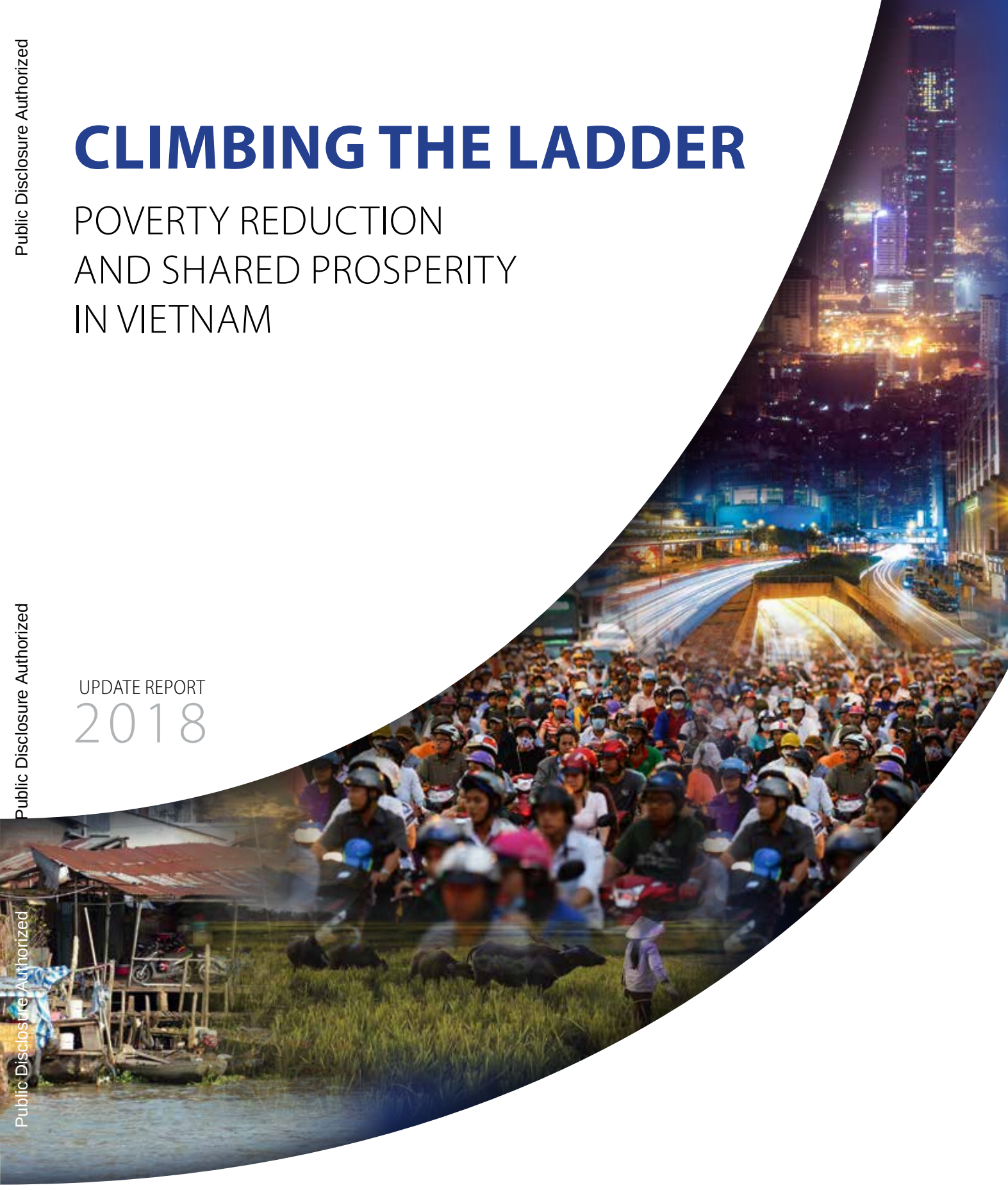
CLIMBING THE LADDER

POVERTY REDUCTION AND SHARED PROSPERITY IN VIETNAM

UPDATE REPORT
2018



THE WORLD BANK

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VIETNAM POVERTY AND SHARED PROSPERITY UPDATE REPORT

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Currency Equivalents

Exchange Rate Effective as of December 15, 2017

Currency Unit	= VND (Vietnamese Dong)
VND 22,760	= US$1.00
Fiscal Year	= January to December

Acronyms and abbreviations

ECD	Early Childhood Development
FDI	Foreign Direct Investment
GSO	General Statistics Office
PPP	Purchasing Power Parity
VHLSS	Vietnam Household Living Standards Survey
VND	Vietnamese Dong

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TABLE OF CONTENTS

LEAVING NO ONE BEHIND

LIST OF MAPS

LIST OF TABLES

LIST OF FIGURES

EXECUTIVE SUMMARY

Vietnamese households are escaping poverty in large numbers, and recent gains appear sustainable.

Poverty measured at the GSO-World Bank national poverty line[1] declined by almost 4 percentage points since 2014, to 9.8 percent in 2016. Notably, poverty among ethnic minorities declined by 13-percentage points, representing the largest drop in poverty among ethnic minorities in the past decade. Moreover, only 2 percent of individuals who were not poor in 2014 had fallen into poverty in 2016, suggesting that those who escape poverty tend to remain out of poverty. Significant progress was observed in non-income dimensions, from increases in enrollment in early childhood education and post-secondary education to access to improved water and sanitation. Overall, progress in all indicators reflected significant improvements for everyone. Poverty reduction owed much to high average growth and not redistribution. Though annual consumption per capita for the bottom 40 percent was very high (5.9 percent), it was 0.8 percentage points below growth in average consumption per capita.

A sizeable economically secure class has emerged and is growing

About 70 percent of Vietnam's population can now be classified as economically secure [2], including the 13 percent who are now part of the global middle-class. They have a high enough income to cover their day-to-day necessities, absorb income shocks, and still have enough left for additional discretionary spending. These income classes are growing rapidly, rising by over 20 percentage points between 2010 and 2017. An average of 1.5 million Vietnamese joined the global middle class each year since 2014, confirming that households continue to climb the economic ladder after escaping poverty. The rise of the consumer class changes society's aspirations and the focus of the poverty and shared prosperity agenda shifts from combatting extreme poverty to effecting broad improvements in the quality of life and supporting the further expansion of the middle class. As these changes continue, consumption will become increasingly crucial to economic growth.

Rapid job creation and an ongoing transition to wage employment are driving gains in poverty reduction and shared prosperity

A booming export sector and rising domestic demand from the emerging consumer class helped create more than 3 million jobs between 2014 and 2016. Nearly 80 percent of these jobs were created in the manufacturing (50 percent), construction, retail and hospitality sectors, absorbing a net outflow of 2 million workers out of agriculture. This marks a turning point in Vietnam's structural transformation, as employment in agriculture shrunk in absolute terms too, accompanied by rapid growth in wage employment in all sectors, including agriculture. Robust labor demand over this period boosted average monthly wages in the private sector by a cumulative 14 percent. Households in Viet Nam are therefore increasingly wage dependent. About 54 percent obtained most of their income from wages in 2016. Also, two in five people now have a paid job. The rise in wage incomes contributed to more than half of the decline in poverty during 2014-16 and 40 percent of the increase in the share of people attaining economic security.

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1 The GSO-World Bank poverty line in 2016 is VND 969,167 per person per month, equivalent to US$3.34 per day in 2011 purchasing-power-parity (PPP)

2 Economic security is defined as having a daily per capita consumption of at least 2011 PPP $5.5, while the global middle class is defined as having a daily per capita consumption of at least 2011 PPP $15. In Vietnam, these groups of households have less than 0.5 percent chance of falling back into poverty. Among those classified as the middle class, 75 percent have a washing machine, 98 percent live in a house build with concrete or bricks of which 55 percent have a private bathroom and kitchen. The average living area of 121m^2 and 60 percent of the adults have post-secondary education.

Agriculture transformation still has considerable power to reduce poverty

Vietnam's poorest households are concentrated in highlands and mountainous areas less known for agriculture dynamism, but there is still untapped agriculture potential there. Sub-optimal land use and cropping decisions account for a larger share of the difference in agriculture income between poor and nonpoor households than does the local topography. Across lowland and highland areas, poor and nonpoor households cultivate similar amounts of land. However, they devote less of their land to more profitable industrial crops such as coffee, black pepper or rubber, and devote more of their land on the less profitable rice or maize production instead. This could be a result of lower access to credit due to lacking land user certificates ("red books"), lower financial literacy and borrowing capacity and low technical skills. The poor have lower values of collateralized fixed assets and banks rarely make use of the lower collateral requirements targeting such segments. Financial institutions also have a strong preference for collateralized loans with land. This limits the poor's access to finance needed to invest in perennial crops. Lower professional and management skills of farmers are evident in that poor households tend be less productive when cultivating the same crops on the same types of land as nonpoor households.

Existing inequalities persist

Inequalities in opportunities entrench existing gaps between groups. While welfare has improved across the board, inequalities between groups are not closing fast enough. Close to 45 percent of ethnic minorities still live in poverty. Thus, ethnic minorities who make up only 15 percent of the country's population, constituted 73 percent of the poor in 2016. Their average per capita consumption was still less than 45 percent of the Kinh and Hoa. Gaps between the remaining poor and the non-poor in terms of access to upper secondary education and improved water and sanitation widened. With a wage premium over secondary education ranging from 43 percent for professional trade training to 63 percent for a university degree, the poor and ethnic minorities' lower tertiary education attainment excludes them from the most rewarding jobs. Lower rates of educational enrollment are partially explained by household poverty itself, as lower-income families are less able to invest in tutoring and study support, as well as the low quality of schools in poor communities. This hints at reduced inter-generational mobility.

Vietnam's accelerating structural transformation has changed the economic landscape, and with it the poverty and shared prosperity agenda.

The country pursued an export oriented model that successfully generated jobs. Now most households, both poor and non-poor, have a wage income. The poverty and shared prosperity agenda is no longer about just moving people to wage jobs, but increasingly more about creating better wage jobs. It is much less about extreme poverty, and more about attaining economic security. At the same time, some old challenges persist that need to be addressed, like the gaps between ethnic minorities and the Kinh and Hoa.

The analysis presented in this report reveals three strategic priorities for advancing poverty reduction and shared prosperity in Vietnam.

1. **Boosting labor productivity and investing in infrastructure to sustain job creation and wage growth without losing competitiveness.** With wages becoming central to households' livelihoods, sustained welfare improvement hinges on future wage income growth and creation of better jobs. But recently wage growth outpaced labor productivity growth. To boost labor productivity and sustain higher wage incomes, Vietnam needs to move production up the value-chain and promote investment into higher productivity sectors to shift labor inflows into these sectors. This could be achieved by:
    a. Attracting FDI into higher value agriculture, manufacturing and services activities, while linking domestic SMEs to multi-national corporations though information exchanges, skills upgrade and technology transfer.
    b. Keeping up investments in infrastructure so that supply of transport, electricity, logistics and telecommunications keeps up with the high demand from a fast-growing export sector and provide an enabling environment for the country to move up the value chain or into high value added sectors.

2. **Implementing education reforms designed to equalize opportunities and develop workforce skills.** Rising private sector wages in the face of abundant supply of labor suggest that firms are competing for a limited pool of competent laborers. A significant share of hiring employers say that job applicants lack the skills needed for the job, even for low-skilled jobs. Investments in skills development would increase the pool of competent workers, facilitate the expansion of value chains into more sophisticated activities and support the growth of new sectors. Expanding access to high quality education across groups will be vital not only to develop skills, but to reduce inequalities and increase access to better paying jobs for all. Tutoring and differences between quality of schools in poor and non-poor communities explain the variation in academic achievement at lower secondary level, which determines progression to tertiary education. This signals that inadequate teaching places poor children at a disadvantage. Necessary reforms include:

    a. Increasing instruction hours in schools to close the achievement gap that better-off households currently close through study support payments, but poor households cannot afford.

    b. Reforming the curricula to develop problem solving and critical thinking skills that most employers find lacking among workers.

3. **Spurring agriculture structural transformation through changing farmland use patterns, strengthening land user rights, and improving skills of poor farmers.** Addressing sub-optimal farmland use patterns is key to unlocking the agriculture potential of the poor by aligning land use with comparative advantages of specific areas and farm income generation objectives as outlined in the Agricultural Restructuring Plan. This requires a bolder shift of land from rice and maize to more profitable annual and perennial crops. Necessary for achieving this is:

    a. Strengthening land user rights through completing land titling to facilitate household access to credit (using land as collateral) and enabling the poor to invest in more profitable crops that require costly initial investments, intermediate inputs or hiring of labor.

    b. Improving farm management and business skills of the poorer farmers, often neglected by public extension and investment programs, is required to help boost agricultural productivity, thereby reducing the productivity gap with less-poor farmers.

INTRODUCTION

Vietnam has achieved remarkable success in reducing poverty while controlling inequality. The country's broad-based growth reflects the government's focus on developing labor-intensive export sectors while investing heavily in human capital that saw the country exceed its peers (World Bank, 2016a). However, gains have been concentrated among the Kinh and Hoa ethnic majority, while minority groups have not only continued to experience poverty rates far above the national average, but have seen slower progress too. During 2012-14, poverty among ethnic minorities declined by less than 2 percentage points, leaving close to 58 percent of ethnic minorities still living in poverty. The country's poverty agenda became more centered on issues of social exclusion. Recognizing this, the government implemented multiple programs aimed at reducing poverty among lagging communities by more than 1.5 percentage points per year.

This report analyzes recent trends in poverty and shared prosperity. It presents the findings of the 2016 Vietnam Household and Living Standards Survey (VHLSS), highlighting important progress and identifying new challenges. The report defines monetary poverty according the GSO-World Bank poverty line, amounting to monthly consumption of VND 969 167 per person i.e. equivalent to 2011 PPP $3.34 per person per day. This poverty line was determined in 2010 and has only been updated for changes in the cost of living since then. The Vietnamese government also uses a multidimensional poverty line, which classifies households as poor if they have an income per capita of VND 900,000 in urban areas or VND 700,000 in rural areas and are "deprived" in at least three of 10 dimensions of nonmonetary poverty. Because the thresholds used to determine the multidimensional poverty line are not comparable over time, the report uses the GSO-World Bank approach to assess long-term poverty trends. But the report also provides an update on complimentary non-monetary dimensions of poverty too.

The report is organized into two main sections. The first section reviews Vietnam's progress in reducing poverty and promoting share prosperity. It describes updated poverty and shared prosperity trends, the nature of economic mobility, and the drivers of poverty reduction. The second section – titled leaving no one behind - is more forward-looking, starting by identifying major constraints faced by the poor, then proceeding to lay out challenges for moving the poverty and shared prosperity agenda going forward.

