Social capital, income and subjective well-being: evidence in rural China

Wenwen Zhang a, b, *

a Hong Kong Financial Research Institute of Bank of China, Hong Kong, China
b The Advanced Institute of Global and Contemporary China Studies, CUHK, Shenzhen, China

Abstract

In a relational society like China, how does social capital ("relationship") affect people's well-being? This article takes rural China as an example to explore the relationship between social capital, income and the level of well-being of Chinese farmers. After reviewing the definition and measurement of social capital and subjective well-being, this paper tests four hypotheses of social capital, income and subjective well-being. Using a 9200-observation sample from CHIPs 2002 and applying an ordered logistic regression model, this article provides evidence that the level of happiness among farmers is positively correlated with higher income, more active participation of social activities and reciprocal activities. That is, social capital is a strong predictor of happiness. Based on the findings, this article makes policy recommendations from three different aspects.

1. Introduction

In the past 40 years, there has been a drastic growth in China's economy. However, the level of subjective well-being of Chinese farmers does not correspond with the trajectory of the country's economic performance. According to three surveys conducted in 1990, 1995 and 2001 by the World Value Survey, the happiness index of Chinese residents was 6.50, 7.08, and 6.60, respectively. According to the consumer survey data of Gallup Consulting Co., Ltd., the happiness index of Chinese consumers dropped from 69 in 1994 to 62 in 2014 (full score of 100), while the disposable income of Chinese residents increased from 3,496.2 yuan in 1994 to 20,167 yuan in 2014, a nearly six-fold increase. Higher income does not bring more happiness, which is reminiscent of the Easterlin Paradox [1,19]. Other than income, the subjective well-being of Chinese farmers is influenced by a variety of complex factors, such as gender, age, education, marriage and social network. The Chinese society is widely regarded as a “society of connections” and “society of acquaintances”. Connections, a form of social capital, play a unique role in China. How does social capital influence subjective well-being? This paper intends to examine whether income is a mediator variable between social capital and subjective well-being in China through CHIPs (Chinese Household Income Projects) statistics.

The remainder of the paper is organized as follows. First, this paper begins with reviewing what generates happiness in the discipline of psychology in Section 2. Then in Section 3 and 4, it proceeds to several hypotheses in the context of China's rural area and empirical methods in addressing the hypotheses. Section 4 presents the results, robustness check, as well as some discussions on the results. In the end, it concludes with a discussion on policy recommendations and possible limitations.

2. Literature review

2.1. Social capital

Flap believes that social capital is a resource provided by others who have a strong relationship with us [2]. Such resource includes three elements: the number of people who are “ready or obligated to help you” in your social network when you ask for help; the strength of the relationship with people expressing their willingness to help; the resources available to these people. Bourdieu holds that social capital depends on the scale of individual connections, and the capacity and quantity of capital contained in those connections [3]. This definition clearly does not contradict with the roles of social network in social capital, but he pays more attention to the maintenance of social capital in the collective. Coleman, proceeding from the theory of social action, holds that social capital consists of two elements: first, it is part of the social structure; second, it facilitates certain actions of individuals within the structure [4]. Puntnam believes that social capital is the trust and norm that can improve economic efficiency through coordinated actions [5]. Through empirical research, he found that the participation in social groups reflects the scope of social capital in a society. Lin combines the definitions of scholars of different schools and considers that social capital is
composed of resources embedded in the social structure and acquired through purposeful action [6].

This paper uses the definitions of Lin [6] and Puntnam [5] on social capital. Lin conceptualized social capital with two dimensions: embedded resources and social network location [6]. Lin (2001) believes that embedded resources can be converted to network resources and contact resources [6]. Network resources mainly refer to self-social networks, such as participation in social activities; contact resources refer to links with instrumental actions to obtain help, such as mutual help. Puntnam conceptualized social capital as trust [5].

