Are Vietnamese farmers concerned with their relative position in society?

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ABSTRACT   *This paper examines the attitude towards relative position or status among rural households in Vietnam. On average, respondents show rather weak preferences for relative position. Possible explanations are the emphasis on the importance of equality and that villagers are very concerned with how the local community perceives their actions. We also investigate what influences the concern for relative position and find, among other things, that if anyone from the household is a member of the Peoples Committee then the respondent is more concerned with the relative position.*

I. Introduction

Despite the fact that prominent economists such as Smith, Keynes and Scitovsky discussed the importance of status and relative income, the interest in empirically testing these issues in economics is relatively recent. A number of recent tailor-made empirical studies have shown that people do have preferences for relative position or status, with respect to both income and consumption (see for example, Solnick and Hemenway, 1998; Johansson-Stenman et al., 2002; Carlsson et al., 2003; Alpizar et al., 2005). Similarly, studies have shown that relative income has a positive influence on self-reported happiness (for example McBride, 2001; Ferrer-i-Carbonell, 2004). In this paper, we extend this literature by empirically investigating the preferences for relative position among farmers in a rural province in the south part of Vietnam. In our study, we ask the respondents to make pair-wise choices between different hypothetical investment opportunities. These opportunities differ in the outcomes for themselves as well as for the other people in their village. Applying the survey approach introduced by Johansson-Stenman et al. (2002), we obtain the marginal degree of positionality within an interval.

Many previous empirical studies on status or relative position have been conducted in western European countries and the USA. A country such as Vietnam

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differs in many respects from the aforementioned countries. Vietnam is a much poorer country: in 2002, it was ranked 151st in the world based on adjusted gross national purchasing power parity income per capita.[1] However, the most interesting aspect is perhaps not the low income level per se but, that Vietnam's political system is radically different from any in the West. Vietnam is a communist society in which the idea of equality forms the basis for many of the country's policies. Bowles (1998) argued that markets, and other economic institutions, influence the evolution of our values and tastes. Thus, individuals' perceptions of factors such as equality and status are affected by the society where they live. Hence, we expect the preferences for relative position or status to be lower in Vietnam than in the West since the idea of equality is widely spread because of its political importance.[2] The objective of this paper is to investigate preferences for relative position among Vietnamese farmers. From a policy perspective, the question about concern for relative position is important since goods for which there are relative concerns are over-consumed. Then there are efficiency gains by having higher taxes on goods which are more positional (for example Frank, 1985); and see Boskin and Sheshinski (1978) and Ireland (2001) for a discussion of optimal income taxes if income is positional but leisure is not.

The Communist Party of Vietnam was established in 1930, and in 1945 the Democratic Republic of Vietnam was established in what is today the northern part of Vietnam. During the period 1945–75, the Democratic Republic of Vietnam changed its political system towards a Marxist-Leninist system. This political system was introduced to the whole of Vietnam (the Socialist Republic of Vietnam) after the unification in 1975, which resulted in a sharp change of direction for the capitalist-oriented economy in southern Vietnam. A decade later, after a period of stagnation in the economy, the so-called Doi Moi (renovation) started in 1986 initiated by the Communist Party.[3] Before the introduction of Doi Moi, agricultural activities were organized in cooperatives with an egalitarian distribution principle, which ensured a low level of inequality among farmers on the countryside (Nam, 2001). However, the proportion of farmers belonging to cooperatives differed between the north and the south of Vietnam. In 1986, around 95 per cent of farmers in the north of Vietnam were members of a cooperative measured at the regional level. The highest number of farmers belonging to cooperatives in the south was 89 per cent in the Central Coast while only six per cent of the farmers were organised in collectives in the Mekong Delta (Pingali and Xuan, 1992). In the late 1980s, collective farming was abandoned, and land use rights were allocated to farming households during the large land reform. The allocation of land was decentralised to local level politicians. Despite potential incentive problems when allocating, Ravallion and van de Walle (2004) found small effects on income inequality and a substantially improved situation for the poor after the land reform.

