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*Inequality and Instability: an Empirical Investigation into  
Social Discontent in Urban China*

by

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## **Abstract**

Instability, proxied by individual level data on satisfaction, is measured, its association with inequality is investigated, and the socio-economic determinants of overall satisfaction are modelled. A very recent national representative household survey (2002) with a module designed to serve this purpose has been the statistics source of this study. The results point to the role of income growth in quelling social discontent. Membership of the Communist Party and political participation also play a positive role. By contrast, unemployment exerts a strong depressive effect, as does exclusion from state welfare provision.

**JEL classification:** I31, I38, J18, D63

**Key words:** Satisfaction, income growth, unemployment, inequality, instability, China

## **Outline**

1. *Introduction*
2. *Concepts and hypotheses*
3. *Methods*
4. *The extent and components of discontent*
5. *Socio-economic determinants of discontent*
6. *Conclusions*

## Non-Technical Summary

Despite China's economic success during the process of globalisation, progress towards a more democratic political system has been slow. Concerns remain over potential socio-political instability. Without the safety valves provided by political reform, it is feared that social discontent introduced by China's rapid economic reforms may become disruptive and even threaten to derail economic progress. Unemployment in urban China has risen. Protests by retrenched workers in the state sector have become common and sometimes large-scale. State or work-unit welfare has been withdrawn – employees in the state sector feel insecure about their future in terms of pensions, medical insurance and housing subsidies. Income inequality rose sharply during the initial reform period. There have been frequent mass protests and demonstrations while the incidence of violence and crimes has increased sharply.

This paper looks at social discontent using survey respondents' assessments of their own levels of satisfaction. The survey data comes from a module linked to the 2002 Urban Household Income Project (CHIP) survey. 7,000 individuals were randomly sampled from 71 Chinese cities out of 12 provinces covering all geographical regions and administrative levels of China. We find that levels of social discontent are lower than might be expected from media reports of protests and demonstrations. Levels of expressed dissatisfaction are only in the mid-range by international comparisons. Only 12% of respondents in our survey reported being *"not satisfied"* and 3% *"very dissatisfied"* compared to 40% *"satisfied"* or *"very satisfied"*.

Two main exercises are conducted with this data. First, we look at the components of satisfaction: that is to say, given that individuals express their satisfaction with several aspects of life, which aspects in particular appear to drive overall satisfaction? Second, we look at how overall satisfaction is related to objective socio-economic determinants, like household income, age and occupation.

We find satisfaction with income growth to be the most important driver of overall satisfaction. Moreover, household income is the most significant objective socio-economic determinant of overall satisfaction. Relativities in income do affect subjective well-being, but dissatisfaction due to the comparison with others' income is neither pronounced, nor does it have an overriding effect on overall satisfaction. Personal experience of unemployment does have a powerful negative effect on the level of content. Our conclusion is therefore that sustained economic growth - and with it, employment creation - may be sufficient to ward off large scale social discontent and political instability in urban China. Our findings reinforce the perception that the legitimacy of the government depends on China's continued economic growth.

Among other factors which might assist in alleviating social discontent are political participation and strong social networks, including family relationships. We find that membership of the Communist Party is associated with higher levels of satisfaction, even after controlling for income and other factors. Furthermore, people are more content if politically active. Family and social relationships also play significant roles in alleviating discontent.

## 1. Introduction

Despite of China's economic success during the process of globalisation, progress towards a more democratic political system has been rather slow. Constant concerns, therefore, remain over its potential socio-political instability. It is sometimes feared that without safety valves provided by political reform, social discontent introduced by China's rapid economic reforms may become disruptive and even threaten to derail economic progress (Liang, 2006).

Unemployment in urban China has risen. Protests by retrenched workers in the state sector have become common and sometimes large-scale. State or work-unit welfare has been withdrawn – employees in the state sector feel insecure about their future in terms of pensions, medical insurance and housing subsidies (Saunders and Shang, 2001; Appleton, *et al*, 2004). Income inequality rose sharply during the initial reform period (Li, *et al*, 2003; Knight and Song, 2003). There have been frequent mass protests and demonstrations (Tanner, 2004) while the incidence of violence and crimes have increased sharply (PRC: Legal Statistics Yearbooks of China, various years; Liu, 2005).

This paper analyses individual data to examine the determinants of social discontent in urban China. It investigates levels of satisfaction with different aspects of life and models overall satisfaction as a function of socio-economic determinants. The data used for this research were purposively designed by the authors, administered by researchers at the Institute of Economics, Chinese Academy of Social Sciences, and conducted by the National Bureau and Statistics (Guannian, 2002). The survey was linked to the 2002 Urban Household Income Distribution Survey (CHIP, 2002). 7000 individuals were randomly sampled from 71 Chinese cities out of 12 provinces covering all geographical regions and administrative levels of China.

The paper is structured as follows. Section 2 explains our approach to measuring social discontent. Section 3 explains the two main empirical exercises undertaken in the paper: analysing the different components of social discontent and modelling overall discontent as a function of socio-economic factors. Section 4 reports on the former exercise; section 5 reports on the latter. Section 6 concludes.

## **2. Concepts and hypotheses**

### **2.1 *The measurement of “social discontent”***

Social discontent could be measured in several ways - through observed behaviour, for example, protests, strikes and violent internal conflict. There is evidence that such incidents are becoming more prevalent in China. The number of collective protests is reported to have increased fourfold during the 1990s, rising from 8,700 in 1993 to 32,000 in 1999 (Pei, 2002). Some of the incidents are large scale: for example, more than 20,000 laid-off workers participated in a week-long protest in Liaoyang in March 2002. In rural areas, there are repeated reports of violent conflicts between peasants and government authorities. However, it is hard to obtain disaggregated data on behavioural measures of social discontent in China and consequently they are of limited use for analysis.

The approach of this paper is to measure social discontent by surveying individuals and asking a variety of attitudinal questions. Due to the potential official sensitivity of conducting such research in China, the approach taken was rather elliptical. Rather than ask explicitly political questions, we asked general questions about individual's satisfaction with various aspects of their lives. High levels of expressed dissatisfaction are indicative of social discontent - a society full of dissatisfied individuals cannot be said to be socially content (Diener, 2000; Frijters, 2000). Satisfied individuals are unlikely to protest - strike or riot (Gissinger and Gledisch, 1999; Huntington, 1968). Our measure of discontent therefore has much in common with the self-reported happiness measures now subject to analysis in a growing economics literature (Layard, 2005).

Our primary measure of social discontent is derived from the following survey question: *Considering all aspects of your life, how satisfied are you?* One adult respondent was randomly selected from each household survey and answered the question by positioning themselves on a five point scale. The positive ends of the scale were labelled *very satisfied* and *satisfied*; the negative ends of the scale were labelled *not satisfied* and *very dissatisfied*.