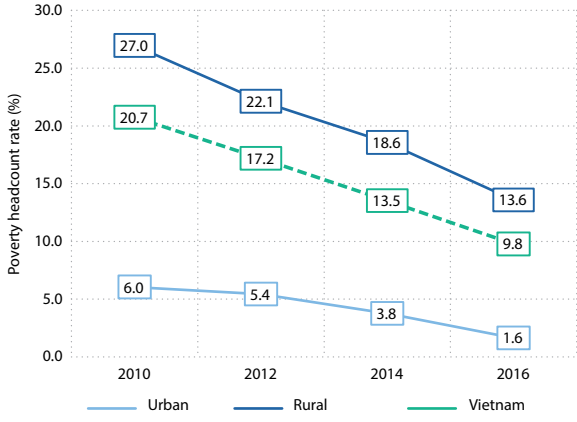
VIETNAM'S REMARKABLE SUCCESS STORY CONTINUES

POVERTY AND SHARED PROSPERITY TRENDS: 2010-16

Poverty declined everywhere for both ethnic minorities and the majority

All measures of poverty reveal broad and consistent (Figure 1). Measured at the GSO-World Bank national poverty line, the poverty headcount rate fell from 20.8 percent in 2010 to 9.8 percent in 2016, having declined by nearly 4 percentage points in the two years between 2014 and 2016. Meanwhile, estimates based on the poverty line for lower middle income countries (at 2011 PPP $3.2 per person per day), show a lower poverty rate of 8.6 percent in 2016. Extreme poverty is all but eliminated, with only 2 percent of the population living on less than 2011 PPP $1.9 per day. The poverty gap, which measures how far consumption of the poor is below the poverty line, has also steadily declined, indicating that poverty is becoming less severe among the remaining poor (see Annex 1, Figure 33). This leaves no doubt that Vietnam's remarkable success in reducing poverty continues.

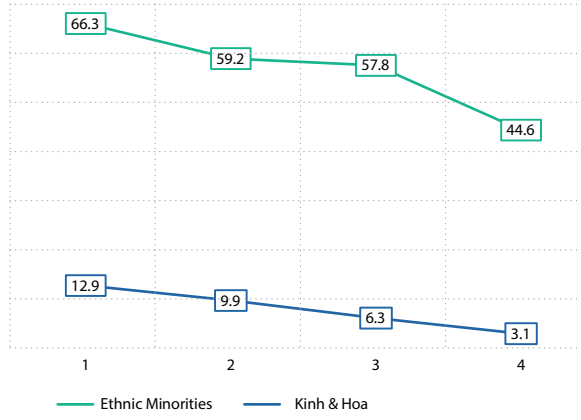
Figure 1. Poverty Rates Based on National and International Poverty Lines, 2010-16



Source: Authors' calculations based on the 2010-16 VHLSS.

Minority groups have experienced an especially significant decline in poverty rates in recent years. The poverty rate among minority groups fell by just 1.4 percentage points between 2012 and 2014, but then plunged by more than 13 percentage points from 57.8 percent to 44.6 percent between 2014 and 2016 (Figure 2). The decline in poverty among ethnic minorities during 2014-16 is the steepest decline in poverty among them for the past two decades. It also marks the first instance when declining poverty among ethnic minorities drove the overall decline in poverty rates nationwide.

Figure 2. Poverty Rates by Ethnic Group, 2010-16



Poverty declined everywhere. Between 2014 and 2016, poverty rates declined across all regions of Vietnam, though to a varying degree. The Midlands and Northern Mountains region and the Central Highlands region experienced the largest drops, with regional poverty rates falling by 9.3 and 6.3 percentage points, respectively (Table 1). The gains in the Central Highlands were especially noteworthy, as the regional poverty rate had barely declined during 2010-14. Remarkably, there is no indication that the pace of poverty reduction is slowing in regions where poverty rates are already low. Poverty more than halved, and one can say it was almost eliminated, in both the Red River Delta and Southeast regions which both had a 3-percentage point decline in poverty during 2014-16. Progress in these regions drove the decline in urban poverty nationwide.

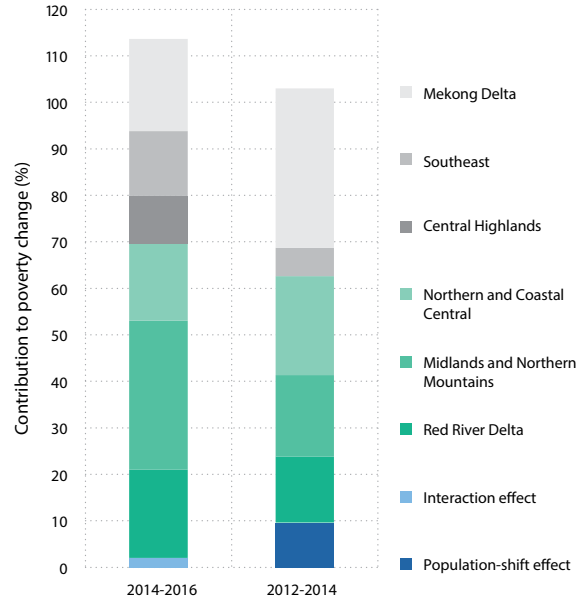
Table 1: Poverty trends by region, 2010-16

	Poverty Headcount Rate					Distribution of the Poor			
	2010	2012	2014	2016	Change	2010	2012	2014	2016
Vietnam	**20.7**	**17.2**	**13.5**	**9.8**	**-3.8**	**100.0**	**100.0**	**100.0**	**100.0**
Rural	27.0	22.1	18.6	13.6	-5.0	91.4	90.6	90.6	94.7
Urban	6.0	5.4	3.8	1.6	-2.1	8.6	9.4	9.4	5.3
Regions									
Red River Delta	11.9	7.5	5.2	2.2	-3.0	13.7	9.9	9.0	5.2
Midlands and Northern Mountains	44.9	41.9	37.3	28.0	-9.3	28.6	33.4	35.6	40.2
Northern and Coastal Central	23.7	18.2	14.7	11.8	-2.9	25.9	23.7	23.3	26.7
Central Highlands	32.8	29.7	30.4	24.1	-6.3	9.5	10.0	13.7	16.2
Southeast	7.0	5.0	3.7	0.6	-3.1	5.2	4.7	4.6	1.0
Mekong Delta	18.7	16.2	9.8	5.9	-3.9	17.1	18.4	13.7	10.8

Source: Authors' calculations from VHLSS 2010, 2012, 2014.

The spatial pattern of poverty reduction during 2014-16 was more balanced than in previous years, as gains in the poorest regions contributed the most to poverty reduction. Decomposing changes in the national poverty rates to account for changes in poverty within regions and the effect of migration between regions (Ravallion and Huppi, 1991) reveals that reduction in poverty within the Mekong Delta and the Northern and Central Coastal areas accounted for 55 percent of the reduction in poverty during 2012-14, though these regions accounted for 40 percent of the population (Figure 3). During 2014-16, declining poverty within the Midlands and Northern Mountain region and the Central Highlands region contributed 42 percent to the total reduction in poverty, even though these regions are home to just 20 percent of the population. Over the same period, the contribution of the Mekong Delta and the Northern and Central coastal areas declined to 36 percent. Falling poverty rates in Vietnam's poorest regions have driven the overall decline in the national rate observed in recent years.

Figure 3. Regional Decomposition of Poverty Changes in Vietnam, 2012-16

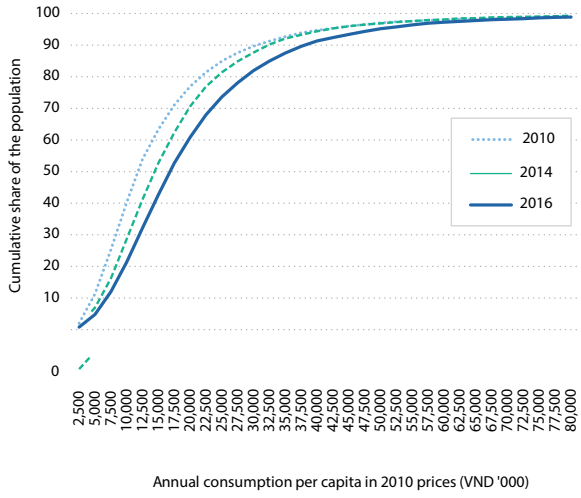


Source: Authors' calculations from VHLSS 2012, 2014, 2016.

Poverty reduction reflects significant improvement at all levels of welfare

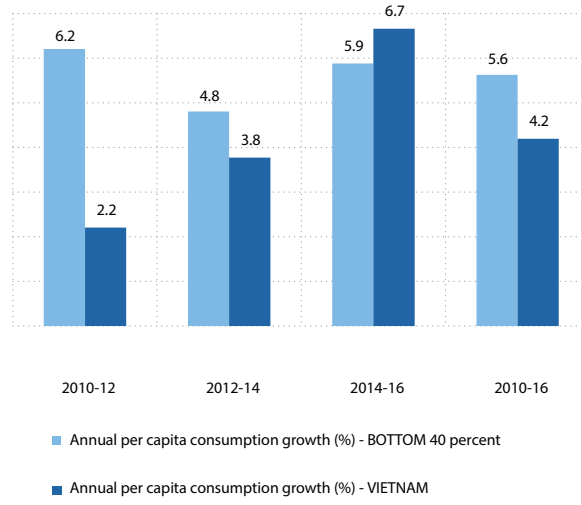
The observed decline in poverty rates reflects robust and broad-based income growth among households at all income levels. Vietnam's annual per capita GDP growth rate averaged 6.4 percent during 2014-16. Per capita consumption growth was equally high, rising by an average of 6.7 percent per year. Consumption growth was robust across all welfare levels, as evidenced by the change in the distribution of the consumption aggregate in real terms between 2014 and 2016 (Figure 4). The rightward shift in the distribution means that in 2016, Vietnamese at all levels of welfare were spending more than in previous years, which helps to explain the decrease in poverty. Due to strong and consistent gains in consumption across welfare groups, the observed shift in the distribution also implies that poverty rates declined over this period, regardless of which poverty line is used.

Figure 4. Poverty Dominance Curves, 2014-16



Source: Authors' calculations from VHLSS 2010-16

Figure 5. Per Capita Consumption Growth, 2010-16



Source: Authors' calculations from VHLSS 2010-16

But consumption growth is becoming less pro-poor over time

The rate of per capita consumption growth among households in the bottom 40 percent has recently fallen below the national average. At nearly 6 percent per year, growth in per capita consumption among households in the bottom 40 percent was high, but still 0.8 percentage points below the national average and nearly a full percentage point below the growth rate for households in the top 60 percent. However, due to a highly pro-poor distribution in previous years, consumption growth among lower-income households still outpaced the national average over the 2010-16 period (Figure 5).

Inequality now appears to be increasing, especially in the Central Highlands and the Mekong Delta. The Gini coefficient dropped from 39.3 in 2010 to 34.8 in 2014, but then rebounded to 35.3 in 2016 (Table 2). The increase in inequality occurred entirely in rural areas, where the Gini coefficient increased by 0.8 points, while no change in inequality was observed in urban areas. Other measures of inequality, such as the Theil index, confirm an incipient rise in inequality, primarily in rural areas. The Central Highlands and the Mekong Delta regions both exhibited a significant increase in inequality, with Gini coefficients rising by as much as 2 Gini percentage points. Increasing inequality in these two regions and in the Northern and Central Coastal region was responsible or the incipient rise in inequality.

Table 2: Trends in Inequality, 2010-16

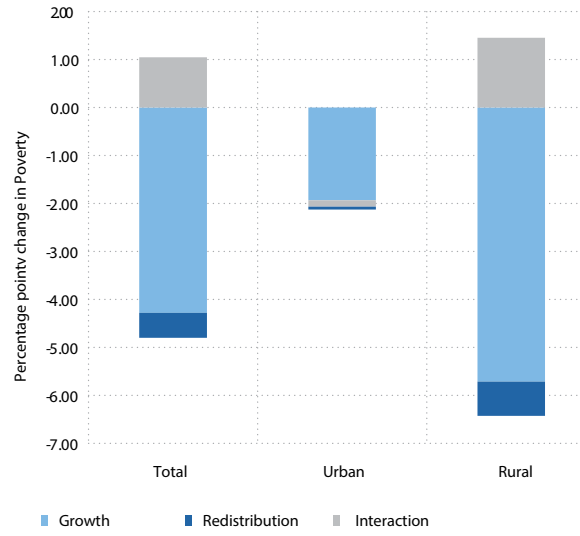
	Gini Coefficient				Theil Index			
	2010	2012	2014	2016	2010	2012	2014	2016
National	**39.3**	**35.6**	**34.8**	**35.3**	**29.4**	**22.9**	**21.6**	**22.3**
Urban	38.6	31.7	33.1	32.9	27.8	21.4	19.7	19.5
Rural	33.2	34.4	31.0	31.8	20.0	17.4	16.5	17.7
Region								
Red River Delta	40.1	34.4	33.6	32.8	29.7	20.9	20.3	19.3
Midlands and Northern Mountains	37.1	36.6	37.0	36.4	23.9	23.4	25.0	23.9
Northern and Coastal Central	34.0	33.3	33.2	33.9	20.9	19.6	19.6	20.9
Central Highlands	36.7	37.9	38.9	39.7	23.0	25.2	26.3	27.3
Southeast	39.8	33.3	31.1	30.9	31.6	20.5	18.0	17.4
Mekong Delta	31.7	30.3	28.7	30.6	17.8	17.6	14.5	17.3

Source: Authors' calculations from VHLSS 2010, 2012, 2014, 2016

Growth, rather than redistribution, drove the recent decline in poverty

As inequality rose during 2014-16, poverty reduction was a result of high growth of average consumption rather than changes in the distribution of consumption. A growth-inequality decomposition[3] is used to show how much of the reduction in poverty was a result of high growth in average per capita consumption, assuming no changes in inequality, and how much can be attributed to changes in inequality keeping the average level of consumption per capita the same as the base year. Estimates from the VHLSS 2014 and 2016, suggest that growth was the sole driver of poverty reduction (Figure 6), while rising inequality dampened poverty reduction. If inequality had not changed, the overall poverty rate would have declined by an additional 1.1 percentage points, and the rural poverty rate would have fallen by an additional 1.5 percentage points.

Figure 6. The Relative Contributions of Consumption Growth and Distributional Equity to Changes in the Poverty Rate, 2014-16



Source: Authors' calculations from VHLSS 2014, 2016.

Non-monetary indicators of welfare show improvements but gaps persist

Continued improvements in numerous nonmonetary welfare indicators underscore Vietnam's progress in improving the quality of life. Electricity access has been near-universal for some time now. In 2010, an estimated 98 percent of households was connected to the national electric grid. Improvements have been made on other indicators since 2010 Mobile connectivity is now ubiquitous, as the share of households with at least one mobile phone rose from 73 percent in 2010 to 93 percent in 2016. Access to improved sanitation increased from 70 percent to 83 percent, and access to an improved drinking water rose from 72 percent to 78 percent. Meanwhile, the share of households with an indoor piped water connection rose from 26 percent to 38 percent (Table 3).

Vietnam performed well on education and it continues to improve Upper secondary completion rates increased, evidenced by the rise in the share of 20- to 24-year-olds with complete upper secondary education from 52 percent in 2010 to 59 percent in 2016. Enrollment in early childhood education (ECD) is also on the rise. Two-thirds of three- to five-year-old children were enrolled in pre-primary education in 2016, up more than 13 percentage points from 2010. Vietnam's performance in these areas far exceeds the average for comparable countries in the region.

As with consumption growth, gains in nonmonetary welfare indicators were in most cases, experienced by poor and nonpoor households across all geographical regions. ECD enrollment increased by 15 percentage points among children in the bottom 40 percent of households and among rural children. Enrollment in ECD increased in all regions, ranging from 10 percentage points in the Southeast region to 18 percentage points in the Midlands and Northern Mountainous region. Access to improved sanitation increased by about 10 percentage points among households in the bottom 40 percent, broadly in line with the increase among households in the top 60 percent. And access to phone service rose by 16 percentage points among households in the bottom 40 percent.