2.2. Subjective well-being

Bentham, a pragmatist, believes that happiness and well-being are the ultimate goals of the human race. The human production and practice are to seek more happiness. This is Bentham’s theory of happiness maximization. He materialized happiness as seven factors: intensity, duration, certainty, proximity, multiplicity, purity and extension [7]. By streamlining the literature, Xing found that in modern times, especially after the World War II, western scholars mainly studied subjective well-being from the perspective of economics and social psychology [8]. On the one hand, it is about the quality of life. Researchers define subjective well-being as people’s cognitive evaluation of their life satisfaction, measured by answers to questions such as “Are you happy now?” and “Are you satisfied with your life now?” This includes the degree of satisfaction with the quality of both material and spiritual life. On the other hand, these studies are related to positive psychology and health psychology. For example, the “Emotional Balance Scale” and “Positive Emotion and Negative Emotion Scale” study the subjective sense of well-being from the perspective of psychology. In this article, since the main concern is the study of social economic development, the measure used is subjective well-being. More specifically, this paper takes the answer to “Are you happy?” as the measure.

2.3. Income and subjective well-being

However, to analyze income and subjective well-being of residents, most of the previous studies use cross-national and cross-regional data and even micro-data, such as the World Values Survey (WVS-EVS), and have basically reached a consistent conclusion that the income gap will reduce residents’ well-being [1, 9, 10]. Relevant literature includes Ruut [9], Easterlin [1] and Maurizio [10]. Some studies point out that there might also reverse causality between income gap and well-being, as happiness inequality can also lead to income inequality.

Zhao found that income and health have a positive impact on happiness. Not only can income directly improve people's happiness, but it also indirectly improves happiness by strengthening health [11]. The empirical results of Gao show that material life factors such as income and convenience of life, along with mental and social factors like family harmony, neighborhood relations and identification among friends, have significant effects on residents' sense of well-being [12]. The empirical results of Tian and Zhang indicate that income is the main factor affecting the subjective sense of well-being of the rural elderly, on which income has a positive impact; the satisfaction of cultural services of the rural elderly has a more significant impact on their subjective well-being than that exerted by income; the level of satisfaction of cultural services also has impact on the well-being of the elderly [13].

2.4. Social capital and subjective well-being

The impact of social capital on residents' sense of well-being is basically analyzed through micro-level data. However, researchers haven't reached an agreement on the size of the effect. Yip et al. uses data from Shandong Province to analyze the relationship between social network and human health and well-being [14]. However, due to the data limitation and failure to bypass the endogeneity, it is difficult to prove the causal relationship between social capital and residents’ sense of well-being. The study shows that the happiness of Americans from 1975 to 2004 is mainly related to the increase of income, but negatively related to social capital [15]. Adam also used the data of WVS-EVS from 1980 to 2000 to conduct empirical analysis with more restrictive factors, and concluded that the social trust of Europeans tended to decline, that the relationship between people became more complex, but the effect on well-being was not significant [16]. To overcome these limitations, Sarracino analyzed the relationship between social capital and well-being by relaxing such constraints and dividing the analysis into three stages [17]. As a result, he pointed out that social networks and trust were intensifying Europeans’ identification with well-being, which was conducive to improving personal well-being in education, health care and employment, even though the overall social capital declined.

3. Hypothesis

3.1. Income is the economic basis of well-being of farmers

The nonpecuniary aspects of happiness, such as leisure, entertainment, learning, and even friendship, family and respect, often builds on the economic basis. Therefore, economic factors might play a fundamental role in the well-being of farmers.

Hypothesis 1: Income is the economic basis of the well-being of farmers, on which income has a positive impact.

3.2. The impact of social capital on the happiness of farmers

In addition, social capital (“relationship”) plays a special role in China. Sociologists describe the Chinese society as “relational society” and “acquaintance society”. So, how does social capital affect the happiness of farmers?

Hypothesis 2: The more they participate in social activities, the happier the farmers are.

Hypothesis 3: The more mutual assistance among farmers, the happier the farmers are.

3.3. The relationship among income, social capital and sense of well-being

Hypothesis 4: The social capital of farmers affects the well-being through income.

