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## **Job making a better life: a study of the sense of well-being from the perspective of employment quality**

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**Abstract** In this paper, the authors take subjective well-being as an indicator of people's livelihood. Using 2003–2010 data from the Chinese General Social Survey, the authors apply various subjective and objective indicators of employment quality to address the question of whether and how employment quality contributes to subjective well-being in China. By use of the ordered probit estimation model, the analyses in the paper support that work is an important source of subjective well-being. However, not all jobs but only high quality job can increase subjective well-being. As a subjective indicator of employment quality, overall job satisfaction has a significantly positive impact on subjective well-being; workers with low job satisfaction often have lower levels of well-being than those without jobs. In terms of objective indicators of employment quality, the authors also find that there is no significant difference in subjective well-being between the dispatched or casual workers and the unemployed. The results of path and mechanism analyses indicate that labor dispatch and casual work not only lower individual' subjective well-being directly, but also decrease it indirectly by lowering job satisfaction and the sense of income equality. By use of the life satisfaction index for measuring the subjective well-being, the findings in the paper are consistent with those in studies that use single self-reported well-being

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as an overall indicator. For this reason, the increasing trend of subjective well-being in China in the recent decade can be partly attributed to the improvement of employment quality under proactive labor market policy. The authors hope that the findings of this research will contribute to shaping public policies aimed at enhancing the quality of employment and promoting workers' well-being.

**Keywords** employment quality, subjective well-being, job satisfaction, informal employment, life satisfaction

## 1 Introduction

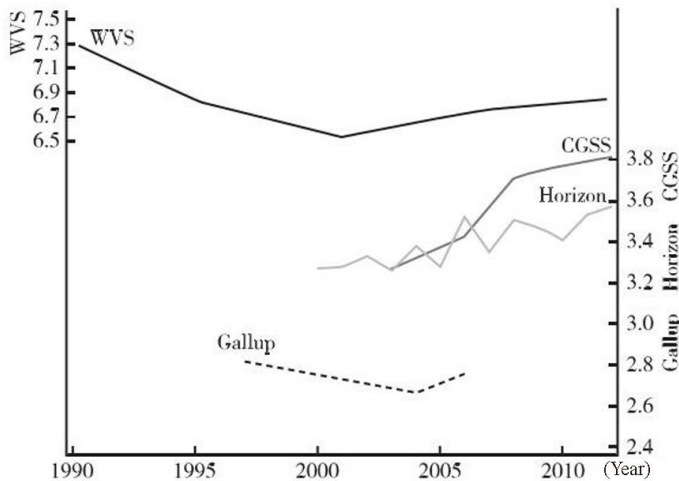
Enhancing the well-being of residents by focusing on improving people's livelihood has been an important issue in the social construction period. Since the reform and opening-up, China's economic achievements have been impressive, but some studies have come to the confusing conclusion that Chinese people's well-being has continued to decline. For example, Brockmann, Delhey, Welzel and Yuan (2009) and Knight and Gunatilaka (2011) used the World Values Survey (WVS) data, claiming that since 1990 China's average overall life satisfaction had been declining.<sup>①</sup> This seems to provide evidence for the "Easterlin paradox" that the sense of well-being depends on relative income rather than absolute income, and it can be reduced by income disparity or income inequality. Although this hypothesis is controversial, it may explain why the well-being of the Chinese people has not improved with economic development. However, in the absence of a fundamental reversal of the income disparity, there is evidence that the level of well-being has risen with economic growth in recent years (Liu et al., 2012). How to understand this seemingly contradictory and confusing phenomenon is precisely the motive and starting point of this study.