### **2.2 *The determinants of discontent***

Satisfaction may be momentary and changeable or durable and long-lasting. It could be determined by many factors, medical, psychological, genetic, and socio-economic. In order to

focus on social discontent, we wish to put aside momentary emotions or variations that are due to predetermined personality types. Instead we are interested in the socio-economic determinants of discontent. Regression analysis may assist in this, since it can identify systematic relations between satisfaction and socio-economic factors, with temporary or idiosyncratic variations tending to appear as unexplained difference. In order to abstract from the influence of personality traits, we asked a variety of questions designed to identify how amiable the respondent was and included an indicator of this personality trait as an explanatory variable when modelling overall satisfaction<sup>1</sup>. In the same spirit, we also control for individuals' age, sex, marital status and self-reported health status when modelling the socio-economic determinants of satisfaction.

### *Income effects*

Economists tend to believe that higher income would bring people a higher level of contentment, although empirical evidence does not always support this argument. The pattern of results tends to be that income is positively associated with satisfaction for individuals using both cross-sectional and panel data. However, when comparing countries of different income or comparing countries over time, there is no such clear pattern (Easterlin, 2001; Frey and Stutzer, 2002; Layard, 2005)

Urban households in China benefited from an average 4.47% annual income growth rate between 1988 and 2002; in the more recent period of 1995-2000, the corresponding rate was 4.42%. However, 24% respondents of this sample reported an experience of absolute fall of their household real income at some stage between 1998 and 2002 (Song, 2002)<sup>2</sup>. This may lead to a rise in discontent, quite apart from any effects on the level of income that they give rise to<sup>3</sup>.

### *Unemployment*

The launch of a program of radical restructuring of state owned enterprises in 1997 created many strains for Chinese society. More than one third of China's urban labor force has been affected - being made redundant or unemployed (Knight and Xue, 2006; Appleton *et al*, 2002). However, state policies have been introduced to cushion the impact on redundant employees<sup>4</sup>. This allows its redundant workers to survive with their basic needs satisfied and to seek

employment in less formal sectors or become re-employed on a less permanent basis. Indeed recent fieldwork in urban China could find hardly any unemployed people when using the narrow International Labor Organisation definition – i.e. working no more than one hour in the last week and being willing to work more (Kim, 2006).

Nonetheless, for those used to depending on the state for allocating jobs and providing welfare, increased job insecurity may be a trauma. The experience of unemployment itself may be a deeply demoralising, quite aside from its income effects. Works brings with it social connections and contributes to a sense of self-worth, so that other studies of happiness often find its direct effects outweigh the indirect effects via income. Therefore it is important for us to estimate the impacts on social discontent of both job insecurity and unemployment<sup>5</sup>.

#### *Social status and social mobility*

Low social status is likely to be linked to discontent. In Western societies, occupation is typically used as the best indicator for social class (Goldthorpe and Hope, 1974). However, in urban China, reforms may have lessened the importance of traditionally high status occupations. Opportunities in the private sector have allowed the creation of a “new rich” while some people in previously respected state sector positions may have been left behind or even become threatened with retrenchment. In such a fluid situation, income rather than occupation may be a more relevant source of social differentiation.

The extent of social mobility has often been regarded as important in determining social discontent. Opportunities for poorer individuals to better themselves may defuse some of the discontent created by poverty. Conversely, the threat of downwards social mobility -for example, through unemployment and job insecurity - may be causes of socio-political instability (Dockery, 2004).

#### *Entitlements and welfare provision*

After a long process of transforming a socialist state into a market-oriented economy, China has almost reached the point of ridding its people of a feudalistic form of citizen status – *hukou*. The hukou system of resident registration has divided China’s citizens into the superior urban and the inferior rural, and accordingly into economic “heaven” or “hell” (Knight and Song,



1999). Although officially still remaining, the urban *hukou* has now begun to lose its value. This is partly due to the relaxation of the state policy of prohibiting rural-urban migration and partly due to the radical reforms begun in the mid-1990s when the “iron rice” bowl of permanent urban job-status was smashed. The gains for rural-urban migrants and the loss of formal jobs for urban workers have created the impression of a zero-sum game - one’s loss seeming to be the other’s gain. In this paper, therefore, it is necessary to examine whether the remaining power of urban entitlement still affects people’s satisfaction.

One aspect of welfare provision that we pay particular attention to is medical insurance. Medical reform in China has recently been widely criticised for lacking fairness, efficiency and effectiveness. Compared with welfare programmes for pensions, unemployment and low income allowance benefits, medical reform is currently of more immediate concern and affects broader social groups, including the majority of China’s middle class. The survey used in this paper identified a large proportion of respondents who were worried about the insufficient coverage of medical insurance. We therefore investigate to what extent lack of state medical insurance contributes to social discontent.

A further aspect of welfare provision concerns housing. In parallel with retrenchment policy, there has been radical housing reform in urban China. Housing had previously been owned and allocated by the work unit. However, reforms led to the transfer of ownership to households, almost as a *quid pro quo* for the withdrawal of many welfare benefits formerly provided by the work unit. By 2002, around 79% of our sample owned their own homes. Home ownership may have increased satisfaction with living conditions by providing households with more incentive to improve their accommodation.

#### *Political affiliation and participation*

Although the Chinese Communist Party (CCP hereafter) has loosened its grip on the economy and arguably abandoned its core beliefs, its membership has risen markedly. The Communist Party membership has expanded from 3.8% of China’s population in 1978 to 5.2% in 2002. As of June 2002, it had 66.4m members, making it the largest political organization in the world (Economist Intelligence Unit, 2004). Given this mass membership, it is interesting to see whether ordinary CCP members differ from non-members in their levels of satisfaction. Similarly, we look at whether membership of one of the smaller political parties (still CCP

sanctioned) is related to social discontent. During a transition from a command economy, there is a political risk that members of ruling party will resist reform as they fear losing their privileges when exposed to the market. However, it is often argued, that so far China appears to have made reform “incentive-compatible”, so that Party members have gained from it and indeed gained more than non-members (Appleton et al, 2006; Morduch and Sicular, 2000).

As well as party membership (political affiliation) we asked respondents about their level of interest and activity in political matters (political participation). Political participation outside the direction of the CCP is still taboo in China – political parties, religious institutions, labor unions etc are all subject to tight official control. However, access to news and information is increasing – for example, through increased international travel and through the internet (despite attempts at censorship - the so-called “great firewall of China”). People can discuss political issues in small groups of trusted friends. Potentially, political participation may be an outlet for social discontent. Consequently, it is interesting to see if our index of political participation is related to satisfaction.

### *Social networks and family-life*

Traditionally, families and social network (*guanxi*) played a significant role in welfare provision or social support in China. State welfare practice in urban China during the planning period reduced the significance of this tradition. However, when reform has weakened the dependency of workers on their state work-units, employment retrenchment and reductions in state welfare programmes have rapidly raised individuals’ sense of insecurity, reviving is the roles of family and enhanced the values of family and private social networks (Morries *et al* 2001). This may be particularly true in the period of transition when the market mechanism – whether for labor or for welfare services - is not fully established. With a potential gap between public and market provision, people may depend on their family, relatives, friends and other social connections to help (e.g. with medical treatment).

