

Welfare Dynamics in Rural Vietnam, 2006 to 2010

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- This policy brief summarises an in-depth study that uses data collected by the Vietnam Access to Resources Household Survey (VARHS) over 2006-2010 to examine changes in household welfare in 12 provinces in rural Vietnam
- The results show impressive progress on average in terms of each of the three welfare measures: food expenditure, household income and assets.
- Macroeconomic data show that Vietnam's overall economy has grown quickly. The VARHS data allow researchers to understand if this growth has benefited rural areas.
- The data show large variations in economic development: there are significant differences in progress by province, and within all provinces a large minority of households did not increase their welfare.
- Households with more productive assets and higher levels of education were much more likely to have higher welfare.
- However, ethnic minorities were much less likely than the average household to have increased food expenditure, income, or assets.
- Overall, this study shows that economic growth has benefited many rural households, but policymakers must keep focus on the large number of rural households that have not yet benefited from this strong macroeconomic performance.

1. Introduction

Vietnam has made significant economic progress since the *doi moi* process was instituted in 1986 which achieved high rates of economic growth by structurally transforming the economy from one dominated by the state / government and cooperative sectors to an economy in which the private sector and foreign direct investment generate a high share of national output.

At the household level, this evolution in macroeconomic policy has created higher rural and urban incomes and higher growth rates of those incomes, cumulatively representing an impressive achievement from the perspective of human development.

Like other countries that have experienced the benefits of rapid economic growth, Vietnam continues to face distinct challenges in completing the transformation of the economy from a centrally planned to a private sector-driven model.

To provide a resource for policymakers, the Vietnam Access to Resources Household Survey (VARHS) has been implemented in 12 provinces of Vietnam. This policy brief summarises an in-depth study using data collected in the 2006, 2008, and 2010 rounds of the survey.

A central feature of the 2006, 2008 and 2010 surveys is the panel structure, with around 2,100 households surveyed in all three rounds, making it possible to follow individual households over time. We evaluate changes in households' welfare by measuring changes over time in:

- Spending on food
- Income
- Ownership of assets

Welfare can have several different definitions, but we expect that food consumption, income, and asset ownership are strongly related to many other measurements of welfare.

2. Summary of findings

2.1 Food expenditure

Food expenditure is an intuitive measure of household welfare, since we value food consumption for its own sake (consuming more and better food) and also as a measure of welfare since when households become richer they consume more food that is higher quality, giving researchers a useful measure of how much rural households are benefiting from national economic growth.

Food spending by province	2006	2008	2010	Change: 2006 to 2010
Khanh Hoa	162.9	123.6	254.3	91.4
Ha Tay	118	154.4	191.9	73.9
Phu Tho	108	142.5	156	48
Long An	148.4	167.7	189	40.6
Quang Nam	129.8	167.5	169.2	39.4
Dien Bien	78.4	75.5	115.1	36.7
Nghe An	93.6	138.2	122.1	28.5
Dak Nong	141.9	170	162.6	20.7
Lai Chau	75.2	100.9	90	14.8
Lam Dong	141.1	96.4	146.1	5
Dak Lak	125	157.6	126.2	1.2
Lao Cai	92	72.9	58.7	-33.3

Comparing first the levels across provinces, the median values in particular report that the two provinces from the North West, Lai Chau and Dien Bien, have very low levels of food expenditure, and the same is clearly the case in Lao Cai in the North East which is ranked the worst off in 2010 in terms of average spending, and has also experienced a large decrease in average spending relative to 2006.

In 2010 the highest average food expenditures are reported in Khanh Hoa, Quang Nam, Dak Nong, Long An and Ha Tay, but there is quite a lot of volatility in ranking among provinces over time.

2.2 Income

The 2006, 2008, and 2010 surveys also asked households to report their income from several sources, such as agriculture, wages, other activities that earned wages, or money transferred to the household by relatives, children or others.

There are two main results from the analysis of income. Firstly, structural transformation of the economy remains uneven across Vietnam: in the provinces of Lao Cai, Lai Chau, Dien Bien, Dak Lak, Dak Nong and Lam Dong, more than half the average income is derived from agriculture.