Despite the fact that Vietnam has recently shifted towards a market-oriented economy, it may still be expected that the ideas of equality affect people's preferences. Them (1997) argues that the relationship among Vietnamese people to a large extent involves respect towards other people in the community, especially in rural areas. For example, in any major decision-making process, people are concerned with how the other individuals will respond to their actions. When there is an event such as a funeral, harvest or construction in the neighbourhood, they feel

that it is their duty to participate. The reason for such consciousness is perhaps historical, since they often had to struggle for their survival in an environment that was often left without any significant help from the district officials or the government. (See for example Scott (1976) for an interesting and extensive discussion on the relationship between social norms in a village and the concern for the relatively poor.) Our experience from discussing with the villagers throughout the survey is also that people are aware of the earnings of other families in the village. The economy has been monetised to a large extent, and there is not much sharing within the village. A consideration for equality and what others think might explains why Carpenter et al. (2004) found very high levels of contribution in a public good experiment conducted in Ho Chi Minh City, in comparison with experiments in the USA and Western European countries.[4] In their paper, they suggested the tradition of working together as one potential explanation for their findings.

The rest of the paper is organised as follows. In section II, we discuss the underlying economic theory and how the survey was designed, followed by presentation of the results in section III, and section IV concludes.

II. Modeling and Measuring Positional Preferences

There are many ways to incorporate relative position or status into the utility function. Most studies have either used some kind of *ratio comparison* utility function, $U = v(x, x/\bar{x})$, where x is the individual's income (or consumption vector of different goods) and $\bar{x}$ is the average income in the society (for example, Boskin and Sheshinski, 1978; Layard, 1980; Persson, 1995), or some kind of *additive comparison* utility function, $U = v(x, x - \bar{x})$ (for example Akerlof, 1997; Knell, 1999; Ljungqvist and Uhlig, 2000).[5] In this paper we apply the following additive comparison utility function

$$v = (1 - \gamma)x + \gamma(x - \bar{x}),$$

where γ measures the *marginal degree of positionality*, that is the fraction of the total change in utility that comes from increased relative income from the last unit of income.[6]

In order to elicit individuals' preferences for relative position, a scenario has to be created to be read to the respondents during the interview. In order to make it cognitively easier for the respondents, we stated that they could think of an investment project in, for example, pigs or any other animal such as cows or perennial crops. The investment project was stated to be distributed free of charge by an external donor without imposing any cost on the people in the village, but the income from this investment would differ among the residents in their village. In the scenario, we told the respondents that they were about to choose between two different alternatives, that is, investment projects with different outcomes in terms of income for both themselves and the average person in the village. The two alternatives were shown on a card as well as read out loud. On the cards, the outcome for the respondent and the mean outcome for the village in Vietnamese Dong (VND)[7] were presented, as well as pigs faces, which were scaled according to the monetary amount. We used this appraoch since some respondents were expected to be illiterate. The scenario read by the enumerators is given in Panel 1.

Panel 1. Survey questions: introductory blurb and sample scenario

In the following questions we ask you to make a number of independent choices, related to different investments in pigs. Note, the investment in pigs is just to symbolise an investment decision. It does not have to be pigs, it could be cows or perennial crops, or any other type of investment. The investment is distributed free of charge by an external donor and thus there is no investment cost to you, your household or the village.

The difference between the alternatives is the yearly income for you and the average yearly income in your village. The income from the investment can affect your well being, which means you might feel you are richer than the others in the village.

We will now ask you to choose between two alternatives. We will ask you several questions, but there is only one investment made. Alternative A is always the same.

Let me illustrate this choice by the following example.

Alt. A.
- Your yearly income from the investment is 2,500,000 VND
- The yearly average village income from the investment is 3,000,000 VND

Alt. B.
- Your yearly income from the investment is 2,300,000 VND
- The yearly average village income from the investment is 2,000,000 VND

In this example you get the 200,000 VND more in Alternative A than in Alternative B. In Alternative A you get 500,000 VND less than the average income in the village, while in Alternative B you get 300,000 VND more than the average income.

Choose the alternative that is best for your household.