### **3. Methods**

In this paper, we undertake two main empirical exercises to analyse our measure of socio-economic discontent. The first is to look at different dimensions of satisfaction. In the

survey, respondents were first asked to rate their levels of satisfaction with different aspects of life before being required to give an assessment of their life overall. For example, they were asked how satisfied they were with their current income, with their occupation, their family life etc. Reported satisfaction with different aspects of life can be regarded as components of overall satisfaction. To provide some indication of how important each component was, our first empirical exercise was to regress the overall satisfaction scale on the satisfaction scales for different aspects of life. This exercise was essentially descriptive with the coefficients on the component satisfaction scales providing some indication of the multivariate correlation between them and overall satisfaction. We wanted to see which aspects of life had significant associations with overall satisfaction, *ceteris paribus*, and which of these associations seemed greater.

The second empirical exercise was to model overall satisfaction as a function of a variety of potential social economic determinants. These determinants – such as income and unemployment – were discussed in the section above. Although endogeneity issues may still arise, this exercise is rather less descriptive than the previous one. It is likely that causation primarily works from income and unemployment to satisfaction, rather than the other way around. As a result we are not simply interested in multivariate correlations but also in making some predictions to illustrate the quantitative importance of some of our determinants. For this reason, we do not use a simple regression, but instead estimate an ordered probit model as that allows us to make predictions taking account of the discrete, ordered nature of the dependent variable.

Specifically, we posit a latent variable,  $S_i^*$ , for overall satisfaction:

$$S_i^* = a_i + b_{mi} \cdot X_{mi} + u_i \quad (1)$$

where  $X_n$  is a vector of  $n$  socio-economic variables and  $u_i$ . Under the ordered probit model, an individual will report a given level satisfaction ( $S_i = j$  where  $j=0, J$ ) if the latent variable lies between arbitrary cut-offs,  $\mu_j$ , whose values are estimated from the data:

$$\Pr(S_i = j) = \Phi(\mu_{j+1} - \beta X_i) - \Phi(\mu_j - \beta X_i) \quad (2)$$

where  $\mu_0 = -\infty$ ,  $\mu_1=0$  and  $\mu_{J+1} = \infty$ .

We can use equation (2) to derive the predicted probabilities of an individual having given levels of satisfaction. This is useful for illustrating the quantitative importance of particular socio-economic determinants. When presenting such predictions we evaluate at the means of the other explanatory variables.

#### **4. The extent and components of discontent**

##### **4.1 *The extent of general discontent***

Figure 1 shows the distribution of responses to the question about overall satisfaction. Two-fifths of respondents were generally satisfied (including 1% very satisfied). On the other end of the scale, 15% were not satisfied, and three times more respondents were very dissatisfied than very satisfied. The most common response was located in our middle range (not that satisfied) but this was merely two percentage points higher than the proportion who were satisfied. It should be noted that if we divided the scale into two – those who are satisfied (or very satisfied) and those who are not so satisfied (or not satisfied or very dissatisfied), we would regard the latter to be the majority.

How does the level of satisfaction in China compare with other countries? Table 1 compares our results with the average levels of subjective well being summarised by Frey and Stutzer (2002). The results for other countries are reported on a ten-point scale, so for China we have had to convert our five point scale. For this exercise, we have taken our middle response ("*not so satisfied*") as being neutral, as the middle response is typically regarded in other countries. If the wording in China is in fact slightly tinged with negativity, we may be over-stating the level of subjective well-being in the country compared to elsewhere. This caveat aside, from Table 1, average satisfaction scores in urban China appear to lie in the middle of the range internationally. Except for Japan, most selected OECD countries have higher scores of life satisfaction than China. Some other transitional economies, specifically Russia and Ukraine, have the lowest contentment scores. Table 1 also shows a slight fall in the overall level of contentment in urban China from 6.83 in 1995 to 6.47 in 2002.

## **4.2** *Components of social dissatisfaction*

In this section, we review levels of satisfaction with different aspects of life (Table 2). We also investigate the extent to which satisfaction with different aspects of life contributes to overall dissatisfaction<sup>6</sup>. This is done by regressing overall satisfaction on variables for satisfaction with different aspects of life (Table 3). The explanatory power of the model (adjusted R squared) is 37%.

### *Income*

When it came to evaluating satisfaction with household income, we asked three separate questions. One asked about satisfaction with current income (absolute income); another with their income compared to people they know (relative income); and the third asked about satisfaction with their income now compared to their income in the past (income growth). Generally, people were reported lower levels of satisfaction on these three income related questions than they did overall satisfaction. This is perhaps unsurprising - people may naturally always want more income (the non-satiation axiom of consumer theory). However, reflecting China's rapid economic growth, levels of satisfaction with income growth were higher (at 44%) than with the other income questions or indeed than with overall satisfaction. Respondents were least satisfied with their current income (only 30% satisfied) with 34% satisfied with their relative income.

In the regression analysis, it is satisfaction with income growth that has the largest effect on overall satisfaction - indeed its effect is larger than that of the other two income-satisfaction scores combined. Levels of satisfaction with absolute income and with relative income are as important as each other. The finding that satisfaction with relative inequality is less important than satisfaction with income growth is attention-grabbing in the light of commentary that rises in inequality are the most likely cause of social discontent. Our results suggest that relativities in income do affect subjective well-being. However, dissatisfaction with relative income does not seem that pronounced, nor does it appear to have an overriding effect on overall satisfaction. If China's economic growth can be sustained, the benefits of this may outweigh any negative effects of inequality on social discontent.

### *Occupation and social status*

When asking the respondents to consider whether they were content with their social position, we distinguished between occupation and status. The former is an objective measure of social position; and latter is rather subjective and complex - a reflection of respects from others which may be based on one's social-political status and economic worth. Respondents were generally (55%) content with their occupation. However, this index was not significantly (or even positively) associated with overall satisfaction *ceteris paribus*. Social status was rather more strongly correlated, although still with a smaller impact than any of the three variables for satisfaction, with income.

We also asked respondents about their satisfaction with their achievements, in work and in their personal life. On average, respondents were less satisfied with their achievements than they were with life overall. However, as with income, it may be in the nature of people to always aspire to achieve more. Satisfaction with personal achievements had the third largest multivariate association with overall satisfaction (Table 3), exceeded only by economic growth and housing in quantitative importance.

#### *Opportunities and social mobility*

A number of attitudinal questions touched on aspects of social mobility. Generally, speaking, respondents reported rather low levels of satisfaction with their opportunities. Less than a quarter of those who responded were satisfied with their promotion prospects. Less than a third were satisfied with their opportunities for further training and the scope for their skills or talents to be appreciated. Surprisingly, levels of discontent over job security did not seem particularly high - 43% of respondents felt satisfied. However, there was a sizable tail of 6% respondents very dissatisfied. This probably reflects the fact that the threat of retrenchment is far from uniform and risks are much higher for some vulnerable workers than for the majority.