In contrast, income from wages and other non-farm sources is the dominant source of income in the provinces of Nghe An, Quang Nam, Long An and Phu Tho, Tay and Khanh Hoa.

The VARHS data shows large differences in the speed of structural transformation of rural economies: households in some provinces continue to rely on agricultural income, and households in other provinces graduating to higher levels of wage and other non-farm income.

Ave. income by province	2006	2008	2010	Change : 2006 to 2010
Khanh Hoa	5453	7012	12813	7360
Ha Tay	7377	8894	13058	5681
Long An	7064	9482	12711	5647
Phu Tho	5496	5985	10948	5452
Nghe An	4352	5193	7860	3508
Lam Dong	6889	8162	9102	2213
Dien Bien	3199	3762	5201	2002
Lai Chau	3311	3418	5280	1969
Dak Nong	9202	10440	11064	1862
Lao Cai	4941	3790	6623	1682
Quang Nam	5244	6118	6473	1229
Dak Lak	6666	8514	7491	825

Looking at the equivalent information in relation to incomes this shows a larger increase of around 64% on average over the period 2006-10, with increases in all provinces (except for Lao Cai from 2006 to 2008). The average increase is largest in the case of Khanh Hoa and for the median income in Nghe An.

Comparing the level of income across provinces, Lai Chau and Dien Bien unambiguously have the lowest levels in 2010, and the province with the highest reported average income in 2010 is Long An.

But again there is variation between the years in the relative ranking of provinces, as well as variation depending on whether the mean or median values are considered. In terms of income, less than half the households that were in the poorest 25% in 2006 were still in the poorest 25% in 2010. Mobility is even higher in terms of food expenditure.

2.3 Assets

Another useful measure for welfare is the household's ownership of assets, since wealthier households own more goods. Since assets are accumulated over time, the measure has lower volatility than, for example, the level of food expenditure. Researchers derived a single number called the *asset index* measuring a household's level of welfare based on the quantity of goods such as telephones, televisions, and vehicles that it owns.

Ave. value assets, by province	2006	2008	2010	Change: 2006 to 2010
Dak Nong	0.548	1.563	2.525	1.977
Lai Chau	-3.094	-2.934	-1.268	1.826
Dak Lak	-0.096	1.049	1.666	1.762
Nghe An	0.827	1.452	2.457	1.63
Long An	-0.781	0.035	0.61	1.391
Dien Bien	-1.837	-2.135	-0.474	1.363
Khanh Hoa	-0.443	0.754	0.893	1.336
Ha Tay	0.587	1.126	1.772	1.185
Phu Tho	1.221	1.383	2.202	0.981
Lam Dong	-0.264	1.208	0.523	0.787
Quang Nam	-0.049	0.62	0.465	0.514
Lao Cai	-0.843	-0.645	-0.78	0.063

The results are consistent with the measures of welfare from income and food expenditure. The provinces of Lao Cai, Lai Chau, and Dien Bien

have the lowest values of this index; the highest values are found in the provinces of Phu Tho, Dak Nong, Nghe An and Ha Tay.

The main finding is that while welfare has increased across the 12 provinces included in the survey, progress has been uneven. Tackling this divide in the benefits of macroeconomic growth remains a key challenge for policymakers.

2.4 Patterns of welfare and welfare change: what can we conclude?

All measures are reasonably consistent in identifying Lai Chau, Dien Bien and Lao Cai as the poorest provinces, and a number of measures suggest that Dak Nong, Long An and Ha Tay are often the best-performing provinces, measured by average household welfare.

But for the remaining provinces there are significant differences between the different welfare measures and sometimes for the same welfare measure between one year and the next.

Long An is in fact ranked low according to the asset measure though not according to income or food expenditure; it seems that here high incomes do not necessarily translate into the household spending on accumulating assets.

Quang Nam is relatively well off and improving ranking in terms of food expenditure, towards the middle of the distribution (and dropping) in terms of assets but relatively low in its ranking in terms of income (especially in 2010).