Seen from a longer time, Chinese people's sense of well-being did not show a monotonically decreasing or rising trend, but with the transformation of economic and social system, it declined first and then

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<sup>①</sup> There are subtle differences between subjective well-being and life satisfaction, but they are often used alternately without differentiation of them.

gradually rebounded. As seen from Figure 1, the WVS with the longest time span showed that the life satisfaction of Chinese residents between 1990 and 2012 displayed a U-shaped curve. Although the average life satisfaction of China in 2012 (i.e. 6.85) was still lower than that in 1990 (i.e. 7.29), it is also an objective fact that the overall life satisfaction in 2001 bottomed out. The survey of Gallup also obtained similar results that the life satisfaction of Chinese residents declined some time ago and began to rise after 2004. Correspondingly, since 2003, Chinese General Social Survey (CGSS) also found that the well-being of Chinese residents gradually increased. The survey about the quality of life conducted by Horizon Research Consultancy Group in 36 large and medium cities also demonstrates that the life satisfaction of urban residents has showed an overall upward trend since 2000. Thus, the U-shaped trend depicts a clear picture of the changing course of the well-being of Chinese residents, and integrates the seemingly conflicting findings together. Those research backgrounds in which the well-being tended to decline are, in fact, the downward part of the U-shaped trend, and those in which the well-being rose are its rebound stage.



**Fig. 1** U-Shaped trends of Chinese residents' well-being from 1990 to 2012

Source: World Values Survey (WVS) (scale of 1–10), survey of Gallup (scale of 1–4), CGSS) (scale of 1–5) and the quality of life survey of Horizon Research Consultancy Group (scale of 1–5 scale).

The more critical question, however, is what the dynamic mechanism of the well-being curve in the U-shaped trend is. Easterlin, Morgan, Switek and Wang (2012) found that by excluding the impact of per capita GDP, population, changes in urban and rural structure and other factors, the employment status of the urban labor market plays a fundamental role in promoting well-being. In fact, employment is related to livelihoods and dignity, which is not only the primary means of obtaining life subsistence, but also the important means of gaining status, social identity and personal development. Therefore, losing jobs will lead to a decline in one's sense of well-being. However, this is not just the job itself, but certain characteristics and nature of the job, such as job stability, job autonomy and career development opportunities, or employment quality are the important determinants of well-being (Dolan, Peasgood and White, 2008). A satisfactory job can improve the well-being of life; on the contrary, for employees with very unsatisfactory jobs, their levels of well-being were even lower than those of the unemployed (Dockery, 2005; Grun, Hauser and Rhein, 2010). That is to say, having a bad apple may be worse than having no apple at all, because accepting jobs means that laborers are to bear the negative effects of labor and the loss of time at their own disposal. In this sense, only high-quality employment is profitable.

On this basis, a lot of research adopts job stability, job autonomy and career development opportunities as indicators to evaluate employment quality, and analyzes their impacts on subjective well-being. For example, Carr and Chung (2014) used the European Social Survey data and found that the job insecurity perceived by employees had a significantly negative effect on life satisfaction. Witte (1999) even found that having unstable jobs was almost the same as losing jobs, generating a significant negative effect on well-being. Knabe and Ratzel (2010) offered an explanation to this that employment expectation as well as employment status exerted a significant impact on well-being. The unemployed who believe that they are able to find jobs soon may have a higher level of well-being than the employed with unstable jobs. Drobnic, Beham and Prag (2010) noted in the life quality surveys in seven European countries such as Finland, Sweden and the UK that job stability (including employment and income

stability) had direct effects on life satisfaction; job autonomy and career development opportunities indirectly affected life satisfaction through job satisfaction. Coad and Binder (2014) conducted their study with the data from German Socio-Economic Panel Study (SOEP) and their results showed that job autonomy had a positive causal relationship with life satisfaction.

Informal employment such as temporary and part-time jobs can be defined as low-quality employment (Leschke and Andrew, 2014), which has a negative impact on well-being. Using the data from the surveys on households in Australia, Buddelmeyer, Mcvicar and Wooden (2015) found that the job satisfaction of informal workers such as those in temporary jobs and labor dispatch was significantly lower than that of permanent employees. Further analysis found that temporary jobs also had a negative effect on life satisfaction and could be attributed to job instability (Dawson, Veliziotis and Hopkins, 2014). Although part-time jobs are considered to have a higher degree of time flexibility, Berger (2013), using the data from SOEP, found that women at childbearing age who worked part-time, had life satisfaction lower than that of stay-at-home mothers who had opted out of the labor market to take care of their children. Research of Brereton, Clinch and Ferreira (2008) on Ireland also indicates that part-time jobs have a significant negative impact on life satisfaction, especially for men.