4. Method

4.1. Data source

This paper adopts quantitative research on the data of China Household Income Survey (CHIPs) conducted by the Institute of Economics, Chinese Academy of Social Sciences and National Bureau of Statistics in February 2003. According to the income of rural residents nationwide in 2002, 9200 rural households of 12 provinces and 70 cities were sampled, including Beijing, Shanxi, Liaoning, Jiangsu, Anhui, Henan, Hubei, Guangdong, Chongqing, Sichuan, Yunnan and Gansu. Given that this study takes households as a unit, the selected database is database 7 (family and social network in rural areas), in which there are 9,200 valid samples collected through face-to-face interview.

CHIPs 2002 was to measure and estimate the distribution of personal income and related economic factors in both rural and urban areas of the People’s Republic of China. The principal investigators based their definition of income on cash payments and on a broad range of additional components. Data were collected through a series of questionnaire-based interviews conducted in rural and urban areas at the end of 2002. The questionnaire is distributed through the Agricultural Research Team of
the National Bureau of Statistics, the specific sampling is stratified sampling.

Dataset 7 in CHIPs 2002 are applied in this paper. Dataset 7 contains 449 variables and 9,200 cases (rural households). Dataset 7 focuses on households and social networks in rural areas. It includes basic household variables such as property value, ownership, and land area, and demographic information about the parents of household heads. It also includes economic variables such as income and sources of income, production costs, expenditures (food, fuel, clothing, transportation, health care, education etc.), loans, minimum living expenses, business, and taxes. Variables about land use are included, as well as variables about assets such as livestock, farm equipment, construction equipment, appliances, and food production (rice, corn, tubers, meat, etc.). Also included are variables about social networks, such as the frequency of mutual help, information exchange, and lending, variables about public services such as irrigation, pest control, education, and medical services, and attitudinal variables about social problems, income inequality, government responsibility, life satisfaction, health, mood, social class, savings, aging, etc.

4.2. Modeling

We use the ordered multiple logit model to analyze the relationship between social capital, income and subjective sense of well-being.

The ordered multiple logit model adopts the form of logistic function:

\[ Y_{ij} = \frac{1}{1 + e^{\sum_{k=1}^{4} \alpha_k X_{ik}}} \quad Y \in (0, 1) \] (1)

Among them, \( x_i \) is the i-th index, and \( \alpha_i \) is the coefficient of the i-th index. \( Y_i \) is the probability of the subjective well-being \( X_i = j \) \( (j = 1, 2, 3, 4, 5) \), with 1 = very happy; 2 = happy; 3 = neutral or indifferent; 4 = not very happy; 5 = not happy at all).

The dependent variable \( y \) features diversity so \( y \) can be any value with progression. It is assumed that there are four grades (not happy at all; not that happy; neutral or indifferent; happy), and \( y \) can be 1, 2, 3, 4. The cumulative logit model is established.

\[ p_j = P(y = j) \quad j = 1, 2, 3, 4 \]

\[ \text{Logit}_j = \ln \frac{\sum_{k=1}^{4} p_k}{\sum_{k=2}^{4} p_k} = \ln \frac{P(y \leq j)}{P(y \geq j + 1)} = \alpha_0 + \beta X \] (2)

Among them, \( X = (X_1, X_2, \ldots, X_5)^T \) represents a group of independent variables, \( \beta \) is a group of regression coefficients corresponding to \( X \), and \( \alpha_0 \) represents the intercept term of the model. After estimating the parameters of \( \alpha \) and \( \beta \), we can calculate the probability \( p_j \) of a certain case (e.g. \( y = j \)).

We followed by Zhao [11], which applied logistic regression. The variables are followed by reference papers. Social capital 1 (participation in social activities), Social capital 2 (mutual help), Household net income, Coverage per capita, CPC membership these variables are followed by Zhao [11], Gao [12], Tian and Zhang [13]. It is used Stata 16.0 to analyze the data (see Table 1).

