² from higher-income households do better in school according to each of the four indicators: age when started school, grades passed per year of school, last completed grade, and exam score in last completed grade (Behrman and Knowles 1999).¹³ Firstly, on average, children in the first quintile start school when they are half a year older than children in the fifth quintile. Secondly, children from the first quintile pass about eight grades in a decade of attending school, while children from the fourth and fifth quintiles pass nine or more grades in a decade. Thirdly, children from the fifth quintile had completed almost two more grades than children from the first quintile at the time of the survey. Fourthly, children from the fifth quintile score about 17 per cent higher than children from the first quintile.

These results raise some questions about whether school fees are progressive in the sense that they favour children from lower-income households among those children enrolled in school, particularly because of the primary school fee exemption. Behrman and Knowles (1999) argue that the progressiveness of school fees is limited due to two reasons. School fees are only about one-third of what households pay directly to schools and are a much smaller proportion of households' total school-related expenditures. Secondly, because school enrolment is positively correlated with household income, the structure of school fees is less progressive for the entire population of households with school-age children than it is for the selected subset of that population with children enrolled in school.

12 Defined as a child aged between six and seventeen.

13 Using data from Vietnam Social Sector Financing Survey (Asian Development Bank/GSO, 1996) with 2,789 children aged 6-17 from 1844 sample households.

Another topic in this literature is the association between family size and children's schooling. There is much concern about whether children from large and often poorer families are less likely to attend school and more likely to have lower academic achievements. Truong et al. (1998) use the nationally representative 1994 Inter-Censal Demographic Survey (GSO) to examine this relationship for Vietnam.¹⁴ Although a clear inverse bivariate association between family size and children's school attendance and educational attainment is evident, the multivariate analysis reveals that much of this association is attributable to other influences related to family size. Thus, when other variables such as urban-rural residence of the parents, region, parents' education, household wealth, and child's age are controlled for, only a modest association between family size and most measures of children's schooling remains.

The author recognises that endogeneity of family size means that the estimates of the effect of family size on schooling may be biased. Although the direction of bias is unknown, the most common argument is that the bias exaggerates the effect of family size on schooling. If so, then the effects estimated here provide even less evidence that reductions in family size will lead to notable improvements in schooling.

Overall, the issue of access to education of good quality for the poor remains a central issue, despite the rapid growth in the economy and spending on education. The scope and need for more updated studies is obvious.

6.4 Child labour

According to Vietnamese labour law, children under 15 years of age are considered to too young to work. Although statistics on child labour are hard to come by and interpret, the 1999 Housing and Population Census reported that in 1999, over 700,000 Vietnamese children aged 13 to 14 were active in the labour force. The share of children aged 13-14 who were employed has declined from 22.9 per cent (1989) to 15.8 per cent (1999) since the last census. Both censuses show that a larger share of female children is active in the labour force than boys (at 26.3 per cent and 17.8 per cent compared to 19.8 per cent and 13.9 per cent), although the rate declined more rapidly for girls than boys over from 1989 to 1999. Rural children are more likely to engage in employment activities than urban children (17.9 per cent compared to 7.1 per cent in 1999). In particular, rural girls aged 13-14 have the highest engagement in employment activities (20.4 per cent). The Mekong Delta region has the largest proportion of child workers with more than one third of the total. Eighty six per cent of child workers are engaged in unskilled occupations.

There appears to have been a significant decrease in the number of Vietnamese children engaged in child labour over the past decade. Research suggests that fewer Vietnamese children are working excessive hours, labouring in dangerous and hazardous working environments, and/or sacrificing their education in order to earn money. However, girl children, children in rural and remote areas, children from ethnic minorities and children from poor families are still over-represented in child labour statistics. Little research has been conducted into the prevalence of children working in the high-risk areas such as begging and scavenging (Michaelson 2004).