Households in the Midlands and Northern Mountainous regions, however did not make as much progress on upper secondary education and access to water. Upper secondary completion rates in the region remained broadly unchanged at 43 percent between 2010 and 2016. However,

3 For a description of the growth-inequality decomposition methodology, see: Datt and Ravallion, 1992.

Table 3: Trends in Nonmonetary Welfare Indicators, 2010-16

	ECD		Tertiary Completion		Piped Water		Improved Water		Improved toilet		Telephone	
	2010	2016	2010	2016	2010	2016	2010	2016	2010	2016	2010	2016
Male	53.6	66.1	47.7	50.9	22.4	35.1	69.6	76.2	68.7	82.5	79.3	94.6
Female	52.9	67.4	56.0	66.6	37.0	47.2	78.2	83.6	74.1	85.4	75.0	87.7
Ethnic Minorities	44.6	64.5	26.2	31.5	5.7	10.8	43.4	46.9	23.1	45.3	51.0	85.0
Kinh & Hoa	55.2	67.3	56.8	66.0	29.2	42.6	76.0	83.2	77.0	89.4	81.9	94.0
Not Poor	59.2	69.1	59.0	64.2	30.4	40.8	76.4	81.3	78.1	87.7	84.1	94.4
Poor	38.7	53.2	18.7	16.2	6.7	7.1	50.9	40.2	33.5	30.5	49.0	72.6
Top 60 percent	62.2	74.4	64.1	71.9	35.7	49.3	79.6	86.1	84.0	93.4	87.6	96.6
Bottom 40 percent	42.4	57.9	24.9	33.4	9.4	18.2	58.2	63.8	45.6	65.0	60.8	86.0
Rural	49.0	64.2	44.8	53.2	8.7	20.5	63.4	69.9	60.4	77.0	74.4	90.9
Urban	63.8	72.7	69.3	71.4	66.2	75.8	91.2	95.6	92.2	96.4	86.8	96.7
Red River Delta	68.2	81.5	72.8	80.7	27.6	46.6	61.4	73.1	87.4	97.8	81.1	91.6
Midlands and Northern Mountains	60.8	78.0	43.3	43.2	13.1	15.3	58.8	60.4	52.2	69.5	69.7	93.4
Northern and Coastal Central	54.5	66.6	55.3	63.0	21.1	31.1	79.5	81.4	72.1	83.4	75.3	90.1
Central Highlands	38.7	52.3	41.2	49.0	12.8	18.0	78.6	81.9	51.2	66.6	78.8	89.4
Southeast	54.7	64.7	51.4	57.8	43.8	56.0	93.7	97.6	90.2	95.7	84.8	97.4
Mekong Delta	33.0	44.1	29.9	43.0	27.3	42.8	64.2	74.9	44.5	67.8	77.1	94.2
Vietnam	53.3	66.7	51.9	58.8	26.2	38.2	71.9	78.1	70.1	83.3	78.2	92.8

Source: Authors' calculations from VHLSS 2010, 2012, 2014, 2016.

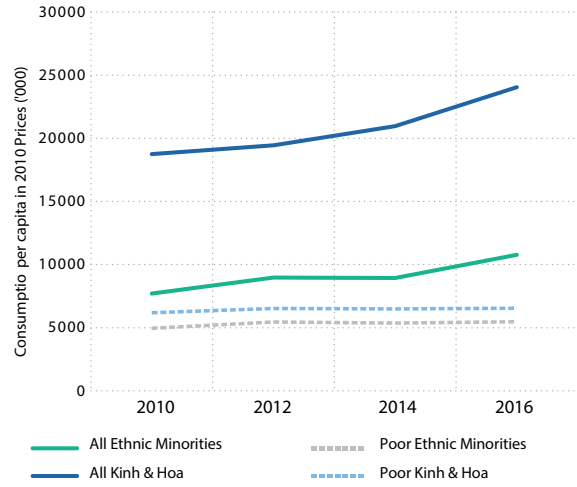
completion rates may rise in the near term, since upper secondary enrollment has increased by 5 percentage points. The share of households with a piped water connection or access to an improved water source rose by less than 2 percentage points during 2010-16, with similarly limited progress observed among households above and below the poverty line.

While access to upper secondary education and water and sanitation improved for both poor and nonpoor households, gaps between them widened over time The disparity in upper secondary enrollment rates between children living in poor and nonpoor households widened to more than to 24 percentage points in 2016. Meanwhile, the gap in access to improved toilets between poor and nonpoor households widened by 13 percentage points, and by 2016 access rates among nonpoor households were nearly three times higher than access rates among poor households.

Gender gaps are emerging in upper secondary education as female students outperform their male peers. Enrollment rates for girls and boys are broadly equal from the ECD to lower secondary levels and have increased at a similar pace. In 2010, net enrollment rates in upper secondary education were also equal at about 34 percent, but by 2016 the rate for female students had risen to 43.5 percent, while the rate for male students had reached just 39.6 percent. Similarly, the upper secondary completion rate among females aged 20-24 was 67 percent in 2016, compared to 51 percent for male students.

Overall, all population subgroups are experiencing substantial gains, but welfare indicators for some, especially minorities, continue to lag far behind. Both monetary and nonmonetary indicators are improving among ethnic minorities, but not fast enough to catch up with the Kinh and Hoa (Figure 7). Average per capita consumption of ethnic minorities was only 41 percent of the average per capita consumption of the Kinh and Hoa in 2010 and was still less that 45 percent in 2016. As the economy grows, the absolute gap between ethnic minorities and the Kinh and Hoa has increased. Poverty is also significantly deeper among poor ethnic minority households than among poor Kinh and Hoa households. Similar disparities are evident in education, and gaps at the upper secondary level in 2016 mirrored gaps at the lower secondary level a decade earlier. Thus, even as society progresses, those at the bottom remain there. Despite recent progress, targeted measures will be necessary to ensure that poverty rates among ethnic minorities converge with the national average.

Figure 7. Trends in Annual Consumption per Capita, 2010-16



Source: Authors calculations from VHLSS, 2010, 2012, 2014, 2016

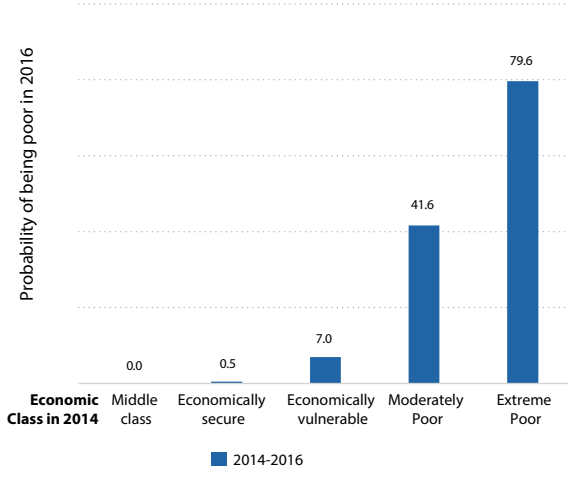
ECONOMIC MOBILITY: CHASING THE MIDDLE CLASS DREAM

Panel data reveals the progress of Vietnamese households as they move up the economic ladder.[4] To demonstrate this progress, households are grouped into five economic classes based on their daily consumption per capita in 2011 PPP dollars. Following international norms[5], these five classes are defined as: (i) the extremely poor, who live on less than $1.90 per day, (ii) the moderately poor, whose per capita consumption ranges from $1.90 to $3.20 per day, (iii) the economically vulnerable, who consume $3.20 - $5.5 per person per day, (iv) the economically secure, consuming $5.50 - $15 per person per day, and (v) the global middle class, who live on more than $15 per person per day. Households in the last two groups are referred to as the "consumer class," since they have enough income to cover daily expenses, absorb income shocks, and consume some amount of non-necessity goods and services. Economic mobility can be analyzed by examining the movement of households between these groups, as well as movements in and out of poverty.

Though based on international norms, these groups resonate in Vietnam. Households in the first two groups are classified as poor based on the GSO-World Bank national poverty line. Panel data for 2014-16 show that the estimated risk of a household in the consumer class falling into poverty is almost zero (Figure 8). Thus $5.5 per capita per day is a reasonable threshold for defining economic security in Vietnam.

Living conditions or life style choices of Vietnamese we classify as part of the global middle class, are much better and represent the dream of many. In 2016, about 55 percent of middle-class households lived in a house with a private bathroom and kitchen (Table 4). Nearly all middle-class houses had concrete or brick walls and used septic/semi-septic tanks. Their average living area was 120 m^2. About 75 percent of the middle class had a washing machine, 58 percent had an air conditioner, and 57 percent had a computer. By comparison, just 5 percent of the economically vulnerable lived in a house with a private bathroom or kitchen, 47 percent had a septic tank, and their average living space was 64 m^2. Fewer than 8 percent had a washing machine, fewer than 2 percent had an air conditioner, and fewer than 3 percent had a computer. On average, the middle class spent three times as much on nonfood items (excluding durable goods) than the economically vulnerable, Moreover, 60 percent of adults in middle-class households had a post-secondary education, twice national average.

Figure 8. Probability of being poor in 2016 conditional on economic class in 2014



Source: Authors' calculations from VHLSS 2014, 2016.

4 The VHLSS includes a rolling panel of households, in which 50% of the households in one round (e.g. VHLSS 2014) are revisited as part of the sample for the next (the VHLSS 2016 in this case). This survey is a rooftop survey, without any tracking of individuals or split households. This design may lead to attrition bias, depending on migration patterns. We test for the existence of such bias by looking at key outcomes for the panel sample against the full sample, and find no evidence of attrition bias.

5 These thresholds are based on international income classifications. See: World Bank, 2017a.

Table 4: Living Conditions Indicators by Economic Class, 2016

Economic Class	Extreme Poor	Moderately Poor	Economically vulnerable	Economically secure	Middle class	Vietnam
Living area (m2)	51	57	64	84	121	84
Piped water or borehole	8.3	20.3	41.2	68.1	85.7	62.3
Septic/Semi-Septic Tank	4.2	14.1	46.5	78.9	95.7	70.8
Concrete or brick wall house	30.8	43.0	70.8	89.9	97.8	84.2
Lives in villa or a house with private bathroom and kitchen	0.0	1.4	5.2	23.0	55.4	23.2
Has a computer	0.0	0.8	2.5	21.8	56.0	22.1
Has air conditioners	0.0	0.4	1.6	15.8	58.6	18.8
Has a washing machine	0.0	0.7	7.5	38.1	74.7	35.5
Has a water heater	0.0	0.2	7.9	29.6	57.6	27.9
Share of adults with post-secondary education	3.9	6.9	14.6	30.2	60.4	30.3
Nonfood expenses (VND '000)	1,267	2,230	3,831	7,519	17,196	7,967

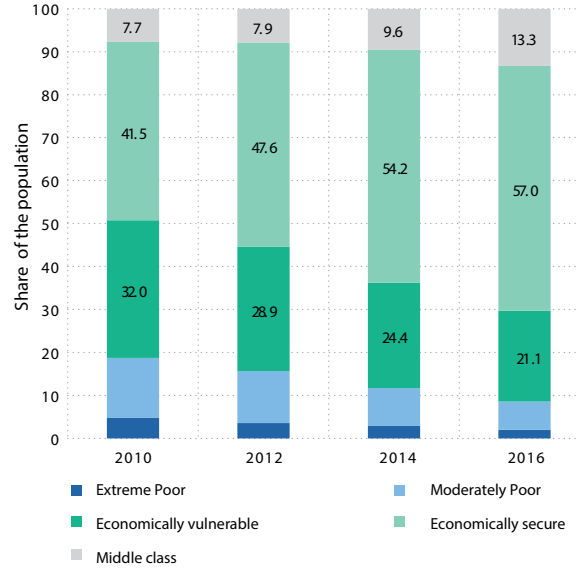
Source: Authors' calculations from VHLSS 2016.

The middle class is expanding as households move up the economic ladder

Vietnam's consumer class is growing rapidly. The share of households classified as economically secure increased from less than 50 percent in 2010 to 70 percent in 2016. These include the 13.3 percent of households that are part of the global middle class (Figure 9), up from 7.7 percent in 2010. Most of that increase occurred between 2014 and 2016, when 3 million people joined the global middle class. More importantly, the population classified as economically insecure or poor is rapidly declining from half the population in 2010 to 30 percent in 2016. Not only are households managing to escape poverty, they can quickly progress out of the economic insecurity to a place in the consumer class. The shrinking share of economically vulnerable households suggests that economic security is within reach of most of the population.

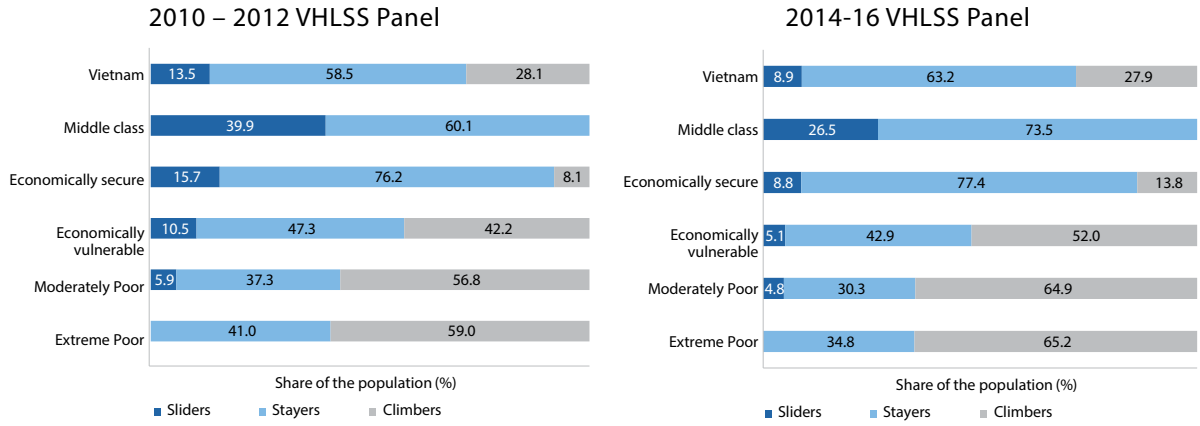
Economic mobility among the same households over time provides robust evidence of upward movement in Vietnam (Figure 10). About 28 percent of the population moved into a higher economic class between 2014 and 2016, 63 percent stayed in the same class, while only 9 percent fell into a lower economic class. Thus, three times as many people moved up the economic ladder than those who moved down. Upward mobility is even higher when the top economic class is excluded, as this class represents the upper bound from which no further economic movement to a higher class is "possible" in this classification. About 65 percent of households that were either extremely poor or moderately poor in 2014 had moved up the economic ladder by 2016. Among households that were economically vulnerable, 52 percent had become economically secure or joined the middle class by 2016. Meanwhile, not more than 9 percent fell to a lower economic class among each of these groups. These figures clearly indicate that households' welfare is on an upward trajectory, consistent with the robust consumption growth observed in recent years.

Figure 9. Population by Economic Class, 2010-16



Source: Authors' calculations from VHLSS 2010, 2012, 2014, 2016.

Figure 10. Trends in Economic Mobility, 2010-16



Source: Authors' calculations from VHLSS 2010, 2012, 2014, 2016

The risk of falling into poverty is low and declining

Table 5: Transitions into and out of Poverty: 2014-16

	2016		
2014	Not Poor	Poor	Total
Not Poor	97.9	2.1	100
Poor	49.9	50.1	100

Source: Authors' calculations from VHLSS 2014, 2016 panel households.