In several other cases, there is quite a lot of variability between years in terms of the same welfare measure; in 2006 Khanh Hoa and Lam Dong are at the top of the ranking according to food expenditure, but in 2008 they are in the lower half of the distribution, for example. As noted above, the asset index rankings are the most consistent from 2006 to 2010.

2.5 What causes changes in household welfare?

Regression analysis allows researchers to find out which household characteristics measured in the VARHS are related to the changes in welfare. In particular, it is relevant for policy if some household characteristics are reliably associated

with increases in food expenditure, reported income, or the asset index.

As with any statistical study, more work is needed to answer detailed questions about patterns over time. However, the in-depth study provides some very interesting initial results for policy-makers.

The two main results are:

- Having more productive (working) household members allows households to spend more on food
- Being a member of an ethnic minority household significantly lowers the reported change in food expenditure.

2.5.1 Productive assets and welfare

In each statistical test, larger households have smaller increases in food expenditure. This means that while food expenditure has been growing, on average, across all households in the survey, larger households have lower food expenditure per person. As we expect, households with more assets, such as motorcycles or telephones, have larger growth in food spending.

The VARHS data confirm that households with more productive inputs can increase their spending on food: the number of working (active) household members is important, as is land size, and transport equipment such as motorcycles. Households appear to not be too much impacted by adverse shocks such as bad weather, and households headed by women do not perform differently than households run by men.

Education is strongly positively associated with food expenditure growth. Households where the head is from an ethnic minority have a substantially lower rate of growth of food expenditure.

It is interesting that households that are members of more political associations have larger growth in food expenditure, suggesting that social capital (the value of social interactions and links) may increase household welfare. Finally, in some of the survey rounds, having a business, having a red book for some household land, and owning livestock is associated with increased growth in food spending.

2.5.2 Welfare of ethnic minority groups

The most striking finding is that there are large differences in welfare between ethnic groups. Average food expenditure in kinh households is more than two times as large as non-kinh households, and the growth of food expenditure over this period was 4.0% for kinh households but 2.6% for non-kinh households (and even lower for those in the North).

While a number of policy initiatives have been undertaken to improve the situation of ethnic minorities, this evidence shows that large differences continues to persist in rural Vietnam. The reduced welfare of rural households is often explained by remoteness: these communities are generally very far from large cities, transportation networks, administrative centres, or town / cities.

Researchers can use the VARHS data to test the effect of distance on the welfare measures at the same time as other household characteristics. By including a measure of remoteness defined as distance from a road, researchers find that remoteness does not explain the lower welfare levels of ethnic minorities.

Ethnicity, rather than remoteness, continues to determine household welfare, indicating that specific communities are being "left behind" during a period of overall macroeconomic growth.

Better educated ethnic-minority households do better (have higher welfare), suggesting that education can offset the "negative" effect of ethnicity on welfare. However, the positive effects of education do not overcome the negative effect of ethnicity, and, in any case, the VARHS show that non-kinh households have lower average levels of education so this is unlikely to offset the effects of ethnicity.

3. Conclusions

There are many positive results to report: many households have benefited from national economy growth through increased food spending, higher incomes or more household assets. However, the structural transformation of the economy from agricultural production to modern, diversified income sources is not complete, and there are some groups in the rural sector that have not benefited proportionally from economic growth.

Many of the provinces have enjoyed sustained, consistent progress in the average values of the welfare measures, but some such as Dien Bien have only progressed in some years. In most provinces and according to most measures, at least one out of every five households have actually become worse off over this period. The most striking instance is the case of Lao Cai, in which the average households was worse-off in 2010 than it was in 2006. At both the province and household level, the impressive growth performance and progress has not been shared by all.

In addition to unequal benefits of growth, we find three important results:

- Households with higher levels of productive assets, such as more working household members, are better placed to raise their food expenditure levels over time
- Ethnic minorities continue to be “left behind” and are not experiencing increased food expenditure, household income, or asset holdings. The VARHS data show that much progress can still be made to improve welfare.
- National economic growth has been high, but the effect of household welfare has not been shared equally across provinces or across households in rural areas; some households are being “left behind.”