Although it has been acknowledged among relevant studies in China that employment status has a significant impact on well-being, most of these studies treat it as a dichotomous variable and investigate mainly the impact of whether one works or whether one loses jobs on well-being (e.g., Luo, 2006; Chen et al., 2012; Jiang, Lu and Sato, 2012). Needless to say, as a developing country in transition, China is facing salient problems in low-quality employment, such as informal employment, low labor payment, long working hours and poor working conditions, which have resulted in phenomena such as “working poor,” “ant tribe” and “death from overwork,” creating a great negative impact on people’s well-being. Consequently, we will naturally ask such a question: is having a job always better than having no job, or, what kind of job can make life better? In

such a background where realizing higher-quality employment and improving continuously the quality of people's lives have become the core issues of China's economic and social development, it is of essential necessity to explore the impact of employment quality on the sense of well-being so that countermeasures and suggestions can be put forward.

In view of this, the authors analyze empirically the impact of employment quality on well-being as well as its mechanism by employing the data from multiple rounds of China's General Social Survey. Employment quality is a multidimensional concept that can be studied from both macro and micro perspectives. The employment quality at the macro level is similar to the decent work defined by the International Labour Organization, which refers primarily to the overall employment environment and conditions of a country or an economy, including wage levels, unemployment, labor relations and other indicator dimensions (Lai et al., 2011). This paper considers the employment quality at the micro-individual level (i.e. employment quality), including salary, working hours, job stability, job autonomy and work value among other featuring dimensions, as well as the matching of jobs with laborers (Bustillo et al., 2011). Since the structural dimension of employment quality does not have a uniform standard in theory, it is difficult to construct a comprehensive employment quality index in operation. Moreover, if a highly abstract employment quality index or score is first obtained and its effects on well-being are then analyzed, it is absolutely unlikely to know what specific dimensions of employment quality and job characteristics have influenced well-being. In practice, a large number of literature adopted key dimensions such as job stability to measure the quality of employment and to examine its effects on well-being. Because the focus of this study is not the connotation of employment quality or the measurement of structural dimensions, combining the reality of China's binary job market, and drawing on the approach of Buddelmeyer et al. (2015), the authors took casual work, labor dispatch and other unstable informal employment as the indicators to measure employment quality in order to explore their impacts on well-being. Compared with the formal employment in the formal sector, informal employment is characterized by long working

hours, low wages, fewer benefits, lack of stability and so on.(Wu and Cai, 2006), which can be said to be a typical type of low-quality employment and thus is appropriate to measure the employment quality. At the same time, some studies advocate the use of job satisfaction as a comprehensive evaluation indicator of employment quality (Clark, 2005), not only because it can simplify the definition and measurement of employment quality, but also because it treats individual workers' feeling of jobs to be the most direct and important. Based on this, in addition to the use of unstable informal employment to evaluate employment quality objectively, this paper adopted job satisfaction as the subjective evaluation indicator of employment quality.

The main content and contributions of this study are presented in three aspects. (1) It introduces the concept of employment quality from two perspectives: informal employment from the objective perspective and job satisfaction from the subjective perspective, and analyzes their impacts on well-being, further enriching and developing the research conclusions about the relationship between employment status and well-being. (2) It analyzes the mechanisms of unstable employment such as labor dispatch and casual work affecting the well-being of residents, mainly to test and identify direct effects as well as the indirect effects arising from the decreasing of job satisfaction and the sense of income equity, so as to expand the paths for analyzing the effects of employment quality on well-being. (3) By utilizing a series of survey data from 2003 to 2010, the paper, from the perspective of employment quality, provides a new explanation for the rising trend of urban residents' well-being in the context of active employment policy, thus conducive for the academia and government sectors to deepen their understanding of the significance of employment quality in improving people's livelihood and to further enhancing the employment strategy and policies.