Edmonds (2003) documents the probability that a child (aged six to fifteen) works in agriculture, a family operated business, or wage employment dropped by 28 per cent between 1993 and 1998. He shows that 80 per cent of the drop in child labour for rural households at

¹⁴ A total of 13,093 households were interviewed containing 64,380 members. In addition, about 10,500 married women aged 15-49 were interviewed.

the poverty line in 1993 can be explained by improvements in household economic status. Edmonds (2003) and Edmonds and Pavcnik (2003) examine the effect that integration of Vietnam's rice market had on child and adult labour markets. They find that the increase in rice prices between 1992-1993 and 1997-1998 was associated with reduced child labour.

Edmonds and Turk (2002) document the sharp decline in child labour in the 1990s which they link to significantly improved living standards. They used data from the VLSS 1992/93 and 1997/98 and found substantial heterogeneity in the rate of child labour reduction in Vietnam across ethnic group and geographical areas. Decreases in the probability that children participate in any type of economic activity have been largest in provincial towns, minor cities, the Southeast and the rural Mekong river delta. Declines in the proportion of children working have been the smallest in urban areas, the south central coast, and the Central Highlands. Ethnic minorities appear to work more than non-ethnic minorities, but most of this additional work can be explained by time-invariant household characteristics. Ethnic minorities constitute 14 per cent of the population of Vietnam, but represent 29 per cent of the poor.

The evidence from both qualitative and quantitative work is that children still working are doing so because their families are too poor to support the basic needs of the family without the economic contribution of the children.

Some other papers focus on the impact of child labour on children's outcomes. O'Donnell, Rosati and Van Doorslaer (2004) tested whether agricultural work in childhood, the dominant form of child work worldwide, has health impacts.¹⁵ Their paper uses panel data from the VLSS 1992-93 and 1997-98. It attempted to control for both unobservable heterogeneity and simultaneity biases by instrumenting work status with community level data reflecting opportunities in the local labour market and availability and quality of schooling. Three indicators of health: body mass index, reported illness, and height growth were employed as dependent variables. There was clear evidence of a healthy worker selection effect. They found little evidence of a contemporaneous impact of child work on health but work undertaken during childhood raises the risk of illness for up to five years and the risk increases with the duration of work. There is no evidence that work impedes the growth of the child.

Beegle, Dehejia, Gatti (2004) also found no significant health effect of child labour. They investigate the effect of child labour on a wider range of outcomes e.g. subsequent school attendance, educational attainment, occupational choices, earnings and health. The authors also use panel data VLSS 1992-97 and instrument child labour with community shocks and rice prices. The regression analysis shows that children who worked when they were young are significantly less likely to be attending school five years later and have a significant lower level of education attainment. However, they found that child labour leads to a greater probability of wage employment and to higher daily labour and farm earnings. This more than fully offsets the foregone earnings attributable to reduced schooling. There do not appear to be significant health effects of child labour.

Overall, child labour remains prevalent, but the literature has not confirmed naïve views on the nature of the impact on children's opportunities, including for education, health and earnings at adulthood. More careful and balanced work on child labour and its forms and consequences using more updated data remains relevant.

¹⁵ Child labour is defined as a child between the age of six and fifteen performing unpaid work on the household farm or business and/or paid work outside of the household at any time in the previous 12 months.

7. Conclusions and Opportunities for Young Lives

From both the data analysis and the literature review, we have seen that much existing knowledge about childhood poverty in Vietnam comes from studies which use either household survey cross-sectional or panel data. This paper shows that the successful reduction in child poverty rate and the improvements in such aspects of child development as health, nutrition, education and child labour since the 1990s cannot be denied, but there is evidence benefits have not been distributed equally between the poor and non-poor, between rural and urban residents and across regions and ethnic groups. More work is needed to document these patterns and their causes and how policies might address them.

Various explanations have been offered to explain these trends but establishing a causal relationship is always a difficult matter as these processes have complex and multiple directions of causality. From a statistical point of view, a longitudinal dataset can help to address these questions as it enables us to isolate and control for a variety of factors and, over time, to understand the causal relationships and analyse the critical points in children's lives. The Young Lives data set will be uniquely placed to study many of these processes, as it develops its panel data set of children over multiple rounds and the young people move into adulthood.