Table 6: Probability of Being Poor (Based on GSO-WB Poverty Line) in Terminal Period by Economic Status in Base Year: 2010-16

	Poor at end of panel period		
Economic class in base year	2010-2012	2012-2014	2014-2016
Extreme Poor	51	57	64
Moderately Poor	8.3	20.3	41.2
Economically vulnerable	4.2	14.1	46.5
Economically secure	30.8	43.0	70.8
Middle class	0.0	1.4	5.2
All non-poor	4.0	4.4	1.6

Source: Authors' calculations from VHLSS 2010, 2012, 2014, 2016.

In recent years, very few non-poor households have fallen below the poverty line. While half of households that were poor in 2014 had moved out of poverty by 2016, only 2 percent of households that were not poor in 2014 had fallen into poverty by 2016 (Table 5). The mass movement of households out of poverty, combined with the small share falling below the poverty line, suggest that fewer Vietnamese households are in chronic poverty, and those who escape poverty mostly sustain their gains. Poverty eradication can now be regarded as a realistic goal, given how few households who escape poverty end up falling back and how close the remaining poor households are to the poverty line

Over time, the risk of falling into extreme poverty has substantially declined. This trend reflects the shrinking share of economically vulnerable households, as well as the low downward mobility of households in each of the top four economic classes. This is made clear from a comparison of transitions between the 2010-12 and 2014-16 panels in Figure 10 above. Further evidence comes from comparing movements in and out of poverty by economic class in the base year using panel data (Table 6). Between 2010 and 2012, just 4 percent of the population fell into poverty, and this this share declined to 2 percent between 2014 and 2016. Similarly, while 13 percent of households classified as economically vulnerable in 2010 had fallen below the poverty line in 2012, just 7 percent of economically vulnerable households in 2014 had fallen into poverty by 2016. Almost all the households classified as economically secure in 2014 remained non-poor in 2016.

Upward mobility has increased across all demographic groups. In the past, gains among

Table 7: Economic mobility by household characteristics, 2014-16

	Transition, 2014-16			Economic Class in 2016	
	Sliders	Stayers	Climbers	Economically Secure or middle class	Middle class
Male	9.0	63.1	27.9	72.0	12.6
Female	8.6	63.5	27.9	77.7	21.8
Ethnic Minorities	13.8	49.4	36.8	23.5	2.7
Kinh & Hoa	8.1	65.4	26.5	81.3	16.7
Household head education level					
Some primary	10.2	54.4	35.4	53.3	6.3
Completed primary	9.2	61.9	29.0	70.1	8.4
Completed lower secondary	10.0	65.3	24.6	76.4	10.7
Completed post-secondary	6.0	70.4	23.6	92.7	35.1
Rural	9.8	59.6	30.7	65.7	7.5
Urban	7.2	70.4	22.4	88.7	29.3
Red River Delta	9.9	67.9	22.2	81.8	18.7
Midlands and Northern Mountains	12.2	55.6	32.2	43.6	6.5
Northern and Coastal Central	7.0	64.9	28.1	70.8	10.5
Central Highlands	11.7	58.5	29.8	58.2	8.5
Southeast	5.9	68.0	26.1	91.0	28.2
Mekong Delta	9.3	57.6	33.1	75.4	9.6
Livelihoods					
Non-agriculture labor income only	7.1	72.3	20.6	91.0	31.1
Nonwage agriculture only	11.1	54.8	34.2	62.1	6.7
Agriculture wage and nonwage income	11.5	55.8	32.7	36.6	2.3
Agriculture plus non-agriculture wages	8.9	56.6	34.5	63.8	5.8
Agriculture plus household business	9.4	65.1	25.5	78.6	11.9
Agriculture and both non-agriculture wages & household business	8.6	68.1	23.3	72.4	8.4
Remittances & Transfers only	16.6	49.8	33.6	83.1	17.3
Major source of income					
Crop cultivation	12.6	57.8	29.6	56.6	4.9
Other agriculture	8.4	54.8	36.8	58.4	5.6
Household business	5.3	70.0	24.7	88.6	22.1
Wages	9.6	63.3	27.1	74.1	15.5
Remittances	8.5	62.0	29.6	72.2	11.8
Transfers	13.7	48.0	38.3	62.4	10.9
Other income	1.4	77.7	21.0	79.0	37.7

Source: Authors' calculations from VHLSS 2014 -2016 panel households' data.

ethnic minorities, farming households, and households located in the Midlands and Northern Mountain region tended to lag the national average. However, between 2014 and 2016, more than 30 percent of households in these demographic groups had moved up the economic ladder (Table 7). In many cases, upward mobility among these groups exceeded the national average. However, they were also subject to an increased risk of downward mobility compared to other groups. For example, upward mobility was 10 percentage points higher among ethnic minorities than among the Kinh and Hoa, but downward mobility among ethnic minorities was also 5 percentage points higher. The same can be said for exclusively family farming households and those living in Midland and Northern Mountainous areas. But on balance, more people from these groups moved up the economic ladder than sliding down.

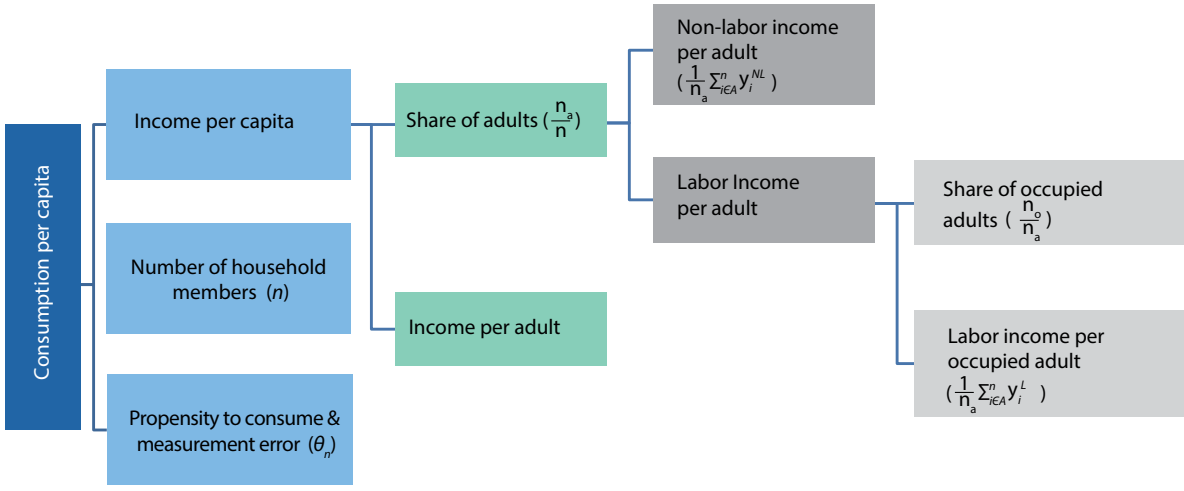
Some groups were more likely than others to achieve economic security. Households who made the full transition out of agriculture are more likely to attain economic security (Table 7). About 91 percent of such households are classified as economically secure in 2016, of which a third of them are classed as the middle class. On the other hand, only 37 percent of people supplementing their family farm income with agriculture wages could be classified as economically secure. Only 23 percent of ethnic minorities were classified as economically secure, in contrast to 88 percent of the Kinh and Hoa. Economic security, seems the preserve of the more educated, and mostly urban based population. About 93 percent of people living in households headed by a person with post-secondary education are classified as economically secure, with 35 percent being in the global middle class. In urban areas, close to 89 percent of the population are economically secure, with 29 percent being in the middle class. The Southeast region leads the way in economic security (91 percent) while the Midland and Northern Mountainous regions fall short (just 44 percent). Despite, recent progress in escaping poverty, lagging groups fall short of attaining economic security.

VIETNAM'S RECIPE OF SUCCESS

Vietnam's model of export led growth in labor intensive sectors paid off. Jobs were created and wage incomes grew. To understand Vietnam's success in raising living standards, a simplified analytical framework for examining changes in households' income-generating capacity is applied. This considers that changes in household income-generating capacity are determined by changes in: (i) the stock of household labor and other assets such as land, (ii) the employment rate of household's labor, (iii) the returns to household labor – both wages and profits from agriculture or household businesses, and (iv) transfers received by the household.[6] A combination of the first three makes up labor income and reflect human capital accumulation and labor market dynamics, while the fourth represents nonlabor income. This is in part influenced by government taxes and government transfers.

The contribution of labor income and its subcomponents to poverty reduction and upward mobility can be quantified using income-poverty decompositions[7] (Figure 11). Components of labor income analyzed include the share of adults (an indicator of the availability of labor), the proportion of employed adults in the household, average wages per worker, and average non-wage earnings per adult from agriculture and household businesses. Non-labor income is separated into remittances, social transfers and other income. Table 8 below presents estimates of the contribution of these factors to poverty changes based on two poverty lines corresponding to the GSO-WB poverty line and the 2011 PPP $5.5 per day poverty line denoting the threshold for economic security. Results for the global middle class line are shown in Annex 1, Table 12.

Figure 11: Framework for Income-Poverty Decompositions



Source: Adapted from Azevedo et al. 2013.

6 This framework is based on Busolo et al., 2014.

7 This methodology was proposed by Barros et al. (2006) and adapted by Azevedo et al. (2013).

Table 8: Income Decomposition of Poverty in Vietnam, 2014-16

	GSO-World Bank National Poverty Line					Economic security line				
	Vietnam	Rural	Urban	Ethnic Minorities	Kinh & Hoa	Vietnam	Rural	Urban	Ethnic Minorities	Kinh & Hoa
Propensity to consume	-0.8	-1.7	0.7	-2.9	-0.7	-1.8	-3.5	0.6	-1.2	-1.7
Share of Adults	0.2	0.3	0.4	-0.3	0.3	-0.2	-0.4	0.1	0.8	-0.4
Share of wage workers	0.2	0.2	-0.6	-0.8	0.1	-0.3	-0.7	-1.0	-0.2	-0.8
Average wages per worker	-1.8	-2.2	-1.3	-3.9	-1.7	-3.3	-3.2	-3.4	-3.1	-3.7
Average business earnings	-0.4	-0.5	-0.7	-0.9	-0.5	-1.4	-1.3	-1.9	-1.1	-1.7
Average crop income	0.4	0.6	0.2	0.0	0.5	0.0	0.2	0.1	0.4	-0.1
Average other farm income	-0.5	-0.8	0.1	-1.8	-0.3	-0.6	-0.9	0.1	-1.3	-0.8
Remittances	-0.8	-0.8	-0.7	-1.5	-0.7	-1.0	-1.1	-0.7	-1.0	-1.0
Transfers	-0.2	-0.2	-0.1	-0.6	-0.1	-0.2	-0.2	-0.3	-0.1	-0.2
Other income	0.1	0.2	-0.2	0.1	0.0	0.1	0.1	-0.1	0.2	0.0
Total change	-3.7	-4.9	-2.1	-12.6	-3.2	-8.8	-10.9	-6.5	-6.5	-10.5

Source: Authors' calculations from VHLSS 2014, 2016.

Notes: Numerical differences in the overall change arise from differences in the number of observations used in the analysis as with missing income information for at least one of the income aggregates are dropped.

Wage income growth drove poverty reduction

Rising wage income made the largest contribution to both poverty reduction and the increase in economically secure households. Real wages rose a cumulative 8 percent during 2014-16 (Figure 12), promoting poverty reduction and shared prosperity in Vietnam. The growth of average wages per worker accounted for an estimated 1.8 percentage points of the decline in the poverty rate during 2014-16, or about half of the total reduction in poverty observed over the period (Table 8). Rising wages accounted for about 38 percent of the growth in economically secure households nationwide and more than 52 percent in urban areas. Wage growth was the most important driver of household income growth in both rural and urban areas, and for both ethnic minorities and the Kinh and Hoa.

Figure 12. Trends in Seasonally Adjusted Average Real Monthly Wages by Economic Sector, 2013-17

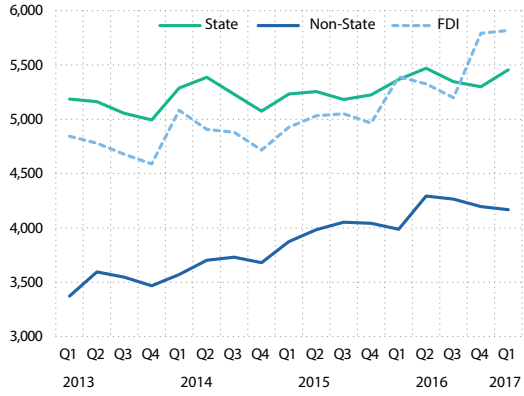
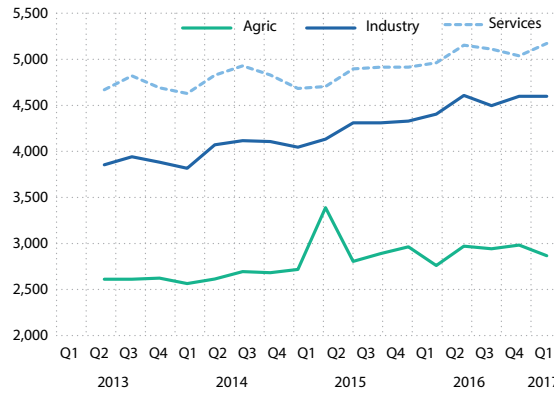
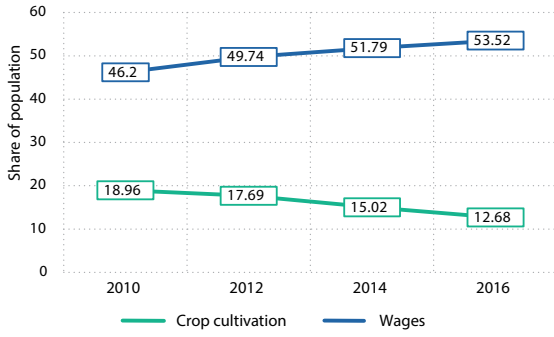


Figure 13. Trends in Seasonally Adjusted Average Real Monthly Wages by Industry, 2013-17



Source: Estimates based on earning data from GSO Labor Force Survey Quarterly Reports, 2013-2016.

Figure 14. Major Source of Household Income, 2010-16



Source: Authors' calculations from VHLSS 2010, 2012, 2014, 2016.

Wages grew faster in the private sector (Figure 12). Average monthly wages in the domestic private sector wages grew the fastest during 2014-16, rising by 14 percent and outpacing wage growth in the FDI sector which rose by 11 percent. Wages increased more in the industry sector, by 11 percent, followed by the agriculture sector (9 percent) while wages in the service sector grew by 5 percent (Figure 13). Due to robust wage growth across all industries in both the domestic and FDI sectors, rising wage income drove household income growth for all groups.

Wages are now the largest source of income among Vietnamese households. This underlined the subtle change in livelihoods. Between 2010 and 2016, the share of households that earned most of their income from nonagricultural wages increased by 7 percentage points overall (Figure 14). The share of ethnic minority households obtaining most of their income from wages increased too, almost by 13 percentage points, to 44 percent in 2016 (Figure 15). Livelihoods were transformed primarily by growing wage income among households that already received some, rather than an increase in the number of households that received wage income for the first time. Indeed, the share of households that received wage income rose by just 2 percentage points between 2010 and 2016. While the transition to wage employment drove down poverty rates among ethnic minorities, many minority workers are engaged in low-wage activities, thus most minority households have not yet achieved economic security.