Subjective Wellbeing = \( \beta_0 + \beta_1 \text{Social capital 1} + \beta_2 \text{Social capital 2} + \beta_4 \text{income} + \beta_5 \text{Coverage per capita} + \beta_6 \text{CPC} + \epsilon_j \) (3)

5. Results and discussion

5.1. Results (see Table 2)

Table 3 presents the regression results where the dependent variable is subjective well-being is “1 = very happy; 2 = happy; 3 = neutral or indifferent; 4 = not very happy; 5 = not happy at all”, orderly multiple logistic regression can be used. The major independent variable is
happier they are; the more interviewees there are, the more sense of subjective well-being in China.

Table 3: Regression results of income, subjective well-being in rural China and social capital.

| (1) | (2) | (3) | (4) |
|-----|-----|-----|-----|
| Household net income | -0.075** (0.038) | -0.075** (0.038) | -0.069* (0.030) | -0.073* (0.038) |
| Coverage per capita | -0.455*** (0.032) | -0.444*** (0.045) | -0.452*** (0.032) | -0.693*** (0.125) |
| CPC membership | 0.072* (0.037) | -0.072* (0.037) | -0.070* (0.037) | -0.068* (0.037) |
| Social capital 1 | -0.003*** (0.001) | 0.002 (0.016) | 
| Social capital 2 | -0.009** (0.004) | -0.121** (0.056) |
| Interaction 1 | -0.001 (0.002) | 
| Interaction 2 | 0.012 (0.006) |
| Constant cut 1 | -6.537*** (0.312) | -6.445*** (0.422) | -5.578*** (0.316) | -8.790*** (1.146) |
| Constant cut 2 | -4.332*** (0.308) | -4.426*** (0.419) | -3.757*** (0.311) | -6.576*** (1.144) |
| Constant cut 3 | -2.550*** (0.307) | -2.458*** (0.418) | -2.593*** (0.310) | -4.793*** (1.143) |
| Constant cut 4 | -0.813*** (0.313) | -0.721* (0.423) | -0.856*** (0.316) | -3.055*** (1.145) |
| Observations | 9,191 | 9,191 | 9,191 | 9,191 |
| Chi 2 | 284.487 | 284.592 | 278.658 | 282.665 |

Table 4: Robust results of income, subjective well-being in rural China and social capital.

| (5) | (6) |
|-----|-----|
| Household net income | -0.071* (0.038) | -0.069** (0.038) |
| Coverage per capita | -0.462*** (0.032) | -0.292*** (0.088) |
| CPC membership | -0.072* (0.037) | -0.073** (0.037) |
| Social capital 3 | 0.075*** (0.018) | 0.579** (0.244) |
| Interaction 3 | -0.056* (0.027) |
| Constant cut 1 | -6.291*** (0.315) | -4.761*** (0.802) |
| Constant cut 2 | -4.086*** (0.311) | -2.556*** (0.801) |
| Constant cut 3 | -2.303*** (0.309) | -0.772 (0.801) |
| Constant cut 4 | -0.565* (0.316) | 0.966 (0.803) |
| Observations | 9,190 | 9,190 |
| Chi 2 | 291.833 | 296.124 |

5.2. Discussion

In Model 1, the coefficient of family net income reaches 0.003, which is significant at 1% level. The coefficient of living area per capita is also positive. Living area is an important economic foundation for people. This result is a supplement for explaining the economic factors that have positive influence on subjective well-being. According to consumer survey data of Gallup (China) Consulting Co., Ltd., the overall satisfaction of Chinese consumers from 1994 to 2004 (equivalent to the happiness index, with a perfect score of 100 points) showed a rising trend first and then a falling trend: in 1994, the annual happiness index is 69 points, in 1997, the index is 2 points higher than in 1994, and in 2004 it is 4 points lower than in 1997, indicating that the happiness index has not increased with income, which is the Easterlin paradox [1]. It is found that the happiness level will rise to a certain point with the increase in income. After reaching this critical point, the positive effect of income on subjective well-being will stop or even decline. However, in 2002, the income level of Chinese rural residents had not reached the critical point of a positive impact on happiness, that is, the economic situation was still the basis of the happiness of rural residents at that time. The positive effect of income is still significant. Hypothesis 1 of this article holds.