Of the above indicators of social mobility, only that for opportunities for skills and talents to be appreciated to be appreciated had a significant and positive coefficient in Table 3. Promotion opportunities and job security surprisingly appeared to have a near zero effect on overall satisfaction. Opportunities for training are negatively associated with overall satisfaction. This latter association may reflect individuals whose work type is declining or under threat - for example, employs in unprofitably state owned enterprises.

### *Welfare provision*

People were asked about their satisfaction with various aspects of services and welfare provision: housing, transport and economic security in old-age. The responses were generally less positive than reports of overall satisfaction. Satisfaction with transport was not strongly related to overall satisfaction in Table 3. Satisfaction over old age security does have a significant positive correlation, *ceteris paribus*, but it has the smallest coefficient in absolute size of any of the statistically significant regressors in Table 3. By contrast, satisfaction with housing was one of the three components most strongly correlated to overall satisfaction in the multivariate analysis.

### *Satisfaction with Government Policy*

Government policies may have direct impacts on people's subjective well being. Di Tella *et al* (2001) found in their research of 12 European countries and the United States that people care about inflation and unemployment, and appeared to be happier when the inflation and unemployment rates in their countries were lower. In this research, we inquired about satisfaction with inflation, pollution control and urban infrastructure management as policy-related aspects of life. However, given the cross-sectional nature of our data, our questions about satisfaction with prices may reflect general issues to do with the real cost of living, rather than monetary policy and inflation *per se*.

Most people in urban China are satisfied with the prices of staple food (76%) and basic goods (57%). Reported levels of satisfaction with how government policies generally impacted their families also compared favourably (at 44%) with overall satisfaction. People were somewhat less satisfied with city infrastructure (38%). Satisfaction with pollution control generally obtained the lowest ratings of any of the attitudinal variables we assessed. Only 19% were satisfied and 34% were dissatisfied. Interestingly, although people were generally dissatisfied with pollution, those feelings did not appear to impact on their overall levels of satisfaction in Table 3. Each of the other policy-related aspects did have significant positive effects in the multivariate analysis.

### *Social network and family tradition*

The dimension of life that people report being most happy with is their family life, marriage and relationships – only 4% respondents were not satisfied, but nearly 80% were either very satisfied or satisfied. People were also rather content with their social connections – over 53% were either very satisfied or satisfied, fewer than 7% were not satisfied. From the multivariate regression, both variables did have significant positive independent effects on overall satisfaction, *ceteris paribus*. However, the coefficients on these variables were rather modest in comparison to those on the more material dimensions such as satisfaction with income and housing.

Respondents were also asked about their satisfaction with aspects of their spouse's lives. People appear to set rather lower standards for their spouse's income and achievements than for household income or their own personal achievements. Or at least, they reported higher levels of satisfaction with them. However, satisfaction with spouses' occupation and social status was comparable to that with own occupation and social status. Only the spouse's personal achievements had a substantial coefficient in the model for overall satisfaction - the coefficient was just over half as large as that on own achievement. Spouse's social status was positively related to overall satisfaction in the regression, but satisfaction with spouse's occupation was perversely negatively related. Satisfaction with spouse's income had no independent effect, but this is perhaps to be expected given that total household income was controlled for.

### *Summary*

Table 4 provides one way of decomposing overall satisfaction into what is attributable to different components<sup>7</sup>. Looking at groups of attitudinal variables, we can see that low levels of satisfaction over income operate to depress overall satisfaction (implying a fall of -0.042 on the five point scale). The occupation and social status variables (primarily that concerned with achievement) also make a negative contribution (-0.028). Smaller negative effects arise from welfare provision (primarily dissatisfaction with housing) and social mobility (primarily attitudes to opportunities for future recognition). The bundle of attitudes towards government policies makes a positive contribution (0.043), although this is primarily due to satisfaction with low food prices. Social and family relations also seem highly rated and contribute to



higher overall satisfaction (0.023). In summary, low levels of satisfaction with income, housing and achievement (past and future opportunities) seem to be factors that work to lower overall satisfaction. This is offset by the contribution of high levels of satisfaction with low food prices and with good family relationships.

## 5. Socio-economic determinants of discontent

Table 5 provides the key parameters of our ordered probit model for the socio-economic determinants of overall satisfaction. Table 6 derives the predicted probabilities from the model evaluating at the means of the explanatory variables. The final specification of the model was chosen from various preliminary models, but the core results are robust, especially those regarding policy factors (Song, 2006).

We begin by considering our hypotheses on income and unemployment. As with cross-sectional studies for other countries, income is positively associated with subjective well-being in urban China. Figure Two plots life satisfaction scores for each household income per capita decile. After the lowest decile, there is a monotonic relation: the higher household income per capita leads to higher average levels of satisfaction. A significant positive effect of income on satisfaction is also evident in the multivariate model. Indeed the log of household income per capita is the single most significant determinant in the model. Doubling household income per capita is predicted to raise the proportion satisfied or very satisfied from 40% to 47%, evaluating at the mean of the explanatory variables. In addition, we identify a significant negative effect if one experienced a fall in household income at any time point in the five-year period before the survey. This deprived experience, at the mean of the other explanatory variables, has reduced the predicted proportion satisfied or very satisfied from 41% to 37%.

Unemployment may have at least three negative effects on satisfaction according to the model. First, it lowers household income. Second, unemployment is likely to put income on a downwards trajectory. Finally, there is a pure unemployment effect after controlling for income effects. This latter effect is large: *ceteris paribus* the pure effect of unemployment raises the proportion not satisfied or very dissatisfied from 13% to 20%.

Next, we examine the effects of health and medical insurance. Reported ill health has powerful adverse effects on subjective well being. Health status was rated on a five point scale, with four dummy variables being included to capture its effects on satisfaction (being “very healthy” was the default category). The dummy variable for being very unhealthy has the largest coefficient in absolute terms in the model. Someone who is reported to be “very unhealthy” has only a 14% probability, at the means of other variables, of being satisfied or very satisfied compared to 47% for the very healthy. There may be an element of reverse causality - a good emotional state is believed to boost the body’s immune system against disease. However, it seems plausible that the direction of causality is largely the other way. Aside from these direct effects of illness, ill health may also lead to economic hardship, by lowering earnings and requiring large outlays for medical treatment. We found possession of medical insurance to have significant effects on subjective well-being. Individuals without any medical insurance were predicted to have a 19% chance of being dissatisfied compared to 12% for those with state medical insurance. This may reflect anxiety over the risk of illness.

More generally, urban entitlements in China depend on the place of residential registration (*hukou*). Our sample is of urban residents and most rural-urban migrants are excluded from the sampling frame. There are a few (less than 1%) people with hukous in rural areas far away from the survey sites. These rural-urban migrants have been included in the sample because of their purchase of urban temporary status. We find that this small proportion of people was the least content compared with those with urban hukou and with rural counterparts with local registration. The results suggest that the hukou control policy may raise social discontent but unfortunately the results are qualified by reliance on small numbers.