How can we measure the concern for status by using a survey? Consider the choice between two investment opportunities presented in Panel 1. The individual's income from the investment in alternative A is 2,500,000 VND and the average income in the village is 3,000,000 VND. In alternative B, the individual's income is 2,300,000 VND, but at the same time the average income in the village is also lower, 2,000,000 VND. If a respondent is indifferent between these two investment opportunities, then we have, in the case of the additive comparison utility function, that:[8]

$$x_A - \gamma \bar{x}_A = x_B - \gamma \bar{x}_B \rightarrow \gamma = \frac{x_A - x_B}{\bar{x}_A - \bar{x}_B} = 0.2.$$

Thus, if a respondent is indifferent between these two investment opportunities, then the marginal degree of positionality, γ, is equal to 0.2. Consequently, if the respondent prefers investment A then $\gamma < 0.2$, and vice versa. By asking repeated questions with different outcomes for both themselves and the average person in the village, it is possible to gain more detailed information about the respondents' degree of positionality.

In our survey, investment alternative A remains the same in all choice sets with a yearly income from the investment of 2,500,000 VND and with an average income in the village of 3,000,000 VND, while these levels were varied in the B alternatives. The B alternatives used in the survey are presented in Table 1, together with the implicit

marginal degree of positionality calculated by assuming indifference between the two alternatives (as in the example above). If an individual chooses alternative A over alternative B_1, then we know that the implicit marginal degree of positionality is below this level, and vice versa. In the survey, the respondents were presented with choice sets until alternative A was picked, starting with a choice between alternative A and B_1. As long as a respondent chose alternative B_1 over alternative A, another choice set was presented, up to a maximum of four choices.

III. Results

The survey was conducted in the Dong Tam commune (Binh Phuoc province) in southern Vietnam during spring 2002. The province is predominantly hilly and most households are engaged in farming activities. Our survey was a part of a larger household survey with interviews in 212 randomly selected households. The sample of households was randomly drawn from the village roster provided by the chair of the commune's farmer association.

The descriptive results of our survey are presented in Table 2. The majority of the respondents had a low degree of positionality with 64 per cent of the sample having a degree of positionality below 0.25 resulting in a median degree of below 0.25. The mean degree of positionality is calculated to 0.28.[9] These estimated degrees of marginal positionality are lower than those found in other studies done in other countries. Carlsson et al. (2003) estimate a mean degree of positionality for income in the 0.59 and 0.71 range using a random sample of the Swedish population, while Alpizar et al. (2005) estimate a mean degree of positionality for income of 0.45 using a sample of Costa Rican university students. Using the same assumptions about the utility function as we have done here, the implicit mean degree of positionality in

Table 1. Alternatives in positionality survey

	Own annual outcome	Average annual outcome in village	Implicit marginal degree of positionality
Alternative A	2,500,000	3,000,000	
Alternative B_1	2,500,000	2,000,000	0
Alternative B_2	2,250,000	2,000,000	0.25
Alternative B_3	2,040,000	2,000,000	0.46
Alternative B_4	1,840,000	2,000,000	0.66

Table 2. Results of relative position survey

Marginal degree of positionality	No.	Frequency	Cumulative frequency
$\gamma < 0$	85	0.40	0.40
$0 < \gamma < 0.25$	53	0.25	0.65
$0.25 < \gamma < 0.46$	19	0.09	0.74
$0.46 < \gamma < 0.66$	21	0.10	0.84
$\gamma \geq 0.66$	34	0.16	1.00

Solnick and Hemenway (1998) is 0.33. As we discussed in the introduction, there are a number of aspects in Vietnamese society which could explain why the concern for relative position should be less than in Western countries, such as: (i) that the Communist Party has emphasised the importance of equality; (ii) the fact that rural households have traditionally been organised in cooperatives; and (iii) that individuals living in rural areas are very concerned with how the local community perceives their actions.