At the same time, the above results show that the higher the social capital is, the happier the farmers are. Assumptions 2–3 in this article hold.

The estimator on Social Capital 1 suggests that the more farmers participate in social activities, the happier they feel. The more people participate in social activities, the easier for them to be happy and get more social capital. First of all, rural China is a relatively closed society, and the connection between people is still relatively close. According to Professor Fei Xiaotong’s description in Native China: “The local limitation is subjective well-being is from an early age. This is a familiar society, not a strangers Society [18] Because it is an acquaintance society, or to be precise, it is a small-scale acquaintance society, resulting in frequent interactions with relatives, friends, and village cadres, and increased feelings in the interaction, so I feel happier. Secondly, although there are also many rural people who go out to work, people who stay behind are old and weak women and children who cannot go out. They are faced with the restrictions of many aspects. Therefore, the objective environment also requires them to communicate with their relatives, friends, and village officials to obtain information [20]. On the contrary, if these people do not participate in social activities, they will not be able to obtain the relevant information, and they will definitely be at a disadvantage and cannot be happy about life. Third, participating in social activities can broaden social networks and achieve certain goals. Information in rural areas is relatively slow to spread, and farmers in some countries are not clear about welfare policies. Through participation in social activities, such as looking at the village affairs public column, and understanding village-level affairs, farmers can know some of the latest conditions and policies in the village to protect individual rights and interests. Some people will obtain information through activities such as eating with village cadres to maximize their personal interests and seek their own happy life. Therefore, the more people participate in social activities, the happier farmers feel.

The estimator on Social Capital 2 suggests that the more farmers help each other, the happier they feel. Since rural China is an acquaintance society, the probability of helping each other is high. First of all, the result of mutual help is beneficial to both parties and helps to increase happiness. For example, the middle-aged and young people in rural areas help workers when the farmers are busy, exchange information about working with each other, lend money to each other, and help workers when build houses, all of which are beneficial to their work in agriculture, other works, and life, hence can increase happiness [21]. Secondly, the process of helping each other can make people happy and improve their wellbeing. For example, for the elderly and young people in rural areas, they can get help from neighbors and relatives and improve their lives when they live or are sick [22]. They are happier than those who are helpless. In addition, other surrounding villagers will greatly appreciate the helpers and this will improve their reputation in the village, which incentivizes the helpers to be more willing to help those in need and form a virtuous circle. In this way, the process of mutual assistance increases the happiness of both parties. Therefore, no matter the result or process of mutual help, the more farmers help each other, the happier they feel.

Interaction 1,2 failed to pass the significance test. Hypothesis 4 of this article does not hold. Income is not a mediator variable between social capital and subjective well-being in China.

5.3. Robust analysis

Table 4 presents the regression results where the dependent variable is subjective well-being is “1 = very happy; 2 = happy; 3 = neutral or it from an early age. This is a familiar society, not a strangers Society [18] Because it is an acquaintance society, or to be precise, it is a small-scale acquaintance society, resulting in frequent interactions with relatives, friends, and village cadres, and increased feelings in the interaction, so I feel happier. Secondly, although there are also many rural people who go out to work, people who stay behind are old and weak women and children who cannot go out. They are faced with the restrictions of many aspects. Therefore, the objective environment also requires them to communicate with their relatives, friends, and village officials to obtain information [20]. On the contrary, if these people do not participate in social activities, they will not be able to obtain the relevant information, and they will definitely be at a disadvantage and cannot be happy about life. Third, participating in social activities can broaden social networks and achieve certain goals. Information in rural areas is relatively slow to spread, and farmers in some countries are not clear about welfare policies. Through participation in social activities, such as looking at the village affairs public column, and understanding village-level affairs, farmers can know some of the latest conditions and policies in the village to protect individual rights and interests. Some people will obtain information through activities such as eating with village cadres to maximize their personal interests and seek their own happy life. Therefore, the more people participate in social activities, the happier farmers feel.