CCP members accounted for 40% of our sample and tended to be more content than non-members. Although CCP members tend to receive a wage premia (Appleton *et al.*, 2005), the effect we identify may reflect wider privileges since we control for household income. Interestingly, it is membership of the CCP rather than membership of a political party that appears to raise satisfaction: the satisfaction levels of members of minor political parties are not predicted to differ from those who are not members of any political party. However, participating in politics or expressing a general interest in it does tend to reduce social discontent. This is particularly interesting because half of those expressing an interest in politics or political participation were not Communist Party members. Sometimes it is feared that an interest in politics outside of the Party control may encourage social discontent. On the

contrary, our results suggest that if the government was more tolerant of political expression and so encouraged a more widespread interest in public affairs, the level of contentment of the nation may improve.

Occupation is used as an indicator of social classification in the model, but only two occupational groups have coefficients that are statistically significant – government officials and managers. Both groups are more likely to be satisfied than the default category - unskilled manual workers. Other things being equal, 47% of higher rank government officials are predicted to be satisfied or very with their lives, compared to 40% of unskilled workers. Indeed, ignoring the fact that other differences are not statistically significant at 10% level, we confirm that all, apart from one – the petty private individual owners - occupational groups appear more satisfied than the unskilled manual workers. This seems ironic given that the latter, the proletarians, were designated the leading-class of China by the Communist Party before the economic reform. Has red China changed its colour?

Finally, we turn to personal characteristics. It will be recalled that we included as a control variable an index for having an amiable personality. This variable was designed to control for personality traits so as to allow the impact of the socio-economic variables of interest to be estimated without bias. Having an amiable personality (i.e. the index moving from zero to one) reduces the probability of being discontent, other things being equal, from 16% to 7%.

Our other personal characteristics are more conventional - age, sex and marital status. At the means of other characteristics, a man has a 15% probability of being dissatisfied; a woman has an 11% probability. This finding may be surprising given that women in urban China appear to have suffered increased wage discrimination and risk of unemployment since the economic reforms (see, for example, Li and Gustafson, 2000; Knight and Song, 2006; Appleton *et al*, 2005). Song (2006) conducts further exploration on this. The findings suggest that women in the sample were more content to subordinate their interest to those of their family and workplace. As long as their families do well, women often seem to be content. Considerations of their own happiness are more likely to be grounded on how well other family members do. Whether this is altruism or feudalistic dependency on the other sex requires further study. However, it may explain the puzzle why female employees or factory workers would accept their early retirements as young as in their 40s; and they are more likely to be made redundant if their partners are given job opportunities. It seems that the State policy-makers understand

Chinese women rather well. There is no collective voice from women in China protesting against state policy of sex discrimination in the policy process of overcoming unemployment and related policies.

The relationship between satisfaction and age cohort exhibits a U curve pattern. Both younger and older people tend to be happier than the middle aged. The turning point when aging switches from causing discontent changed into content is the year of 47. For example, Table 6 predicts that 19% of those aged 40 years old are dissatisfied compared to 12% of those aged 20 and 10% of those aged 60.

Marriage is associated with increased satisfaction. Single people have a 23% probability of being dissatisfied, other things being equal, compared to 12% for those who are being married. There may be an element of reverse causality in this relationship, but it seems unlikely to explain most of the effect. In particular, widows and widowers (and the divorced) appear closer to single people in their relatively low levels of satisfaction.

## **6. Conclusion**

We have analysed social discontent through the lens of individuals' evaluations of their well-being. We find that levels of social discontent are lower than might be expected from media reports of protests and demonstrations. It is true that levels of content have declined slightly over the 1990s and appear lower than in most OECD countries, but they remain in the mid-range internationally. Only 12% of respondents in our survey reported being "*not satisfied*" and 3% "*very dissatisfied*" compared to 40% "*satisfied*" or "*very satisfied*".

It is often argued that economic growth in China has come at the cost of rising inequality and increased job insecurity. These downsides to economic reform may aggravate social discontent despite rising average incomes. In this paper, we find satisfaction with income growth had the highest multivariate correlation with overall satisfaction. Household income was the single most significant socio-economic determinant of overall satisfaction. Relativities in income do affect subjective well-being, but dissatisfaction due to the comparison with others' income is neither pronounced, nor has an overriding effect on overall satisfaction. Personal experience of unemployment does have a powerful negative effect on the level of

content. Our conclusion is therefore that sustained economic growth - and with it, employment creation - may be sufficient to ward off large scale social discontent and political instability in urban China. Our findings reinforce the perception that the legitimacy of the government depends on China's continued economic growth.

Among other factors which might assist in alleviating social discontent are political participation and strong social networks, including family relationships. We find that membership of the Communist Party is associated with higher levels of satisfaction, even after controlling for income and other factors. Furthermore, people are more content if politically active (a condition by no means synonymous with Communist Party membership). But this latter kind of contentment may be conditional upon political tolerance of free expression by both individuals and media reports. Family and social relationships have also played significant roles in sustaining social content in China. They seem to help maintaining a stable mood in this rapidly changing society where the norms of social status, economic opportunities and political inspirations are in flux.

## References

- Appleton, Simon, John Knight, Lina Song and Qingjie Xia (2006), “The economics of Communist Party membership – the curious case of rising number and wage premium in urban China”, Nottingham University: *mimeo*
- Appleton, Simon, Appleton, S., Lina Song and Qingjie Xia (2005), “Has China Crossed the River? The Evolution of Wage Structure in China”, *Journal of Comparative Economics*, 33, 4, 644-63
- Appleton, S., Knight, L., Song, L. and Xia, Q., (2004) “Contrasting paradigms: segmentation and competitiveness in the formation of the Chinese labor market”, *Journal of Chinese Economic and Business Studies*, 2, 3, 185-206
- Appleton, Simon, John Knight, Lina Song and Qingjie Xia (2002), "Labor Retrenchment in China: Determinants and Consequences" *China Economic Review*, 13, 2-3. 252-76
- Frey, B. and Alois Stutzer (2002), *Happiness and Economics – how the economy and institutions affect human well-being*, New Jersey and Oxford: Princeton University Press
- Diener, Ed (2000), “Subjective Well-Being: The science of Happiness and a Proposal for a National Index”, *American Psychologist*, **55**, 1, 34-43
- Di Tella, Rafael, MacCulloch, Robert and Oswald, Andrew (2001), “Preference over inflation and unemployment: evidence from survey of happiness”, *The American Economic Review*, **91**, 1, 335-341
- Dockery, AM (2004), “Looking Inside the Unemployment Spell”, *Australian Journal of Labor Economics*, **7**, 2, June 2004, 175-198
- Easterlin, Richard, A. (2001), “Income and Happiness: towards a Unified Theory”, *The Economic Journal*, 111 (July) 465-484
- Economist Intelligence Unit (2004) *China: country profile* (2004).  
<http://www.economist.com/countries/China/profile.cfm?folder=ProfilePolitical%20Forces>

Frijters, P (2000), "Do individuals try to maximize general satisfaction?" *Journal of Economic Psychology*, **21**, 3, 281-304

Gissinger, Rabveig and Gledisch, Nils Peter (1999), "Globalization and Conflict: Welfare, Distribution, and Political Unrest", *Journal of World Economic Systems Research*, 2, Summer 1999, 327-365

Goldthorpe, JH and Hope K. (1974), *the social grading of occupations: a new approach and scale*, Clarendon Press

Huntington, Samuel P. (1968), *Political Order in Changing Societies*, New Haven and London: Yale University Press

Kim, BC (2006 forthcoming), "The urban livelihoods of the laid-off unemployed in China: Assets, Livelihood strategies and Sustainability". School of Sociology and Social Policy, Nottingham University: PhD thesis.