Next, we wish to investigate what influences the degree of positionality. It is instructive to simply look at the distribution of responses for various groups in the sample. We test if the degree of positionality can be explained by three distinct sets of variables: (i) income and wealth, (ii) household characteristics and (iii) memberships in organisations. The household income is calculated by adding income from farming and labour activities,[10] and in the analyses we apply the equivalence scaled household income, which is calculated as the household income per capita.[11] Income per capita is categorised into five groups: below 1 million VND, 1–1.9 million VND, 1.9–3 million VND, 3–5 million VND and above 5 million VND, where the first two levels are income per capita levels below the poverty line.[12] Wealth is measured by other wealth items, excluding land, and reported as the per capita value of the aggregated market value of durable goods and livestock, excluding land, owned by the household. The second group of variables relates to socio-economic characteristics. We create three dummy variables for the age of the respondents, which relate to important changes in Vietnam, resulting in the following groups; 0–32, 33–46 and older than 46 years. Those who were 20 years and younger in 1986, that is, when Doi Moi started, have lived their entire adulthood during the Doi Moi. Therefore, we separate those that are younger than 33 years from those above that age in 2002. In a similar manner, those who were 20 years and older in 1975 have experienced the capitalist economy before reunification, that is, those older than 46 years in 2002. The level of education indicates whether the respondent has a primary school degree or a higher education than primary school degree as the reference group. In addition, we include ethnicity, religious belonging, gender and household size as explanatory variables. The third set of variables is related to whether anyone in the household is member of the Peasant Association or the People's Committee. Finally, we included two variables which potentially can be seen as positional: whether the household has a television or motorcycle.

In Table 3, we report on the distribution of the responses among different income, age and education groups; in addition we include the responses for members and non-members of the People's Committee and the Peasant Association. As can be seen, there does not seem to be much difference between different income groups, or different age or education groups. Using a Kruskal–Wallis test, we can not reject the null hypothesis among the various groups. However, members of the People's Committee seem to care more about positionality than others; so we can reject the hypothesis of equal distribution of responses in this case. Let us look into this in more detail by estimating determinants of the marginal degree of positionality using the interval regression technique, which takes into account that the dependent variable is measured in intervals.[13] The results of the estimations are presented in Table 4 together with descriptive statistics of the explanatory variables.[14]

Table 3. Proportion of degree of positionality for various socio-economic categories (%)

Variable	Low degree of positionality $\gamma < 0$	$0 < \gamma < 0.25$	$0.25 < \gamma < 0.46$	$0.46 < \gamma < 0.66$	High degree of positionality $\gamma \geq 0.66$	H0: Equal distribution between the socio-economic groups (p-value)
Household income per capita is below 1 million VND	43	32	2	9	15	0.61
Household income per capita is 1 million VND to 1.9 million VND	33	15	21	6	24	
Household income per capita is 1.9 million VND to 3 million VND	35	29	6	15	15	
Household income per capita is 3 million VND to 5 million VND	46	15	15	5	20	
Household income per capita is above 5 million VND	40	31	4	13	12	
Age 0–32 years	38	23	10	13	15	0.49
Age 33–46 years	36	29	7	9	20	
Age 47+ year	45	22	10	9	13	
Less than primary education	38	35	8	6	13	0.58
Primary education	48	15	12	12	12	
Secondary education	39	24	8	11	19	
Not a member of the Peasant Association	35	28	9	10	18	0.21
Peasant Association member	44	23	9	10	14	
Not a member of the People's Committee	42	26	7	11	14	0.01
People's Committee member	18	12	29	0	41	

Table 4. Interval regression estimates of the degree of positionality

Description	Coeff	P-value	Mean
Income and wealth indicators			
= 1 If household income per capita is below 1 million VND (1000 dongs); otherwise zero	−0.033	0.566	0.226
= 1 If household income per capita is 1 million VND to 1.9 million VND (1000 dongs); otherwise zero	0.051	0.439	0.159
= 1 If household income per capita is 1.9 million VND to 3 million VND (1000 dongs); otherwise zero	0.022	0.726	0.163
= 1 If household income per capita is 3 million VND to 5 million VND; otherwise zero	−0.015	0.807	0.197
= log of the wealth in million VND	0.024	0.143	7.806
Household characteristics			
= 1 If respondent older than 46; otherwise zero	−0.085	0.165	0.370
= 1 If respondent aged 33–46 years; otherwise zero	−0.036	0.545	0.442
= 1 If primary school degree; otherwise zero	0.010	0.878	0.159
= 1 If higher than primary school education; otherwise zero	0.016	0.751	0.587
= 1 If household belong to the main ethnic group; otherwise zero	0.094	0.062	0.731
= 1 respondent is a Buddhist; otherwise zero	−0.022	0.606	0.317
= 1 If any household member is a member of the People's Committee; otherwise zero	0.190	0.011	0.082
= 1 If any household member is a member of the Peasant Association; otherwise zero	−0.073	0.078	0.548
= 1 If at least one TV set in the household; otherwise zero	−0.109	0.018	0.625
= 1 If at least one motorcycle in the household; otherwise zero	0.018	0.704	0.558
Number of household members	0.039	0.004	4.712
Constant	−0.077	0.611	
Sigma	−1.301	0.000	
Adjusted R^2			
Number of observations		208	0.272