Sectoral decompositions of changes in poverty[8] indicate that most of the decline in poverty was among households that already earned some amount of wage income. Declining poverty among those already earning most of their income from wages contributed to 44 percent to overall poverty reduction, with another 11 percent coming from households switching their major source of income, mostly to wages (Figure 16). The latter effect was driven by a shift among ethnic minority households, for which the switch to mostly wage income contributed 12 percent to total poverty reduction in contrast to one percent among the Kinh and Hoa

Figure 15. Major Source of Household Income among Ethnic Minorities, 2010-16

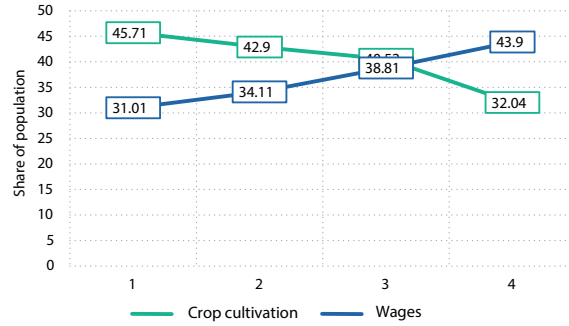
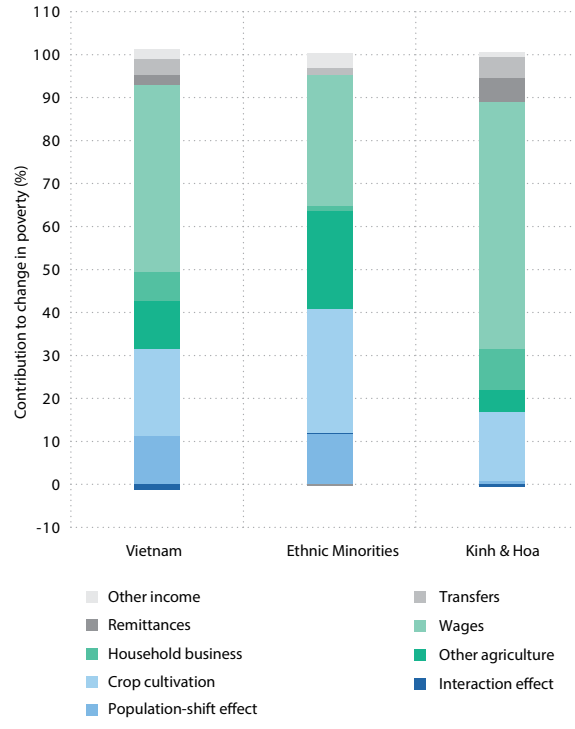


Figure 16. Decomposition of Poverty Changes by Major Income Source, 2013-17



Source: Authors' calculations from VHLSS 2014, 2016

8 Ravallion and Huppi, 1991

Figure 17. Growth in Manufacturing Output and Employment, 2007 -2016

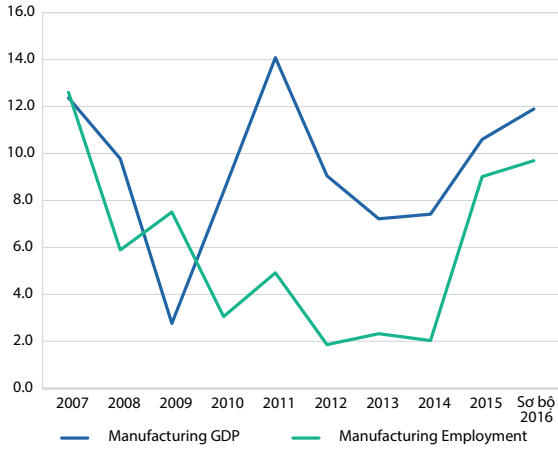
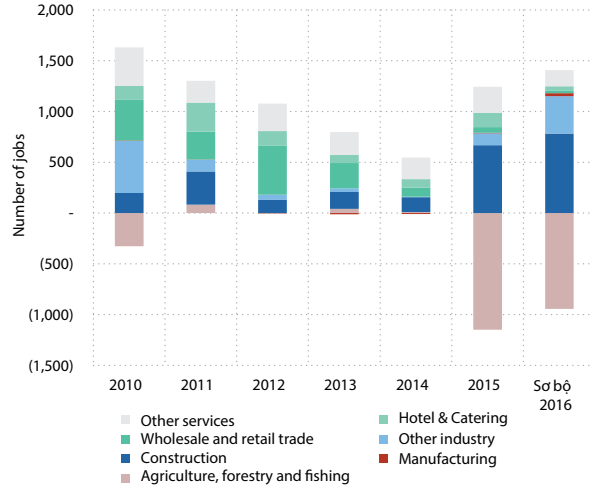


Figure 18. Net Employment Creation by Sector: 2010-2016



Source: GSO, 2017.

Robust labor demand supported rapid wage growth. A booming export sector boosted labor demand for both low and high skilled workers. Manufacturing output grew by a total of 13.3 percent during 2014-16, and the sector added a net 1.4 million jobs. The manufacturing sector's employment rose in tandem with output growth, suggesting that the increase in labor drove the overall growth of the sector (Figure 17). Labor demand was also buoyant in the construction, retail and hospitality sectors, which added a combined 700,000 jobs (Figure 18). All four sectors together accounted for 80 percent of total jobs created during the period, with the manufacturing sector representing more than half of all new jobs. A forthcoming report on jobs in Vietnam (Word Bank, 2018) finds that entry of new firms and growth of the more productive existing firms drove the rapid job creation in Vietnam.

Vietnam began to see a net movement out of agriculture to more productive sectors with higher wages. Despite robust job creation, the total number of employed people grew by less than one percent during 2014-16. Instead of absorbing unemployed workers, the fast-growing manufacturing, construction, retail and hospitality sectors drew labor away from agriculture (Figure 18), reducing employment in the sector by more than 4 percent per year since 2014. This saw higher growth in wage employment in urban areas. The rising share of adults engaged in wage employment in urban areas contributed 0.6 percentage points, or 28 percent, to the decline in urban poverty. The decline in unpaid family-farm labor supply in rural areas resulted in an increase in wage agriculture jobs. That too contributed to rising agriculture wages.

The net movement of labor out of agriculture was followed by a rise in remittances. Though fewer than five percent of households receive most of their income from remittances, remittances still play an important role in helping households escape poverty. Rising remittances accounted for more than 21 percent of the decline in poverty during 2014-16, equal to the contribution of rising agriculture income.

Agriculture transformation contributed to poverty reduction in rural areas

Increased income from non-crop cultivation helped reduce rural poverty rates, especially among ethnic minorities. Income-poverty decompositions suggest that rising non-crop farm income contributed about 1.8 percentage points to the total reduction in poverty rates among ethnic minorities and about 0.8 percentage points to the decline in rural poverty rates. Non-crop income was especially important for those ethnic minority households that attained economic security, accounting for 20 percent of the increase in the share of ethnic minorities classified as economically secure between 2014 and 2016 —second only to the contribution of wage growth. This is part of Vietnam's agricultural transformation story, which has also reflected in the country's success in growing non-traditional agriculture exports (World Bank, 2016b).

Household businesses are important for attaining economic security

Nationwide, household business income was the second-most important contributor to economic security, after wage growth. It accounted for 1.4 percentage points increase in the share of people classified as economically secure in Vietnam. In urban areas, this contribution rose to 1.9 percentage points. Household businesses had a more modest effect on poverty rates, as most households that received income from household businesses were already above the poverty line. The share of households with nonfarm business income remained broadly constant at around 35 percent, but the average income from household businesses rose by 79 percent. Thus, growth in household business income was driven by increased profitability rather than new formations of household businesses.

In sum, Vietnam's export-oriented growth model proved highly successful in reducing poverty and promoting economic security. Robust job growth in the export-oriented manufacturing sector created half of the jobs in the country, boosted demand for labor and accelerated the structural transformation that saw a net movement of labor out of agriculture. With rising incomes, the construction, retail and hospitality sectors were also booming, creating a vibrant labor market. A combination of rising wages and a shift toward wage employment raised wage incomes and drove poverty reduction. An increase in non-crop agriculture gave an extra push to reduce poverty and contributed to greater economic security in rural areas, while rising household-business income further bolstered economic security, especially in urban areas.

LEAVING NO ONE BEHIND

WHO IS LEFT BEHIND?

Poverty is increasingly concentrated in rural areas and among ethnic minorities

Though rapidly declining, there are still a lot of poor people remaining in Vietnam. Their number declined from about 18 million poor people in 2010 to around 9 million in 2016 (Table 9). But that means Vietnam's poor population exceeds the entire population of neighboring Lao PDR. Of course, Vietnam is now home to more than 84 million non-poor people, 64 million of which are economically secure—more than the total population of Thailand. The number of poor people is dwarfed by those who are economically secure by a long shot. Still, there are a lot of them remaining.

Table 9: Number and Distribution of Poor People in Vietnam, 2010-16

Year	Number of poor people				Share of poor people (%)		
	Vietnam	Rural	Ethnic minorities	Kinh & Hoa	Rural	Ethnic minorities	Kinh & Hoa
2010	17,889,556	16,342,568	8,354,993	9,534,563	91.4	46.7	53.3
2012	15,341,951	13,905,071	7,803,869	7,538,082	90.6	50.9	49.1
2014	12,432,678	11,258,372	7,430,997	5,001,681	90.6	59.8	40.2
2016	9,123,737	8,637,695	6,653,882	2,469,855	94.7	72.9	27.1

Source: Authors' calculations from VHLSS, 2010, 2012, 2014, 2016.

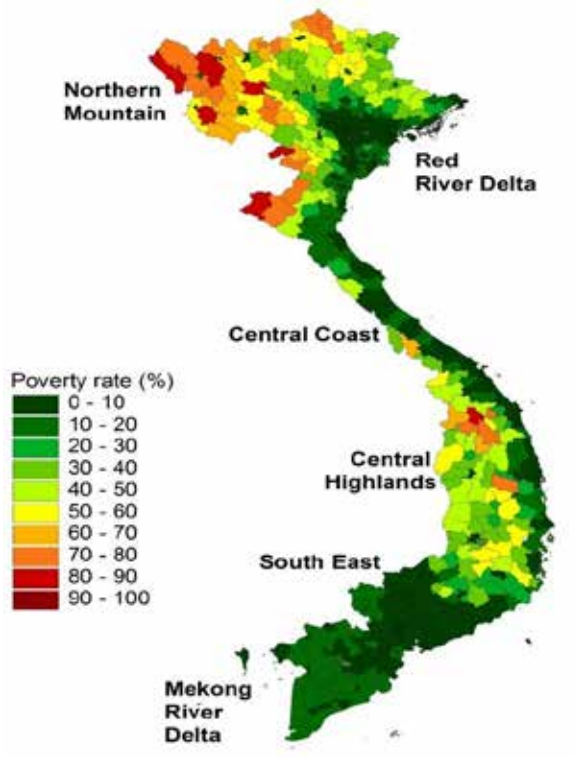
Poverty in Vietnam is synonymous with remoteness. A district level poverty map of Vietnam shows that poverty is mainly concentrated in mountainous areas (Map 1). Together, the Midlands and Northern Mountains and the Central Highlands regions comprise 20 percent of Vietnam's total population, yet these areas were home to 56 percent of the poor population. By contrast, the Red River Delta and Southeast regions comprise nearly 40 percent of the population, but only 6 percent of the poor population.

The poor are heavily concentrated in rural areas and among ethnic minorities. About 6.6 million of Vietnam's remaining 9 million poor people are members of ethnic minorities (Table 9). Although ethnic minorities make up just 15 percent of the total population, they now represent 73 percent of the poor population. The overrepresentation of ethnic minorities among the poor reflects the dramatic decline in poverty among the Kinh and Hoa, and slower progress among minorities until recently. In 2010, 8.4 million poor people were ethnic minorities, and they represented 47 percent of the poor population. Another 9.5 million poor people were ethnic Kinh and Hoa. By 2010, however, just 2.5 million poor Kinh and Hoa remained. Thus, three in every four poor Kinh and Hoa in 2010 escaped poverty, while eight in every ten poor ethnic minorities in 2010 were still poor in 2016. Irrespective of ethnicity, poverty in Vietnam is rural. A full 95 percent of poor people lived in rural areas in 2016, although the rural population accounts for just 68 percent of the total population.

There is an interplay between ethnicity, topography and poverty in Vietnam. The remote, mountainous areas where the poor are concentrated are heavily populated by ethnic minorities. For example, about 73 percent of the population in high mountain communes are ethnic minorities, while more than 96 percent of the population in coastal and inland delta communes are Kinh and Hoa. The ethnic minorities population is overwhelmingly concentrated in rural mountainous communes, where more than 80 percent of them live. Only 11 percent of ethnic minorities live in urban areas. In contrast, 35 percent of the Kinh and Hoa are urban and another 45 percent lives in coastal and inland delta rural communes. Poverty rates for

both ethnic minorities and the Kinh and Hoa are higher in mountainous areas. However, in low and high mountains where the data allows for within location comparison, the incidence of poverty among ethnic minorities is as much as 6 times more than the incidence of poverty among the Kinh and Hoa (Table 10). Thus high poverty among ethnic minorities do not just reflect their geographical location, but differences between them and the Kin and Hoa as well.

Map 1: Poverty Rate by District 2014



Source: World Bank Staff Estimates based on the Population Inter-Census, 2014 and VHLSS, 2014

Note: The boundaries, colors, denominations and other information shown on any map in this work do not imply any judgement on the part of The World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

Table 10: Poverty Rate and Population Distribution by Topography, 2016

	Poverty Headcount Rate (%)		Population composition with location (%)		Population distribution across locations (%)	
	Ethnic Minorities	Kinh & Hoa	Ethnic Minorities	Kinh & Hoa	Ethnic Minorities	Kinh & Hoa
Urban	20.4	0.7	4.5	95.5	8.7	34.7
Rural Communes						
Coastal	25.4	4.1	3.4	96.6	0.9	4.8
Inland delta	12.1	3.8	2.8	97.2	6.3	41.4
Hills/midlands	9.4	1.7	6.8	93.2	1.7	4.4
Low mountains	34.4	5.3	28.9	71.1	23.0	10.7
High mountains	57.0	10.4	72.8	27.2	59.4	4.2

Source: Authors' calculations based on the 2010, 2012, 2014, and 2016 VHLSS.

Even though based in regions with less dynamic agriculture, the remaining poor have primarily agricultural based livelihoods. Over 96 percent of the poor population derives at least some income from agriculture (Figure 19). Nearly half depend exclusively on agriculture, with 27 percent earning their living solely out of their family farms and another 23 percent mixing family farming and agriculture wage work. The rest derive their livelihood from a mix of agricultural income and nonagricultural wages (33 percent), agricultural income and household businesses (8 percent), or a combination of the three (6 percent). Poor households are far less likely than nonpoor households to derive income from a household business. In this, the poor substantially differ from the non-poor, 38 percent of whom receive income from a household business. More than a third of the non-poor only earn their income outside agriculture too, compared to fewer than 4 percent of poor households.