Knight, John, and Xie, J (2006), "How High Is Urban Unemployment in China?" *Journal of Chinese Economic and Business Studies*, 4, 2, pp 91-107

Knight, John and Song, Lina (1999), *Rural-urban Divide: Economic Disparities and Interactions in China*, Oxford and New York: Oxford University Press

Knight, John and Song, Lina (2003) "Increasing urban wage inequality in China: extent, elements and evaluations", *Journal of Economics of Transition*, **11**, 4, pp1-23

Knight, John and Song, Lina (2005), *Towards a Labor Market in China*, Oxford and New York: Oxford University Press

Layard, Richard (2005), *Happiness – Lessons from a new Science*, London and New York: Penguin Books Ltd

Liang, Jing (2006), "Where is the way of the balanced development?", New Century Net: 10/24/2005 1:24:00 PM

Li, Shi and Gustafsson, B (2000), "Economic transformation and the gender earnings gap in urban China", *Journal of Population Economics*, **13**, 2, 305-29

Liu, Jianhong (2005), "Crime Pattern Transition in China", *British Journal of Criminology*, **45**, 5, 613-633

Morduch, Jonathan; and Sicular, Terry (2000), "Politics, growth, and inequality in rural China: Does it pay to join the Party?" *Journal of Public Economics* 77: 331-56.

Pei, Minxin (2002), "China's Governance Crisis" *Foreign Affairs*

People's Republic of China: "Legal Statistic Yearbook", various years, China *Fazhi* Publication House.

Saunders, Peter & Shang, Xiaoyuan (2001), "Social Security Reform in China's Transition to a Market Economy", *Social Policy and Administration*, 35, 3, pp.274-289

Song, Lina (2002), Policy initiatives on inequality in China, Report commissioned by Department for International Development, UK and Overseas Development Institute for the project "Policy Initiatives on Middle Income Countries and Inequality"

Tanner, Murray Scot (2004), "China Rethinks Unrest", *The Washington Quarterly*, **27**, 3, pp. 137-156



**Table 1: Reported Subjective well-being in Selected Countries**

Country	Average satisfaction with life	Country	Average satisfaction
Nigeria	6.82	Russia	4.45
South Africa	6.08	Ukraine	3.95
Brazil	7.15	Denmark	8.16
Peru	6.36	Switzerland	8.02
Taiwan	6.89	Sweden	7.77
South Korea	6.69	U.S.	7.67
India	6.53	Australia	7.58
		Britain	7.46
China	6.83 (1995)	France	6.78
China	6.47 (2002)*	Japan	6.61

Sources: Selected from Frey and Stutzer (2002); \* denotes authors' calculation from this sample.

Note: This is a scale between 1 and 10, 1=lowest score of satisfaction, and 10=highest.

**Table 2: Satisfaction with various aspects of life**

(Unit = %)

How satisfied are you with:	Very satisfied	Satisfied	Not that satisfied	Not satisfied	Very dis-satisfied	Not respond
All aspects of your life considered together	1.03	38.89	42.10	11.55	3.31	3.12
<b><i>Income:</i></b>						
Current household income?	2.08	28.30	39.89	18.81	9.72	1.20
Income compared with the people you know?	1.29	33.20	40.09	16.40	6.32	2.70
Income compared with what you earned before?	1.68	42.24	34.83	14.22	5.71	1.32
<b><i>Occupation and social status:</i></b>						
Current occupation?	5.40	48.90	24.28	7.83	3.57	10.02
Current social status?	1.86	41.01	32.04	15.58	5.69	3.82
Career achievement/personal development?	1.20	27.71	39.49	17.45	5.75	8.4
<b><i>Opportunities and social mobility:</i></b>						
Chances for job promotion?	0.59	18.25	37.08	17.86	5.35	20.87
Chances for getting your talents /skills appreciated?	0.99	25.59	41.79	16.54	4.44	10.65
Opportunities for training?	1.00	25.46	31.52	15.70	4.92	21.40
Job security?	1.39	41.76	25.03	12.84	6.01	12.67
<b><i>Welfare provision:</i></b>						
Economic security in old age?	1.82	33.34	31.59	14.15	7.74	11.35
Current housing conditions?	2.91	37.54	34.63	15.88	8.51	0.53
Means of transportation?	1.40	35.74	32.93	17.57	5.16	7.2
<b><i>Government policies &amp;</i></b>						

<b><i>environment:</i></b>						
General impact of state policies on your family?	1.76	42.27	34.83	8.70	2.61	9.82
Current price of basic foods?	2.57	73.12	18.08	3.27	0.59	2.37
Current price of basic daily needs (clothing and daily goods)?	1.56	54.96	32.64	6.98	1.32	2.54
Public infrastructure of the city?	1.39	37.07	38.72	15.11	5.62	2.09
Current level of pollution?	0.97	17.78	44.50	23.29	10.61	2.85
<b><i>Family and social connections:</i></b>						
Social relations with others (guanxi)?	1.38	51.42	30.98	5.69	1.10	9.44
Family life, marriage and relationships?	9.46	69.45	11.54	3.11	0.90	5.54
Spouse's current income?	2.32	33.08	31.79	16.83	7.44	8.54
Spouse's current occupation?	4.06	43.33	23.68	12.18	4.80	11.95
Spouse's current social status?	2.24	41.37	27.85	13.59	5.00	9.95
Spouse's current achievements?	1.85	34.66	32.67	13.88	4.39	12.55

Note:

Observations = 6976

Sources: Guannian 2002

**Table 3: Regression of overall satisfaction on satisfaction with specific aspects of life**

Satisfaction over the following aspects:	coefficient	T-statistics	
<b><i>Income:</i></b>			
Current household income	0.083	5.95	***
Income compared with the people you know	0.075	5.78	***
Income compared with what you earned before	0.157	10.48	***
<b><i>Occupation and social status:</i></b>			
Current occupation	-0.008	-1.01	
Current social status	0.049	4.35	***
Career achievement/personal development	0.107	10.59	***
<b><i>Opportunities and social mobility:</i></b>			
Chances for job promotion	0.00005	-0.01	
Chances for getting your talents /skills appreciated	0.088	9.75	***
Opportunities for training	-0.026	-3.65	***
Job security	-0.008	-0.92	
<b><i>Welfare provision:</i></b>			
Economic security in old age	0.016	2.28	***
Current housing conditions	0.116	9.23	***
Means of transportation	0.000	0.05	
<b><i>Government policies &amp; environment:</i></b>			
General impact of state policies on your family	0.028	3.55	***
Current price of basic foods	0.073	5.12	***
Current price of basic daily needs (clothing and daily goods)	0.033	2.45	***
Public infrastructure of the city	0.065	5.37	***
Current level of pollution	0.0004	0.04	
<b><i>Family and social connections:</i></b>			
Social relations with others (guanxi)	0.022	2.7	***
Family life, marriage and relationships	0.030	3.45	***
Spouse's current income	-0.002	-0.18	
Spouse's current occupation	-0.020	-2.04	***
Spouse's current social status	0.058	6	***

Spouse's current achievements	0.025	2.22	***
Intercept	0.032	0.57	
Adjusted R square	0.371		
F-value	172.57		
Number of Observations	6977		

Sources: Guannian 2002

**Table 4: Decomposition of overall satisfaction into its components**

	[1] Mean satisfaction	[2] Deviation from mean overall satisfaction	[3] Contribution of deviation to overall satisfaction
Satisfaction over the following aspects:			
All aspects of your life considered together:	3.235	N.A.	N.A.
<b><i>Income:</i></b>			-0.042
Current household income	2.941	-0.294	-0.024
Income compared with the people you know	3.069	-0.166	-0.012
Income compared with what earned before	3.202	-0.033	-0.005
<b><i>Occupation and social status:</i></b>			-0.028
Current occupation	3.497	0.262	-0.002
Current social status	3.185	-0.050	-0.002
Career achievement/personal development	3.013	-0.222	-0.024
<b><i>Opportunities and social mobility:</i></b>			-0.013
Chances for job promotion	2.885	-0.351	0.000
Chances for getting your talents /skills appreciated	3.024	-0.211	-0.019
Opportunities for training	3.024	-0.211	0.005
Job security	3.215	-0.020	0.000
<b><i>Welfare provision:</i></b>			-0.018
Economic security in old age	3.083	-0.153	-0.002
Current housing conditions	3.105	-0.130	-0.015
Means of transportation	3.115	-0.120	0.000
<b><i>Government policies &amp; environment:</i></b>			0.043
General impact of state policies on your family	3.353	0.118	0.003
Current price of basic foods	3.756	0.521	0.038
Current price of basic daily needs (clothing and daily goods)	3.497	0.262	0.009
Public infrastructure of the city	3.138	-0.097	-0.006
Current level of pollution	2.745	-0.490	0.000

<b><i>Family and social connections:</i></b>			0.023
Social relations with others (guanxi)	3.511	0.276	0.006
Family life, marriage and relationships	3.884	0.648	0.019
Spouse's current income	3.066	-0.169	0.000
Spouse's current occupation	3.337	0.102	-0.002
Spouse's current social status	3.247	0.012	0.001
Spouse's current achievements	3.180	-0.056	-0.001

Note:

[2]=[1] minus the mean level of overall satisfaction (3.24)

[3]=[2] multiplied by the corresponding coefficient in Table 3

Sources: Guannian 2002

**Table 5: Overall Satisfaction as a function of socio-economic determinants**  
**Ordered Probit Regression for Urban China**



Variable	Mean value or percentage	Coefficient	Robust T-value	sig.
Experience a fall in HH income	0.2408	-0.1207	-3.66	***
Household income per capita (log)	8.2816	0.1723	9.44	***
Currently unemployed	0.0226	-0.2771	-2.82	***
<b><u>Personal characteristics:</u></b>				
Age (in year)	42.7005	-0.0668	-9.64	***
Age in squared term	2105.82	0.0009	11.97	***
Male	0.4155	-0.1765	-5.84	***
Single (never married)	0.0266	-0.3983	-4.86	***
Divorced	0.0146	-0.2450	-2.19	***
Widow / widower	0.0234	-0.2650	-2.72	***
Amiable personality	0.2554	0.4992	15.54	***
<b><u>Self-reported health status:</u></b>				
Rather good health	0.3732	-0.1303	-3.42	***
So-so good health	0.3122	-0.2867	-7.18	***
Rather poor health	0.0516	-0.3668	-5.35	***
Very poor health	0.0044	-0.9910	-4.30	***
<b><u>Medical insurance coverage:</u></b>				
Medical insurance-Serious-illness coverage	0.3406	-0.0860	-2.40	***
Self-paid medical insurance	0.0155	-0.1259	-1.11	
No medical insurance	0.2782	-0.2938	-7.35	***
<b><u>Political factors:</u></b>				
Political participation	0.3060	0.1664	5.36	***
Other political party member	0.0126	-0.0852	-0.67	
No political party affiliation	0.5860	-0.0925	-2.93	***
<b><u>Occupation:</u></b>				
1. owner/manager of private business	0.0016	0.2471	0.71	
2. Owner of individual business	0.0250	-0.0056	-0.07	
3. Professionals	0.1390	0.0522	1.07	

Notes: (1) Sources: Guannian 2002 and CHIP 2002

(2) The dependent variable is an ordinal value of satisfaction.

(3) Omitted dummy variables are: currently employed, married, not amiable, very good health, not active in politics, Communist Party/League membership, medical treatment covered by the state agents, hukou in local urban area, non-skilled manual worker. Province dummies included but not reported for brevity.

(4) \*\*\* denotes the statistics significance level at 1% or lower, \*\* between 1% and 5%, \* between 5% and 10%. Standard errors are corrected for possible unobserved cluster-level correlations.