Neither income nor wealth has a significant influence on preferences for relative position in the interval regression. Interestingly, having at least one person in the household who is a member of the People's Committee results in being more status concerned, with a marginal degree of positionality around 0.19 units higher than the others. This is an unexpected result, especially since we would expect that the political system of Vietnam is one explanation why the Vietnamese, in general, are less concerned with relative position. We can only speculate why this is the case, one being that households with active members of the People's Committee are more concerned with relative position, and that they see the membership as a way of receiving either political, or for that matter, material status. Consequently, if one values either political empowerment or material wealth, membership in the People's Committee might be beneficial. Moreover, party members have been in favour of

allowing people to do business in the private sector (Tuyen et al., 2003). Hence, active members of the People's Committee might be in the forefront of a new and politically innovative way of looking at the collective, and in light of this, our finding might be less surprising. The results could also be explained with individuals choice of reference group. For example, Runciman (1966) stresses that the choice of reference group is very important. In our case, it could be that members of the People's Committee have another reference group such as more wealthy people living outisde the rural areas. It should also be noted that a similar effect is found in Johansson-Stenman et al. (2002). They find that left-wing voters in Sweden are more concerned with relative position than others. On the other hand, the respondents from a household where at least one household member was a member of the Peasant Association indicated a lower degree of postionality, around 0.07 units, and this was significant at a 10 per cent level. Possession of a television resulted in a significant lower marginal degree of positionality, while the opposite effect for household size, both significant at a 5 per cent level.

IV. Conclusion

In this paper, we have investigated individuals' preferences towards relative position or status in a rural province in Vietnam using a survey where the farmers were asked to make hypothetical choices. Hypothetical surveys are, of course, by no means without problems, see Bertrand and Mullainathan (2001). In our case, we have asked about people's perception of the importance of relative income, but one may doubt farmers are able to express their preferences in this issue. Results from earlier studies, such as Johansson-Stenman et al. (2002) and Alpizar et al. (2005), seem to indicate an overrepresentation of extreme responses, that is, responses with either a very small (or negative) or a very large degree of positionality. The results here are also extreme, in the sense that a large fraction state that they do not care about their relative position. It appears reasonable that at least parts of these extreme responses derives from respondents choosing to apply cognitively easier strategies when responding to the questions. For example, in the first set of questions it is possible that some respondents initially decided that absolute income is more important than relative income, and then answered consistently to this without trying to make trade-offs in each case. Thus, our estimated mean degree of positionality can be underestimated.

The results indicate that respondents are not particularly concerned over their relative position, and that the mean degrees of positionality are lower than those found in comparable studies conducted in Western countries. This might be largely explained by a political system proclaiming equality as well as the close relationships among people. Them (1997) argued that one distinguishing feature of the Vietnamese people is their respect for the community. Community consciousness is often higher than individual consciousness resulting in people being concerned about living in harmony with their community. An interesting and unexpected finding in our econometric analysis is that households consisting of at least one member of the People's Committee care more about relative position than others.

In Vietnam, before Doi Moi in 1986, cognizance of class differentiation led to a campaign for agricultural collectivisation, accompanied by the imposition of an egalitarian distribution principle within these cooperatives. Nam (2001) argued that

this kind of policy made social stratification on the countryside almost non-existent. Since then Vietnam has moved towards a market-oriented economy, but there are clear remnants of the egalitarianism in the rural areas. The strong interaction between individuals found in Vietnam today was perhaps present in Western Europe one or two generations ago. Thus, the development in Vietnam may result in a deterioration of the tight interactions among individuals, which also would result in lower social capital. Thus, it is therefore interesting to follow a country such as Vietnam since it provides a very good opportunity to study how traditional values transform during times of rapid changes. Moreover, this may also provide the possibility to identify factors that can sustain traditional values.