Figure 19. Distribution of Households by Livelihood, 2016

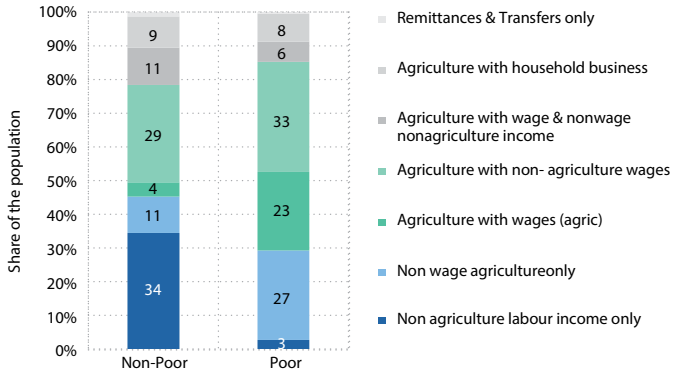
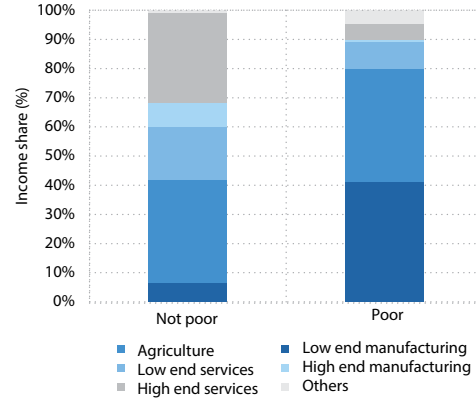


Figure 20. Composition of Wage Income by Poverty Status, 2010-16



Source: Authors' calculations from VHLSS 2010, 2012, 2014, 2016.

Many of the poor today already have a wage income, but mostly from the lower end of the wage scale. In 2016, about 62 percent of poor households received income from wages—23 percent from agriculture and 39 percent from non-agricultural sectors. Wages were the primary source of income for 44 percent of the poor (see Annex 1, Figure 36). But the poor mostly earn wages from employment in low-productivity sectors and less-skilled occupations. About 40 percent of their wage income is derived from agriculture, and another 40 percent came from low end manufacturing. Less than 10 percent is earned from services. By contrast, the service sector accounted for almost half of all wage income among nonpoor households (Figure 20). The average monthly wage in the agricultural sector is equal to about 64 percent of average monthly wage in the industrial and construction sectors and about 57 percent of the average monthly wage in the services sector. Consequently, poor households' greater reliance on agricultural wages relative to other types of wage income contribute to their low total income.

The poor are constrained by a lack of human, physical, and financial capital

Underlying the concentration of poverty among remote, rural and agricultural households are fewer productive assets. The poor are disadvantaged by their low education attainment, financial capacity and to some extent, unfavorable topography or limited access to land. About 57 percent of adults in poor households have primary education or less, and fewer than 7 percent have post-secondary education. The poor have limited access to financial services. Only 19 percent of adults in the poorest two quintiles had an account at a formal financial institution in 2014 and only 27 percent of rural adults held an account at a formal financial institution.[9] Most of the poor reside in hills and mountainous areas. These have access to more but less productive land. In the coastal and inland delta communes, the poor have significantly less land. They cultivate 20 percent less land than the non-poor in these areas. These three factors– low education, financial capabilities and amount and topography of land – determine households' earnings potential and drive livelihood outcomes that so separate the poor from the non-poor.

9 FINDEX 2014.

Figure 21. Employment Profile by Education Level, 2014

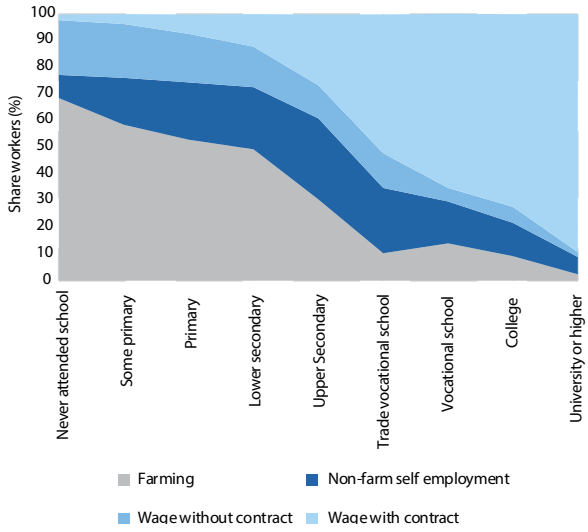
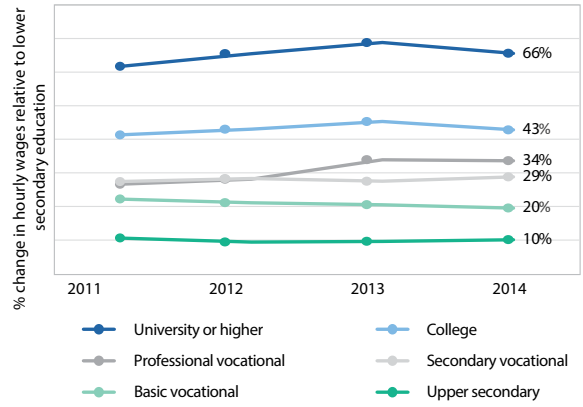


Figure 22. Trends in Returns to Education, 2011-14



Source: Demombynes and Testaverde, 2017.

The lack of education reduces access to better employment or productive opportunities among the poor, resulting in low earnings. Participation in wage employment is a clear example. Nearly all adults in poor households had secondary education or less and in 2014. Only 1 in 4 workers with that education level had a wage job, least of all one with a contract (Figure 21). By contrast, about 85 percent of all workers with a college or university degree had a wage job. The correlation between wage employment and educational attainment remains robust even after factoring in characteristics such as age, location, gender, and ethnicity [10]. Those with a university degree have a 50 percent chance of working in a wage job compared to people with only secondary education but are of a similar age, gender, ethnicity and living in the same areas. Due to their low levels of education, even those with a wage job earn substantially less. Among wage workers in 2014, those with a college or university degree earned 43 to 66 percent more than workers with lower secondary education (Figure 22). That largely explains why average wages per worker among poor households were only 30 percent that of nonpoor households (see Annex 1, Figure 37).

The concentration of poor farming households in highland and mountainous areas diminishes their productivity but not entirely. The per hectare profitability of cereal crops significantly declines as the slope of the cultivated land increases. Excluding rice, which is also grown on terraces in highland areas, the average per hectare profitability of cereals in coastal areas is about three times the average in mountainous regions. However, the average per hectare profitability for industrial crops increases as the slope of the land rises because high-value cash crops such as coffee thrive in highlands and low mountain areas compared to coastal areas. On these types of crops, profitability per hectare in high mountains are at par with plains and midland areas, and significantly higher than in coastal areas (Figure 23).

Sub-optimal land use and crop choice explain much of the differences in agriculture income between the poor and non-poor. Given the variation of profitability for different types of crops by and topography, households in inland and coastal areas can maximize their incomes by shifting more of their land to cereals production. Those in midland and mountainous areas could boost their earnings by using more of their land to grow perennial or industrial crops. However, poor households in midland and mountainous areas allocate their land less efficiently than nonpoor households (Figure 24). For instance, the poor in low mountains devote twice as much land as the non-poor on production of cereals, and half as much on the production of industrial crops. A similar suboptimal allocation can be seen in high mountain and midland areas. The higher income earned by the non-poor from production of industrial crops account for the difference in agricultural income between

10 See occupational choice regressions in Demombynes and Testaverde, 2017.

poor and nonpoor farmers (Table 11). This suboptimal allocation is a more pronounced disadvantage for ethnic minorities who are concentrated in mountainous areas. They do not necessarily own less land in these areas, but are clearly less likely than the Kinh and Hoa to grow perennial crops.

Figure 23. Profitability per Hectare by Crop Type and Topography, 2016

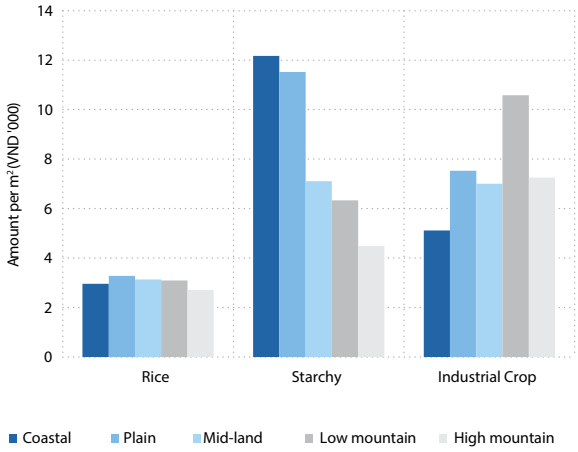
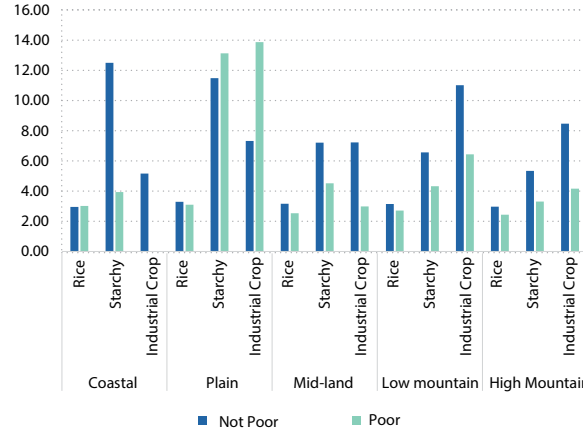


Figure 24. Land Use Choice by Crop Type, Topography and Poverty Status, 2016



Source: Authors' calculations from VHLSS 2016.

Table 11: Average Household and Agriculture Income by Crop and Topography, 2016

	Topography	Rice	Starchy crops	Industrial Crop	Fruit	All Crops
Non-poor	Coastal	5,066	3,338	2,299	3,742	14,445
	Plain	16,983	4,902	3,260	4,990	30,134
	Mid-land	7,055	2,398	9,054	988	19,495
	Low mountain	7,657	4,356	13,149	5,257	30,419
	High mountain	5,815	8,753	29,339	3,107	47,015
Poor	Coastal	3,705	4,477	367	-	8,562
	Plain	6,961	1,227	967	2,104	11,259
	Mid-land	8,265	483	389	748	9,886
	Low mountain	5,699	6,191	4,044	2,740	18,674
	High mountain	7,637	8,333	5,410	579	21,959

Source: Authors' calculations from VHLSS, 2016.

Poor households also earn less profit per hectare than nonpoor households cultivating the same crop groups on the same types of land. Nonpoor households earn twice as much per hectare for industrial crops in midland and high mountain areas and 71 percent more in low mountain areas (Annex 1, Figure 38). They also earn between 50 and 62 percent more than the poor for starch crops too. Only in plains do the poor earn more per hectare than the non-poor in the production of starches and industrial crops, but they have less land. Overall, poor households tend to cultivate less-profitable crops, and they tend to produce less output than nonpoor households for the same crops. This could be a result of lesser attention from public extension and other agricultural departments in development of farm management and business skills of ethnic minority farmers, who require more time and sometimes different training approaches than more commercial farmers. Smaller public investments in irrigation and other infrastructure in these areas may also be a contributing factor.

Underlying drivers of land-use patterns, crop choice and productivity have a greater negative impact on incomes among poor households than topography. Both international evidence and research in Vietnam reveal that supply of household labor, agricultural skills, and intermediate inputs determine cropping choices. Because poor households often lack access to financial capital, they are less likely to grow crops that require expensive intermediate inputs, that take a long time to yield returns (e.g. rubber), or that require a greater quantity of labor or more specialized skills than the household itself can provide. Consequently, low education levels contribute to suboptimal crop choices among poor households. A recent World Bank report on global agriculture found that skilled farmers are the most likely to innovate and adopt new technologies (World Bank, 2017b). In some areas, the shift of land to industrial crops can also be constrained by land use/production masterplans and generally weaker convening power of the poor communities to adjust the masterplans or reclassify paddy land to other crop land.

Low financial capacity contributes to suboptimal land choices among poor households. An analysis based on panel data in Vietnam has shown that households with large houses (i.e., high-value collateral) tend to invest more in the production of perennial crops, and those that possess agriculture equipment (e.g., a tractor) tend to cultivate more of the main regional crop (Nguyen et. al., 2017). The same study found that households with more agricultural labor also devote more of their land to perennial crops. This suggests that the lack of financial capacity to hire labor may deter households' from growing fixed crops. In this context, constraints to access to finance have a binding effect on households' land use patterns.

A lack of formal land title limits access to finance among poor households. The VHLSS 2014, finds that 23 percent of agricultural land cultivated by households was not covered by land-user certificates. In contrast to the Mekong Delta where farmers have land user certificates for 91 percent of their agriculture land, about 30 percent of farmers' land in the Central Highlands and 25 percent in Midland and Northern Mountainous areas did not have land user certificates (Figure 25). About 15 percent of plots with land titles were used as collateral for loans, compared to just 1.3 percent of plots without titles (Figure 26). Financing institutions in Vietnam have a strong preference for land use rights as collateral and there are only limited channels to share risks in agriculture with uncollateralized lending. Banks rarely use lower collateral requirements as specified by Decree 55, designed to support those without land. Therefore, the inability of those without land titles to use land as collateral hampers their ability to access credit and consequently their capacity to invest in cultivation of perennial crops.

Figure 25. Share of Plots with Land User Certificates, 2014

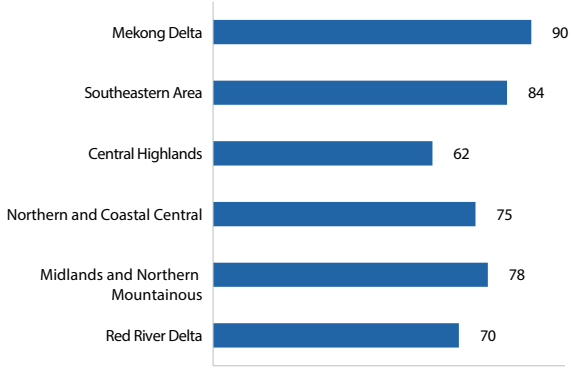
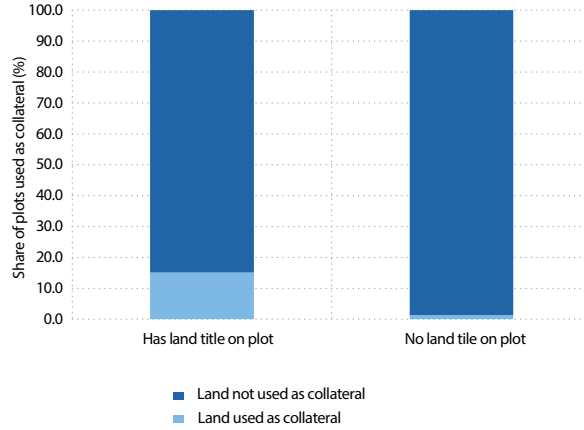


Figure 26. Use of Agricultural Land as Collateral, 2014



Source: Authors calculations from the VHLSS, 2014.

These findings suggest that the key constraints faced by poor households are low levels of education, a lack of financial capacity, and to some extent, marginal land quality. Low education consigns the poor to low paying jobs, and inhibits the production of crops requiring specialized skills. Low financial capacity confines poor households to crops that require modest inputs and mature quickly. Consequently, even in highlands and mountainous areas where perennial crops are more profitable than cereals, poor households tend to focus on producing cereals. A strategy that effectively alleviated these constraints and enabled poor households in highlands and mountainous areas to shift to perennial and other cash crops could have a highly positive impact on poverty and shared prosperity.