The estimator on Social Capital 2 suggests that the more farmers help each other, the happier they feel. Since rural China is an acquaintance society, the probability of helping each other is high. First of all, the result of mutual help is beneficial to both parties and helps to increase happiness. For example, the middle-aged and young people in rural areas help workers when the farmers are busy, exchange information about working with each other, lend money to each other, and help workers when build houses, all of which are beneficial to their work in agriculture, other works, and life, hence can increase happiness [21]. Secondly, the process of helping each other can make people happy and improve their wellbeing. For example, for the elderly and young people in rural areas, they can get help from neighbors and relatives and improve their lives when they live or are sick [22]. They are happier than those who are helpless. In addition, other surrounding villagers will greatly appreciate the helpers and this will improve their reputation in the village, which incentivizes the helpers to be more willing to help those in need and form a virtuous circle. In this way, the process of mutual assistance increases the happiness of both parties. Therefore, no matter the result or process of mutual help, the more farmers help each other, the happier they feel.

Interaction 1,2 failed to pass the significance test. Hypothesis 4 of this article does not hold. Income is not a mediator variable between social capital and subjective well-being in China.
indifferent; 4 = not very happy; 5 = not happy at all”, orderly multiple logistic regression can be used. The major independent variable is Household net income, Social capital 3, Interaction 3. Control variables include Coverage per capita, CPC membership. In column (5) (6), a Logit regression model is reported. Standard error is reported in the parenthesis. ***, **, * represent 1%, 5%, 10% significant level. The results are as follows:

Puntnam conceptualized social capital as trust [5]. We use “Generally speaking, mostly people cannot be trusted”, the independent variable is trust is “1 = strongly agree; 2 = agree; 3 = disagree; 4 = strongly disagree”, To sum up, trust, participation in social activities and mutual assistance can promote farmers' happiness. All definitions of social capital by Lin and Puntnam play a positive effect to subjective well-being in rural China. The results are robust. Also, the increase in farmers' income promotes farmers' subjective well-being.

6. Conclusion and implications

This paper shows that participation in social activities and mutual assistance can promote farmers' happiness; the increase in farmers' income promotes farmers' subjective well-being. The existing literature mostly studies the relationship between income and subjective well-being, the relationship between social capital and subjective well-being, delivering certain fruitful results. However, there is scarce literature concerning the mechanism of the interaction between social capital, income and subjective well-being. This paper fills in the gaps. Besides, this paper explores whether income affects the relationship between social capital and subjective sense of well-being.

Following the findings, we can take the first step in forming policy recommendations.

Firstly, we should diversify the social activities of farmers to expand the social network. Farmers should be consciously engaged in various social activities, such as group dining and participating in activities organized by village committees. Village cadres should increase their interactions with farmers. Village cadres can join each village groups, organize farmers to make dumplings together, make local special food, dine together to enhance collective cohesion. What's more, village cadres should visit the elderly, the disadvantaged, and women and children more frequently to help them actively participate in social activities. Due to various objective conditions, the above-mentioned social groups feel lonely and unwilling to engage in social activities. Village cadres can even invite people of other neighboring households to visit the disadvantaged families to increase their social capital and improve their subjective sense of well-being.

Secondly, we should strengthen the role of the village committee, where village cadres organize farmers to participate in the decision-making of village resolutions. At present, due to the negligence of some village cadres, the village committee fails to realize its designed functions, ending up with mere formalism and scarce effectiveness. In fact, the village committee is a golden opportunity for all farmers to provide useful ideas for other farmers; village cadres can also explain the welfare policies of the country to the village committee, such as the new rural old-age pension scheme, so that these policies are subject to the inquiries and supervisions of villagers. In doing so, villagers make rational judgments on the information they receive, and discuss with each other to share common topics and enhance friendship.

This article has some limitations. One limitation is data. Although the reliability of the data used in this article is high, it is second-hand data and the time is 2002. It is far away from the present. It might not reflect the most updated situation in rural China these days. Second, for the measurement of important concepts, scholars have adopted different methods. For example, some scholars have turned social capital into trust. However, this article only focuses on one of them. In the future, the author would like to collect data based on the questionnaire designed by himself. It's possible, then, to use other variables as the proxies for social capital, and manipulate subjective well-being more meticulously (including life satisfaction, mood, etc.), thus having a thorough inspection on the related concepts.