Asking hypothetical questions about such a difficult thing such as relative position, is by no means a simple task. Consequently, one should be careful when applying various kinds of quantification methods and when analysing and interpreting the results. As most things we are genuinely interested in however, are very difficult to measure (such as freedom, welfare and happiness). Hence, avoiding measuring everything that is difficult to measure does not appear to be very sensible. As expressed by Sen (1987, p. 34): 'Why must we reject being vaguely right in favour of being precisely wrong? The conflict between relevance and simplicity of use [...] is indeed a hard one in economic measurement and evaluation, but it is difficult to see why simplicity of use should have such priority over relevance.'

Acknowledgements

Notes

1. Using international USD, which is a dollar having the same purchasing power as one USD in the USA, Vietnam's gross per capita income is 6.4 per cent of the gross per capita income in the USA (World Bank, 2004).
2. However, there can also be an opposite effect from being concerned with equality, since if one strongly dislikes being in a worse position than others, this would then induce concern for status.
3. Doi Moi meant abandonment of central planning and collective agriculture, and the adoption of market socialism.
4. In a public good experiment, the subjects decide on how much of their endowment to invest in a public good and how much to keep for a private good. The experiment is set up in such a way that each unit invested in the public good returns less than unity to the investing subject. However, all other subjects in the group also benefit from the investment by a single subject by obtaining the same return as the subject who invested. Moreover, if all subjects in the group invest one unit, then the return to each subject exceeds one. Thus, the Pareto optimal solution is for each subject to invest his full endowment in the public good, while the Nash solution is to invest nothing in the public good. Normally, investments in public goods are in the range of 40–60 per cent during the first periods and decline over time. However the experiment in Ho Chi Minh investments were in the range of 60–80 per cent, and did not decline over time.
5. The only empirical test between these two functions that we are aware of is Johansson-Stenman et al. (2002), who found that the ratio-formulation performed better in terms of explaining respondents' behaviour. However, they concluded that more research is needed on this issue.

6. However, the results presented in section III are similar when we applied a ratio comparison utility function in the analysis.

7. The exchange rate was 15,158 VND = 1 USD at the time of the survey.

8. One advantage of the additive comparison utility function is that the degree of positionality is independent of the intial wealth or total income, that is, we do not need to adjust the estimates from the survey for this. At the same time, this can of course be seen as a critique against the additive comparison function as being unrealistic.

9. For non-extreme responses we use the mid-value in each interval when calculating the mean. For the extreme responses $\gamma < 0$ and $\gamma > 0.66$ we set the values to 0 and 1, respectively.

10. Income from agricultural production is calculated as the net value of the income from selling the agricultural products and the cost of production including the cost of hired and in-kind labour. Although some of the labour is in-kind, it is expected that the receiving household will pay back and this is the reason why a price is set on this factor input.

11. A number of different equivalence scale measures were tested using different fractions on a child's consumption in comparison with an adult's consumption, as well as on the extent of economies of scale in the household following the ranges discussed in White and Masset (2003), who investigated this issue in Vietnam. The correlation between the different equivalence scaled income that we calculated was high. Thus, we used the number of household members as the denominator since it is a straightforward measure to apply.

12. The poverty line, based on the cost of basic needs method, was calculated to be 1,789,871 VND per person and year in 1998 using the Vietnam Living Standards Survey (Glewwe et al., 2002). Adjusting for inflation, the poverty line would have been around 2 million VND (1,968,610 VND) at the time of our survey in 2002.

13. As can be seen in Table 2, we do not directly observe the marginal degree of positionality. What we observe is an interval in which the degree of positionality for a particular individual is. The lower and upper limits are: 0, 0; 0, 0.25; 0.25, 0.46; 0.46, 0.66; 0.66, 1.00.

14. We perform a type of RESET test in order to assess if the models are misspecified and/or if variables are omitted. This was performed by re-running the regressions when also including the squared, cubic and quadratic values of the predicted value of the dependent variable (see for example, Godfrey, 1988). We cannot reject the hypothesis of correct specification and no omission of relevant variables in the model at 5 per cent significance level. We also conducted a joint test of all four income variables are equal to zero, and we can not reject this hypothesis at 5 per cent significance level.

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