FINISHING THE JOB AND ADDRESSING NEW CHALLENGES

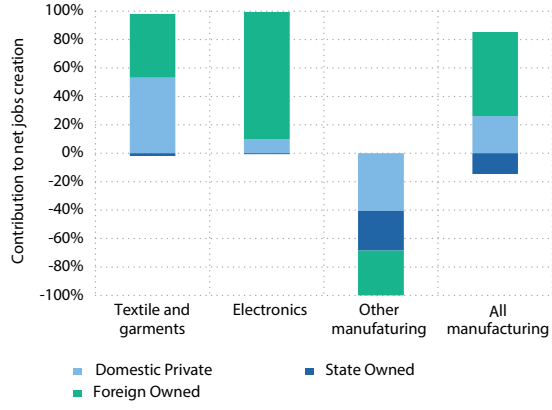
Vietnam's accelerating structural transformation has changed its economic landscape, and with it the poverty reduction and shared prosperity agenda The country pursued an export-oriented growth model that catalyzed job creation. Now 70 percent of households earn at least some of their income from wages. But as wage income become ubiquitous, most lower-income households already have a wage income. Consequently, the poverty reduction and shared prosperity agenda is no longer about just moving people to wage jobs, but increasingly more about improving the quality of those jobs. Alleviating extreme poverty remains important, but attaining economic security is a rising priority. At the same time, some old challenges persist that need to be addressed, like the gaps between coastal and mountainous regions, and between ethnic minorities and the Kinh and Hoa.

Wage growth has been a driver of poverty reduction and greater upward mobility. Sustaining wage growth will be crucial to advance shared prosperity, but this will entail new challenges. For example, wage growth can undermine competitiveness in labor-intensive sectors, slowing overall economic growth. Moreover, household's increased reliance on wage income intensifies their exposure to macroeconomic fluctuations especially to external shocks in Vietnam's case. Finally, the high wage premiums for tertiary education suggest that income inequality could rise rapidly if inequalities in opportunity are not addressed.

Labor productivity and skills are key pillars to sustain high wage income growth

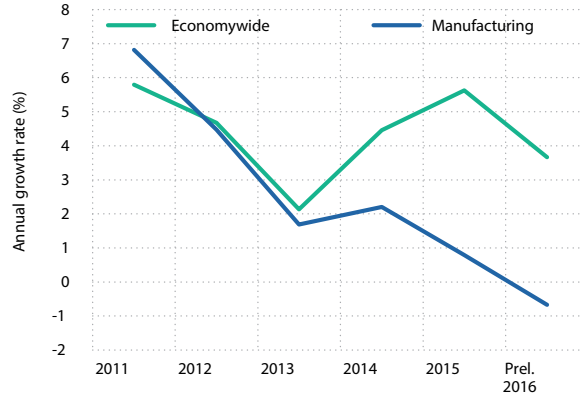
Vietnam now needs to create better jobs and sustain wage income growth without hurting its competitiveness or value proposition to investors. Recent wage growth reflected robust labor demand, driven by the country's success in attracting investors into the export-oriented sectors, especially electronics and textiles and garments. These sectors created the most jobs (Figure 27). Foreign firms created more than 90 percent of new jobs in the electronics sector and more than 45 percent of new jobs in textiles. These firms face high international competition and they are footloose. They were attracted, in part, by Vietnam's low wage rates, therefore rising wages could weaken its competitive advantage.

Figure 27. Net Job Creation by Firm Ownership and Manufacturing Subsector, 2014-2016



Source: Authors' calculation based on the 2016 VHLSS.

Figure 28. Labor Productivity Growth, 2011-16



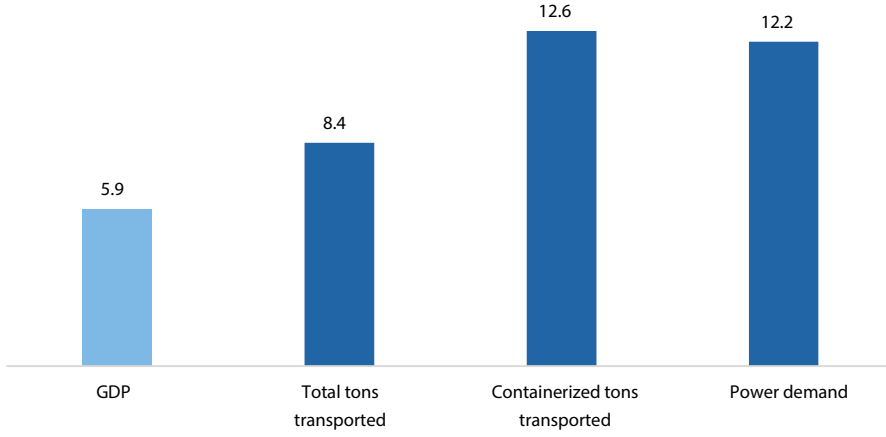
Source: GSO, 2017

As wages rise, labor productivity becomes increasingly important to competitiveness. Wage growth will not erode competitiveness if it is matched by a commensurate increase in labor productivity. However, labor productivity in the manufacturing sector is failing to keep pace with wages (Figure 28). Between 2014 and 2016, labor productivity in the sector grew by 1 percent, while median monthly wages rose by 11 percent. This disparity indicates that the underlying cost of labor is rising much faster than labor productivity growth in the manufacturing sector. A widening productivity gap could in future, slow the growth of wages, employment, or both.

Moving up the value chain or expanding into high productivity subsectors, combined with investing in skills are necessary to sustain wage growth. Productivity varies widely across manufacturing subsectors. Rebalancing production towards the most productive subsectors would allow a net labor inflow into these sectors, raising average wages without increasing the cost of labor. However, Vietnam's surplus labor pool is dominated by lowly educated workers who lack the skills employers demand. Consequently, a shortage of skilled workers may be driving up wages. The movement of labor from other manufacturing subsectors into the electronics and textiles and garments subsectors suggests that either competition for labor is high, and rising wages are pulling workers out of lower-productivity subsectors, or other sectors are investing in labor-saving technology. Preliminary evidence points to the former. Wages are higher in the electronics subsector and a net labor inflow into electronics appears to be driving up wages for other subsectors. Electronics primarily employs workers with post-secondary education, and it may be competing for skilled workers with other subsectors, even as 9 million less-skilled workers remain engaged in unpaid household labor. Competition for a small pool of skilled labor is likely causing the growth of wage rates to exceed productivity gains. A shift to more productive sectors thus needs to be complimented by investment in skills development to keep labor costs affordable and to provide the requisite skills to produce in these sectors.

Ensuring that investment in infrastructure keeps up with increased demand from high output growth is essential for continued creation of better jobs, especially in the export sector. There is always a risk that growth will be throttled by infrastructure bottlenecks if Vietnam does not invest enough in infrastructure. During the 2008-2015 period, both power demand and containerized freight grew by 12 percent per year, while total amount of goods transported grew by more than 8 percent per year (Figure 29). Significant infrastructure investments are needed to keep up with this demand. Just keeping up with electricity demand will require doubling of the current capacity of 35GW for example. Yet these significant infrastructure needs must be addressed under tight fiscal constraints, necessitating the need for private sector participation in infrastructure financing and delivery. This is currently hampered by a challenging legal and regulatory environment and cumbersome approval processes (World Bank, 2016a). Thus, regulatory reforms and effective frameworks for risk sharing are necessary for ensuring reliable electricity supply, efficient logistics and transportation which are needed not only to maintain growth, but for Vietnam to move up the value chain too.

Figure 29. Trends in Infrastructure Demand in Vietnam, 2008-15



Source: GSO, 2016

Adapting the social protection system to suit an export oriented wage economy will be necessary

Job creation was driven by labor demand not just in the export sector – but two consumer driven sectors, intensifying the country' vulnerability to global demand shocks. Households rode the previous shock due to their dependency on the informal sector—including household agriculture. At the height of the crisis, fewer than one-third of workers had a wage job, but this share has since risen to 41 percent, and most households now rely on wages for the bulk of their income. As wage employment continues to rise, and the capacity of the informal sector to serve as an employer of last resort diminishes, future external shocks that could stagnate wages or lead to job losses will have a more disruptive impact on household welfare.

For this reason, Vietnam needs to strengthen foundations for managing external shocks by establishing a social protection system suitable for a wage economy. More than 80 percent of new labor market entrants are employed in a wage job, while retirees are predominantly farmers. Within a few years, wage workers will significantly outnumber nonwage workers. The growing share of wage workers increases households' exposure to both the domestic and idiosyncratic external shocks, while the shrinking informal sector will be less able to absorb excess labor from the formal sector if labor-market conditions deteriorate. Unemployment insurance and active labor market policies become more critical to social protection in a wage economy, as they help households manage income shocks and stabilize the business cycle.

Changing land use and strengthening land property rights will further unlock the agriculture potential of the poor and near poor

Even as we speak of a post agricultural wage economy on the horizon, agriculture holds the potential to lift the remaining poor out of poverty. The transformation of the agricultural sector remains unfinished, and human, physical and financial capital constraints inhibit the ability of poor rural households to take advantage of emerging opportunities. Improving the efficiency of land use can unlock the economic potential of smallholder farmers and support poverty reduction and shared prosperity, even in the country's remote highlands and mountainous regions.

Aside from the legal constraints of converting paddy land to other crop (or livestock or aquaculture) land, limited access to financial resources and technical skills contributes to suboptimal land use among poor rural households. In the highlands and mountainous regions, many households could significantly increase their income by devoting more land to perennial crops. However, cultivating the most profitable crops involves high costs, long lead times, and significant technical skill. Easing financial and human capital constraints could help poor farmers in highland areas make more efficient use of their land. Lack of finance is not only a barrier for mobilizing upfront investments in perennial crop cultivation, it plays in the risk aversion among the poorest farmers. A lack of resources to fall back on in an emergency discourages cash-crop production and inhibits specialization.

Strengthening property rights and adapting extension services have the potential to unlocking agriculture potential. Lack of land titles that could be used as collateral for obtaining loans contributes to the financial constraints faced by the poor. Completing land certificates issuance addresses this barrier. The lack of skills could be addressed through improving the messaging offered by extension workers and establishing collaborative groups/cooperatives, critical to connecting producers with food processors and exporters. Still, without other complementary public investments, for example, in applied research of seedling materials, water saving technologies, and other support services, the shift to perennial crops for the poor farmers will be slow.

Equalizing opportunities in education is central to the poverty and shared prosperity agenda

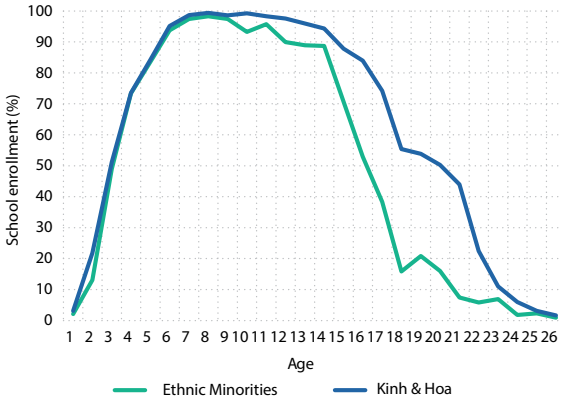
A top priority is getting the remaining poor into better paying jobs – basically formal wage jobs and non-traditional crops in agriculture. The best jobs in Vietnam require tertiary education so the poor are hurt by their low levels of education. Most enter the labor market with secondary education and only 6 percent make it to university. But returns to secondary education, and even upper secondary education are low. With big premiums for university, college and professional vocational training, the poor's lack of progression to tertiary education hurts their earning capacity.

Unfortunately, disparities in education persist, consigning the poor and near poor to low

earning jobs from the time they enter the labor market. School enrollment rates among children from households in the bottom income quintile lag the rates for children from households in the richest quintile across all grade levels (Figure 30). These differences widen toward the end of lower secondary school, at which point a third of children from households in the bottom quintile have dropped out. By age 19, fewer than one-fifth of 19-year-olds from households in the bottom quintile remain in school. By contrast, over two-thirds of students from households in the top quintile continue with their education up to college or university. Similar differences are observed for ethnic minorities' children, who also drop off after lower secondary education (Figure 31). Given the high wage premium for tertiary education, these disparities are slowing social mobility.

Differences in quality of education partly drive these inequalities. The Young Lives Study tracked two cohorts of children, one from the age of two and one from the age of eight. It found that poor academic achievement contributes to dropout rates at the lower secondary level. Among students who completed lower secondary education, those who had good or excellent test scores when they were 12 years old had a 36 percent lower probability of not continuing to the upper secondary level compared to students from similar backgrounds. In addition, 45 percent of students with poor test scores failed to even complete lower secondary school (Le Thuc Duc and Tran Ngo Minh Tam, 2013). The study found that differences in school quality explained one-third of the variation in average math scores. Within the same school, students from all backgrounds benefited equality from an increase in school quality, which is not always the case in other countries. These findings indicate that differences in school quality between poor and nonpoor communities, rather than unequal treatment of students within schools, tend to drive disparities in educational attainment.

Figure 30. Net School Enrollment by Welfare Status, 2016



Nguồn:. Tính toán của các tác giả từ KSMS, 2016.

Figure 31. Net Enrollment by Ethnicity and Age, 2016

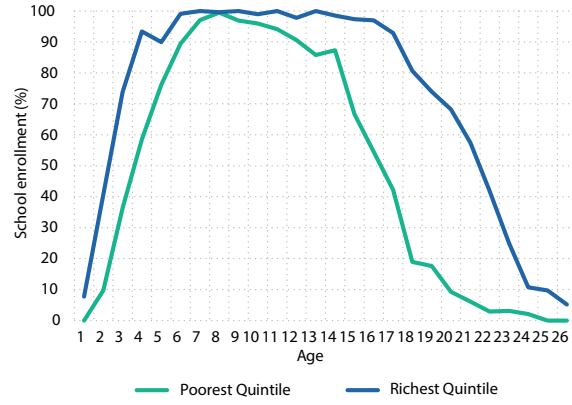
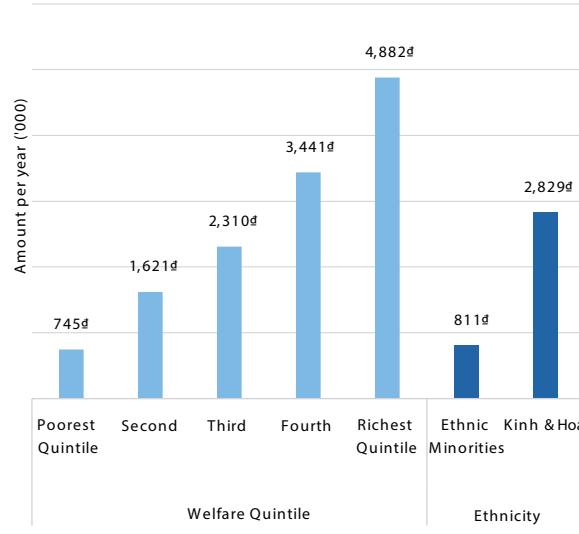


Figure 32. Per Pupil Spending on Tutoring and Study Support by Welfare Quintile and Ethnicity, 2016



Source: Authors calculations from VHLSS, 2016

Household socioeconomic status also contributes to educational disparities, especially in terms of the resources households devote to tutoring, study support and extra payments. Households in the top income quintile spend more than 6.5 times as much per student on tutoring and study support than households in the bottom quintile (Figure 32). Kinh and Hoa households spend about 3.5 times more per student than ethnic minority households. There is evidence that tutoring is a significant predictor of pupil's academic grades, even after controlling for household background or school characteristics. Parental education also plays an important role, as students whose mothers have completed lower secondary education have a greater chance of progressing to tertiary education, even after controlling for test scores and other factors (Le Thuc Duc and Nguyen Thi Thu Hang, 2016). Overall, students from households in the bottom quintile are the most likely to drop out of school. These differences translate into disparities in educational attainment, slowing intergenerational mobility and exacerbating inequality.