Declarations

Author contribution statement

Wenwen Zhang: Conceived and designed the experiments; Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

Funding statement

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Data availability statement

Data will be made available on request.

Declaration of interests statement

The authors declare no conflict of interest.

Additional information

No additional information is available for this paper.

References

[1] Easterlin, Income and happiness: towards an unified theory, Econ. J. 111 (1) (2001) 465–484.
[2] H.D. Flap, D.D.G. Nan, Social capital and attained occupational status, Neth. J. Sociol. (1986) 145–161.
[3] P. Bourdieu, The forms of capital, in: J.G. Richardson (Ed.), Handbook of Theory and Research for the Sociology of Education, Greenwood Press, Westport, CT, 1983/1986, pp. 241–258.
[4] J.S. Coleman, Foundations of Social Theory, Harvard University Press, Cambridge, MA, 1990.
[5] R.D. Putnam, The prosperous community: social capital and public life, Am. Prospect 13 (Spring) (1993) 35–42.
[6] N. Lin, Social Capital: A Theory of Social Structure and Action, Cambridge University Press, Cambridge, England, 2001.
[7] Xinluan Tian, Xiaojuan Zhang, An empirical study on income, cultural services and subjective well-being, Stat. Decis. (5) (2017) 116–118.
[8] Zhanjun Xing, Summary of research on measurement of subjective well-being, Psychol. Sci. 25 (3) (2002) 336–338.
[9] Run. Social, Equality and state welfare effort: more income-equality, No more equality in quality of life, MPRA Paper 5 (19) (1992) 112–157.
[10] P. Maurizio, Scitovsky and the income-happiness paradox, J. Soc. Econ. 4 (43) (2013) 1–10.
[11] Jiali Zhao, Income, health and subjective sense of well-being, On Economic Problems (11) (2017) 118–124.
[12] Shunyue Gao, An empirical study on the influencing factors of residents' sense of well-being, Stat. Decis. (5) (2017) 116–118.
[13] Xinluan Tian, Xiaojuan Zhang, An empirical study on income, cultural services and the subjective well-being of the rural elderly, World Surv. Res. (7) (2018).
[14] W. Yip, S.V. Subramaniam, A.D. Mitchell, et al., Does social capital enhance health and well-being?—evidence from rural China, Soc. Sci. Med. 64 (1) (2007) 35–49.
[15] S. Bartolini, L. Bonatti, Endogenous growth, decline in social capital and expansion of market activities, J. Econ. Behav. Organ. 67 (3-4) (2008) 917–926.
[16] M. Adam, Social capital across europe: findings, trends and methodological shortcomings of cross-national surveys, Soc. Sci. Inf. 47 (3) (2008) 159–186.
[17] Sarracino. Social, Capital and subjective well-being trends: comparing 11 western European countries, J. Soc. Econ. 39 (4) (2010) 482–517.
[18] Xiaotong Fei, From the Soil: the Foundations of Chinese Society, Shanghai People’s Publishing House, Shanghai, 2007.
[19] R.A. Easterlin, Wang F. Morgan, China’s life satisfaction, 1990—2010, Proc. Natl. Acad. Sci. U. S. A 109 (25) (2012) 9775–9780.
[20] Wenlong Li, Haiying Lin, Zhuang Jin, Research on the availability of social capital and its influencing factors: empirical findings from farmers and herdsmen in Inner Mongolia, Econ. Res. (2019).

[21] Xiao Pan, Jing Su, Xiaomeng Yan, The status transition and influencing factors of multi-dimensional poverty in rural households: evidence from CFPS micro-panel data, Econ. Surv. (2) (2020) 36–43.
[22] Jiabin Xu, Yang Wang, Cuixia Li, Are large professional growers willing to set up farmers’ professional cooperatives?——an empirical study based on 364 sample data in Heilongjiang Province, Rural Econom. 456 (10) (2020) 129–136.