There is much scope for analysis to better understand how poverty in childhood affects children's later outcomes in life, how poverty is transferred from one generation to another, which children are moving out of childhood poverty and why, how much intrahousehold resources are allocated to children and how macro-policies can impact childhood poverty and children's well-being in Vietnam.

Early childhood experiences and child development outcomes

The nature of a longitudinal panel data allows various child outcomes such as education achievement, health, nutrition, income can be observed later in life and linked back to the child's early childhood experiences. The term 'experiences' used here can include many different dimensions which affect a child such as nutrition status, early education and such household shocks as natural disasters and the birth and death of family members. Other factors such as mother's age when giving birth, birth weight, birth order and pre-natal care are also correlated with later child outcomes. One strong point of the YL dataset is that it measures child outcomes in terms of children's subjective well-being – their personal feelings, values and aspirations – unlike any other dataset. Further studies can look at what factors are important in determining children's well-being.

The dynamic of childhood poverty

Policy-makers concerned about children living in poverty often want to know answers to questions such as: Which children are getting out of poverty or falling into poverty and why? What are the household characteristics or child characteristics or government interventions which can shift households or children out of poverty? How many children are living in chronic

poverty and why? These questions can only be answered either by using panel data or longitudinal data where the same group of children can be observed over time to see who is moving in and out of poverty.

Intra-household allocation of resources

Children are often seen as a sub-category or members of a household. Often the effects of poverty on children are merely inferred from household survey data which assumes that everyone in the family, including children, enjoy the same level of care and resources. Not much has been understood about intrahousehold allocation of resources. For example, it is important to know from a policy perspective who suffers most when there is a shock, the mother or the child, and whether children's recovery from shocks is different to that of adults (Dercon and Krishnan 2000). Who has more power in making decisions on matters affecting child nutrition, education, health expenditure and clothing?

Intergenerational transmission of poverty

Poverty spells early in life can produce long-term adverse effects on capabilities. Moreover, childhood poverty has strong inter-generational effects which operate through a number of channels.¹⁶ For example, childhood poverty is strongly associated with less schooling and lower educational attainment, with long-term effects on future productive capacity and standard of living. Childhood poverty in developing countries often leads to malnutrition and stunting, with malnourished girls in particular having a greater likelihood of giving birth to low birth-weight babies, which jeopardises their life chances. Nutritional deficiencies during childhood lead to lower learning outcomes, with inter-generational effects, because the education of mothers has been shown to be particularly important to children's well-being. We need better understanding of these channels to estimate intergenerational mobility and tackle chronic poverty at the early stages of a child's development.

Linking macroeconomic and sectoral policies to children's well-being

This is not an easy topic. Several attempts have been made to link overall macroeconomic or sectoral policies to children (McCarty 2003) or study the impact of trade liberalisation on child well-being in Vietnam (Nguyen and Jones 2006) but none have successfully answered the question of how macroeconomic policies impact on children's well-being.¹⁷ The key issue is to be able to convincingly identify the 'policy' via observable variables that are exogenous to behaviour and responses, for example via a natural experiment, or at least using suitable instrumental variable approaches and controls for the multitude of other factors that may affect behaviour and outcomes. There are remaining questions such as, how do government policies, e.g. free health care for poor children under 6 or school fee exemption, impact on children's health and education? How does volatility in commodity prices (e.g. agricultural products) affect poor household's income and children's well-being? How do households with children cope with the macroeconomic shocks?

16 Source: CHIP briefing no. 4, 'Early Childhood Care and Development (ECD)', Save the Children UK, London.

17 McCarty (2003) use the household to proxy for children and so does not really answer the question. Nguyen and Jones (2006) were unable to study the link between trade liberalisation and children's well-being directly.

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