Vietnam therefore needs to address issues with the quality of education – that makes tutoring so central for academic achievement. The importance of tutoring to pupils' academic achievement at lower secondary education signals inadequate teaching and places poor children at a disadvantage. Reforms to the curricula and learning times are necessary to close this gap. Additionally, evidence suggests that drop outs at secondary schools are higher for children in communes further off from the district center, pointing to challenges in access to tertiary education for pupils in remote areas. Their remoteness increases the cost for post-secondary education, which could be mitigated by raising education aid.

In summary, efforts to promote shared prosperity will increasingly focus on enabling households to achieve economic security while addressing persistent welfare disparities across groups. shared prosperity will require creating more and better jobs that are accessible to all workers, rich and poor. This can be achieved in the context of the current export oriented model by moving up the value chain and promoting investment in more productive sectors of the economy to increase labor inflows these sectors. The development of more sophisticated economic activities will, in turn, require investment in workforce skills to ease wage pressures arising from competition for a limited pool of workers and provide the skills needed for the economy to move up the value chain. Expanding access to high-quality education, especially in poor and underserved regions, will be critical not only for developing skills, but to reducing existing inequalities in access to opportunities between the poor and the non-poor.

PRIORITIES FOR POVERTY REDUCTION AND SHARED PROSPERITY

Living standards in Vietnam are improving, poverty rates are declining, and the consumer class is rapidly expanding. The incidence of poverty has begun to fall sharply for ethnic minorities as well, revealing the potential for further poverty reduction among disadvantaged groups. Meanwhile, households that have escaped poverty face a low risk of falling back. Just 2 percent of members of households that were above the poverty line in 2014 had fallen into poverty by 2016. Economic mobility has been overwhelmingly oriented upwards, and the share of the population classified as economically secure expanded by 20 percentage points between 2010 and 2016. Overall, 70 percent of the population is now classified as economically secure, including the 13 percent who are part of the global middle class. The rise of the consumer class is changing society's aspirations and altering the focus of the poverty reduction and shared prosperity agenda.

Vietnam' success in reducing poverty was on the back of a rising consumer class and most importantly, growing wage incomes buoyed by increased labor demand in the export sector. More than 3 million wage jobs were created between 2010 and 2016, half in the manufacturing sector and the other half in construction, retail, and hospitality. This spurred the movement of 2 million workers out of the agricultural sector, marking a turning point in the country's structural transformation. Robust labor demand boosted average monthly wages in the private sector by 14 percent, which in turn put upward pressure on wages in other sectors. Agricultural wages rose by 9 percent, and wage employment in the agricultural sector expanded. Vietnam is now primarily a wage economy, as more than 54 percent of households earn most of their income from wages and a full 70 percent of households receive at least some amount of wage income. Most of the poor households now also receive a wage income, but more than half of those wages come from agriculture, the lowest-paid sector, while less than 10 percent come from services, the highest-paid sector. Vietnam's labor market places a high premium on college and university education, and the better jobs are accessed mainly by workers with post-secondary education. The poor' low levels of education thus contribute to their low earnings both in and outside agriculture. However, existing inequalities in access to post-secondary education, entrenches this disadvantage.

Rapid wage growth and agriculture transformation drove poverty reduction. Increasing wages accounted for more than half of the reduction in poverty observed between 2014 and 2016, while income from non-crop cultivation and remittances each contributed 20 percent. Wage growth also propelled the rise of the consumer class, supported by an increase in household business income. Within agriculture, a shift away from traditional cereals crops cultivation was a driver of household income growth, and differences in land use among smallholder farmers drives earnings differences between poor and nonpoor households. These trends reflect the centrality of wages to livelihoods and shared prosperity in Vietnam, as well as the potential for further agricultural transformation to reduce poverty in rural areas. To sustain poverty reduction and transition to economic security, Vietnam should keep creating jobs, sustain wage income growth, equalize opportunities to good jobs and unlock the potential in agriculture.

Achieving these objectives calls for a focus on the following strategic priorities for socio-economic development of the country.

(i) Boosting labor productivity and investing in infrastructure to sustain job creation and wage growth without losing competitiveness.

With wages becoming central to households' livelihoods, sustained welfare improvement hinges on future wage income growth and creation of better jobs. But recently wage growth

outpaced labor productivity growth. To boost labor productivity, raise wage incomes and continue creating wage jobs, Vietnam needs to move production up the value-chain and promote investment into higher productivity sectors to shift labor inflows into these sectors. This can be achieved by:

- Attracting FDI into higher value, agriculture, manufacturing and services sectors
- Supporting growth of the domestic private small and medium enterprises through information and skills upgrading to link them to multi-national corporations
- Increasing investments in infrastructure so that supply of transport, electricity, logistics and telecommunications keeps up with the high demand from a fast-growing export sector, and provide an enabling environment for the country to move up the value chain or into high value added sectors.

(ii) Implementing education reforms designed to equalize opportunities and develop workforce skills.

Rising private sector wages in the face of abundant supply of labor suggest that firms are competing for a limited pool of competent laborers. Indeed, a significant share of hiring employers say that job applicants lack the skills needed for the job, even for low-skilled jobs. Investments in skills development would increase the pool of competent workers, facilitate the expansion of value chains into more sophisticated activities and support the growth of new sectors. Expanding access to high quality education across groups will be vital not only to develop skills, but to reduce inequalities and increase access to better paying jobs for all. This can be achieved by:

- Reforming the structure of the school day to increase instruction hours - Tutoring and differences between quality of schools in poor and non-poor communities explain the variation in academic achievement at lower secondary level, which determines progression to tertiary education. This signals that inadequate teaching places poor children at a disadvantage. This could be addressed by increasing teaching hours in school.
- Revision the curricula and pedagogical approach - Teaching and testing should place more emphasis on developing problem solving and critical thinking, the skills that employers deem lacking in Vietnam.

(iii) Spurring agriculture structural transformation through changing farmland use patterns, strengthening land user rights, and improving skills of the poor farmers.

Addressing sub-optimal farmland use patterns is key to unlocking the agriculture potential of the poor by aligning land use with comparative advantages of specific areas and farm income generation objectives, as outlined in the Agricultural Restructuring Plan. This requires a bolder shift of land from rice and maize to more profitable annual and perennial crops. Key to achieving this is:

- Strengthening land user rights through issuing land titles which could help increase household access to credit (using land as collateral), enabling the poor to invest in more profitable crops that require costly initial investments, intermediate inputs or hiring of labor.
- Improving farm management and business skills of the poorer farmers, often neglected by public extension and investment programs, could help boost agricultural productivity, thereby reducing the productivity gap with less-poor farmers.

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ANNEXES: ADDITIONAL TABLES AND FIGURES

Table 12: Income Decomposition of Changes in Middle Class in Vietnam, 2014-16

	Vietnam	Rural	Urban	Ethnic Minorities	Kinh & Hoa
Propensity to consume	-0.1	-1.0	1.2	-0.4	-0.1
Share of Adults	0.0	0.2	-0.5	0.3	0.0
Share of wage workers	-0.4	0.0	-0.5	0.0	-0.4
Average wage	-1.7	-0.9	-4.0	-0.6	-2.0
Average business earnings	-1.3	-0.9	-2.7	-0.5	-1.7
Average crop income	-0.1	-0.1	-0.2	0.0	-0.1
Average other farm income	-0.3	-0.1	-0.1	-0.2	-0.2
Remittances	-0.6	-0.2	-1.2	-0.3	-0.6
Transfers	0.0	-0.1	-0.1	0.0	-0.1
Other income	-0.2	0.2	-0.7	0.0	-0.1
Total change	-4.5	-2.9	-8.9	-1.7	-5.3

Source: Authors' calculations from VHLSS 2014, 2016.

Notes: Numerical differences in the overall change arise from differences in the number of observations used in the analysis as with missing income information for at least one of the income aggregates are dropped.

Figure 33. Trends in Poverty Gap and Poverty Gap Squared in Vietnam, 2010-16

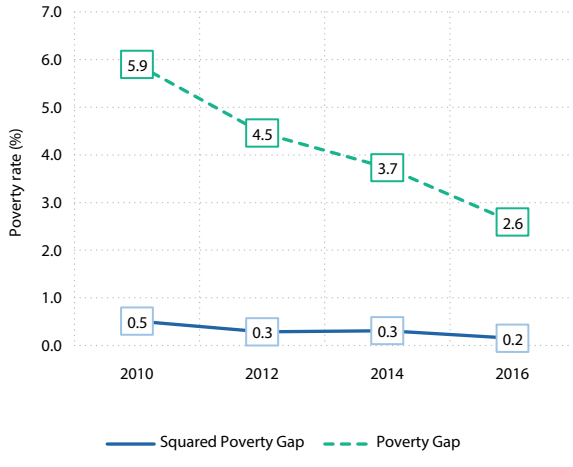
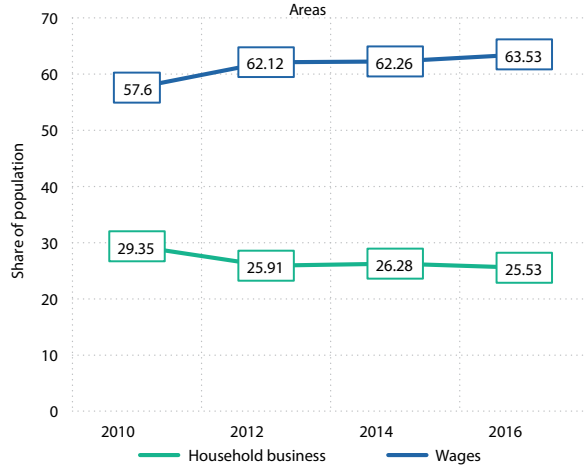


Figure 34. Major Source of Income in Urban Areas, 2010-16



Source: Authors' calculations from VHLSS 2010, 2012, 2014, 2016.

Figure 35. Major Sources of Income in Rural Areas, 2010 vs 2016

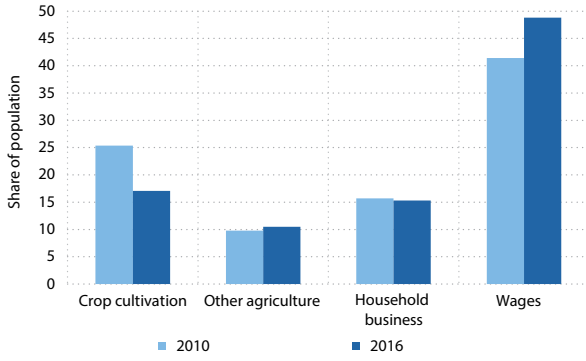
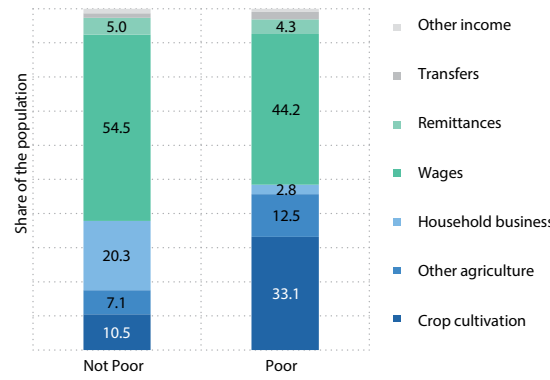
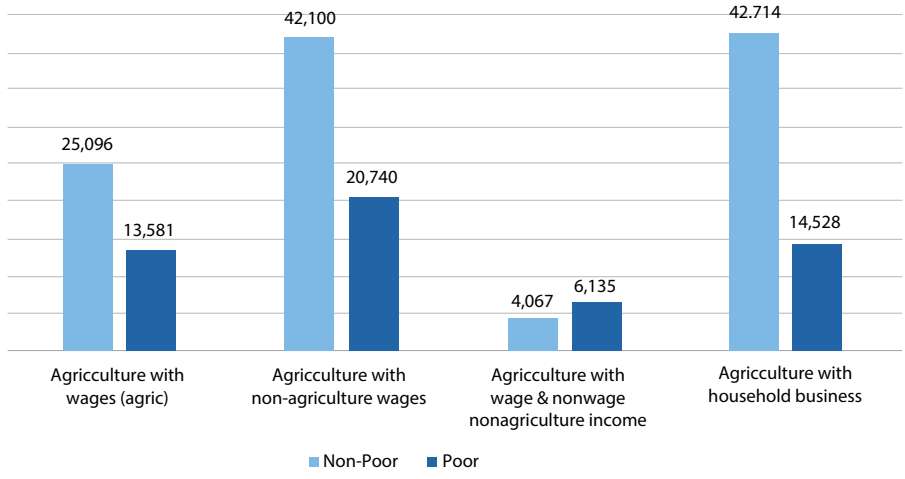


Figure 36. Major Source of Income by Poverty Status, 2016



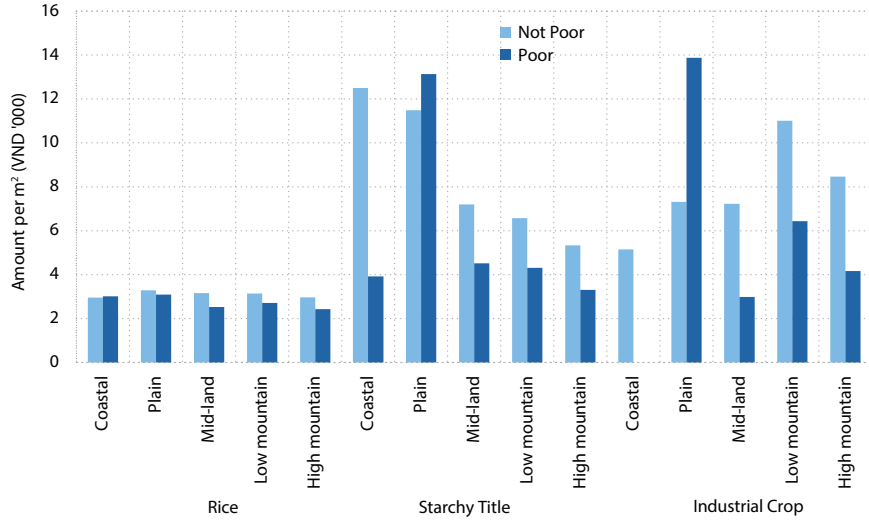
Source: Authors' calculations from VHLSS 2010, 2012, 2014, 2016.

Figure 37. Average Annual Wage Per Worker, 2016 (VND' 000)



Source: Authors' calculations from VHLSS 2016.

Figure 38. Profitability by Crop Type and Poverty Status, 2016



Source: Authors' calculations from VHLSS 2016.