**Table 6: Predicted probabilities of satisfaction (derived from Table 5)**

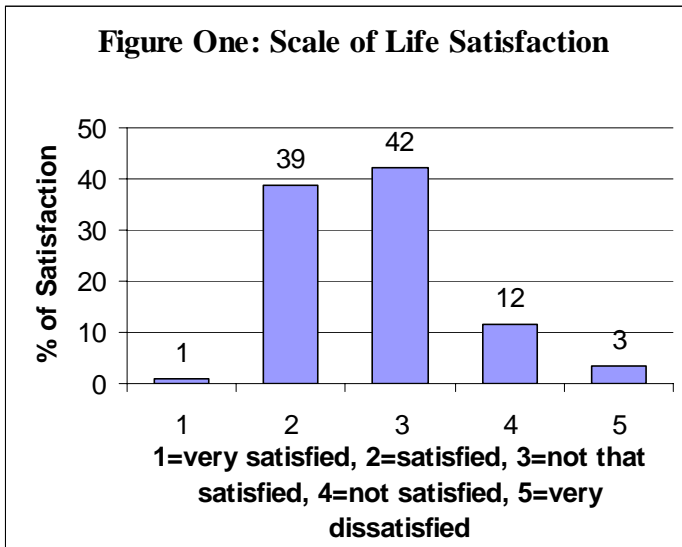
	Very satisfied	Satisfied	Not so satisfied	Not satisfied	Very unsatisfied
Baseline	0.6%	39.8%	46.8%	10.6%	2.3%
Not deprived (current income > past income)	0.6%	40.8%	46.3%	10.2%	2.1%
Deprived (current income < past income)	0.4%	36.4%	48.3%	12.1%	2.8%
Log (household income per capita) if doubled	0.9%	46.2%	43.3%	8.1%	1.5%
Currently employed	0.6%	40.0%	46.7%	10.5%	2.2%
Currently unemployed	0.3%	30.1%	50.2%	15.3%	4.2%
<b>Personal characteristics:</b>					
Age in year:					
= 20	0.6%	41.0%	46.2%	10.1%	2.1%
=30	0.3%	32.6%	49.6%	14.0%	3.6%
=40	0.3%	30.5%	50.1%	15.1%	4.0%
=50	0.4%	34.5%	49.0%	13.0%	3.2%
= > 60	0.8%	45.1%	43.9%	8.5%	1.6%
Female	0.7%	42.5%	45.4%	9.5%	1.9%
Male	0.4%	36.0%	48.4%	12.3%	2.9%
Married	0.6%	40.5%	46.4%	10.3%	2.1%
Single	0.2%	26.5%	50.8%	17.3%	5.2%
Divorced	0.3%	31.7%	49.8%	14.4%	3.7%
Widow (er)	0.3%	31.0%	50.0%	14.8%	3.9%
<b>Personality:</b>					
Not amiable	0.4%	35.1%	48.8%	12.7%	3.0%
Amiable	1.5%	53.5%	38.3%	5.8%	0.9%
<b>Health status (self assessment):</b>					
Very health	0.9%	45.8%	43.5%	8.3%	1.5%
Health	0.6%	40.9%	46.2%	10.1%	2.1%
So-so health	0.4%	35.2%	48.7%	12.7%	3.0%
Not health	0.3%	32.4%	49.6%	14.1%	3.6%
Very unhealthy	0.0%	14.1%	47.7%	26.1%	12.0%
<b>Political participation and affiliation:</b>					
Not interested in political affairs	0.5%	37.9%	47.6%	11.4%	2.5%
Interested in politics affairs	0.8%	44.1%	44.5%	8.9%	1.7%
Communist Party/League members	0.7%	41.8%	45.8%	9.8%	2.0%
Other political Party members	0.5%	38.6%	47.3%	11.1%	2.4%
Not affiliated to any political					



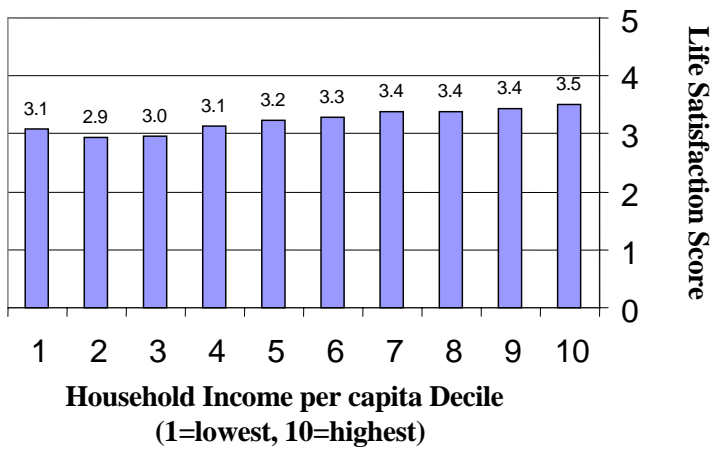
**Table 6: Predicted probabilities of satisfaction (contd.)**

<b>Occupation / social status:</b>					
Professionals	0.6%	40.7%	46.3%	10.3%	2.1%
Government official / managerial	0.9%	45.6%	43.6%	8.3%	1.5%
Middle-rank managers / official	0.7%	43.4%	44.9%	9.2%	1.8%
Owner/manager of private business	1.0%	47.8%	42.2%	7.6%	1.3%
Owner of household business	0.5%	38.5%	47.3%	11.2%	2.4%
Office worker	0.6%	40.2%	46.6%	10.5%	2.2%
Skilled workers	0.6%	39.6%	46.8%	10.7%	2.3%
Commerce / service worker	0.5%	39.3%	47.0%	10.8%	2.3%
Unskilled manual worker	0.5%	38.8%	47.2%	11.1%	2.4%
Other (non specified)	0.4%	36.1%	48.4%	12.3%	2.8%
<b>Location of ID registration:</b>					
ID registered in local urban sector	0.6%	39.7%	46.8%	10.6%	2.3%
ID registered in local rural sector	0.9%	46.1%	43.3%	8.2%	1.5%
ID registered in outside urban	1.3%	50.8%	40.3%	6.6%	1.1%
ID registered in outside rural	0.1%	21.7%	50.7%	20.4%	7.1%

Note: Probabilities are evaluated at the means of other explanatory variables.



**Figure Two: Life Satisfaction Score by Income Decile**



## Notes

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<sup>1</sup> Three questions were asked to assess amiability: (1) whether the person considered themselves a pleasant person at home; (2) whether the person got along well with their colleagues; (3) whether the person were liked by their employer. The three questions were presented as statements about themselves and respondents had to agree or disagree on a five point scale. A dummy variable for having an amiable personality was created which was one if they replied on the top two points of the scale (agree or strongly agree) for all three questions.

<sup>2</sup> Studies in other countries suggest that workers may report real wage falls that cannot be corroborated with firm-level data. In urban China, real wages have been rising strongly. However, some households will have experienced falls in income due to unemployment, changes in labor supply or other factors.

<sup>3</sup> Consequently, in the model we include as determinants of satisfaction both household income per capita in 2002 and a dummy variable for whether the respondent had experienced absolute income decline in the previous 5 years.

<sup>4</sup> The most common methods to compensate the workers are (1) allocating them enterprise-owned housings for a small cost; (2) granting them with some seniority-linked settlement fund after selling the firm assets although this has been disrupted by the “Management-Buy-Out” package (MBO) which has caused a national debate since 2004; (3) advising them to take early retirement by offering pension and medical insurance package; (4) establishing a nation-wide (urban) system to issue unemployment benefit and low-income allowance.

<sup>5</sup> By unemployment, we exclude the possible un-reported employment, and strictly control for those who were not working at all during the time of the interview.

<sup>6</sup> In order to sustain a true evaluation of their life satisfaction, we asked respondents to evaluate their satisfaction with specific aspects of their life first and finally to answer the general question “*Considering all aspects of life, how satisfied are you?*”.

<sup>7</sup> It first presents the mean levels of satisfaction with different aspects of life in Column 1. It then shows whether these levels of satisfaction are atypically high or low compared with mean overall satisfaction in Column 2). The effect of these deviations on overall satisfaction is given by weighting them by the corresponding coefficient from Table 3 (Column 3).