## **2 Data, variables and method**

### **2.1 Data Sources**

The data are from the CGSS conducted by Renmin University of China and Hong Kong University of Science and Technology, including a total of four

rounds of surveys in 2003, 2006, 2008 and 2010. With the survey result on a sample of 1% national population as the sampling frame, CGSS used the four-stage stratified probability proportional to size, a kind of unequal probability sampling, to sample districts (counties), streets (towns), neighborhood committees, households and residents in 28 provinces, municipalities and autonomous regions of China. For research purposes, the authors selected samples aged 16 to 60 from urban areas, including rural migrant workers, and excluding those who were in schools or the army, were incapable or do not have non-farm work experience (including people who have never employed or worked as farmers), those who did primarily housework and who were retired, and also the non-employed samples such as those in home-based businesses, freelancers, self-employed worker and business owners.

## **2.2 Measurement indexes and variable selection**

### **2.2.1 Subjective well-being**

Subjective well-being is the explained variable in this study, mainly measuring long-term emotional experience or life satisfaction. CGSS adopts a reliable, effective and widely used method, that is, a single comprehensive self-report inventory method, to measure respondents' subjective ratings of life satisfaction or happiness. The scores of well-being are ranked in ascending order; specifically, 1 to 5 means "very unhappy," "unhappy," "moderately happy," "happy," and "very happy" respectively.

The descriptive results of the previous survey data show that the average score of well-being rose between 2003 and 2010, increasing from 3.26 in 2003 to 3.82 in 2010.<sup>①</sup> As can be seen from Figure 2, the rising average level of well-being was mainly because of the significant increase in the proportion of people who reported being "happy" in life, from 31.86% in 2003 to 59.52% in 2010. And the proportion of people feeling "very happy" also increased markedly. By contrast, the percentage of

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<sup>①</sup> The calculation of the unscreened original data shows that the average in 2003, 2006, 2008 and 2010 is 3.27, 3.45, 3.77 and 3.82 respectively, and the well-being of rural residents is relatively low but on the rise, with the average increasing from 3.39 in 2006 to 3.69 in 2010 (there are no rural samples in 2003).



people feeling “moderately happy” dropped sharply from 51.45% in 2003 to 16.83% in 2010, while that of people feeling “unhappy” or “very unhappy” remained basically unchanged.

### **2.2.2 Core explanatory variables**

The impact of employment status on well-being is the focus of this study, which is assessed and analyzed from three aspects, including employment status, employment type and overall job satisfaction, as shown in Table 1. As can be seen from the table, the proportion of the samples in employment at the time point of the survey was over 80% with a slight increase in 2003 to 2010. Compared with 2003, the proportion of “very unsatisfied” and “unsatisfied” workers in 2008 was significantly lower, while the proportion of “satisfied” ones increased, resulting in an increase in average job satisfaction scores. The original average for job satisfaction in 2006 is 2.66 which will be 3.32 if each value is multiplied by 1.25 and converted to an average comparable to those in 2003 and 2008. Thus, from a subjective point of view, the quality of employment improves from 2003 to 2008.

**Table 1** Employment status of the samples

Variables	Year 2003	Year 2006	Year 2008	Year 2010
Having a job	76.62	79.99	86.09	86.27
Having no job	23.38	20.01	13.91	13.73
Labor dispatch and casual work	5.95	4.14	6.69	10.22
Working for permanent employers	70.67	75.86	79.39	76.04
Very unsatisfied with work	5.24	5.59	1.61	—
Unsatisfied with work	13.53	28.33	8.63	—
Moderately satisfied with work	37.06	—	42.05	—
Satisfied with work	37.30	60.58	44.53	—
Very satisfied with work	6.87	5.50	3.17	—
Average of job satisfaction	3.15	3.32(2.66)	3.39	—

Note: The figures in the table, except the average job satisfaction scores, are reported as percentages (%). There was no labor dispatch classification in 2003 and 2006, and only half-time employees and casual workers without permanent employers were included. However, in the other years, the aggregate of labor dispatch and casual work is referred to. The average and distribution of job satisfaction are only for the employment samples.

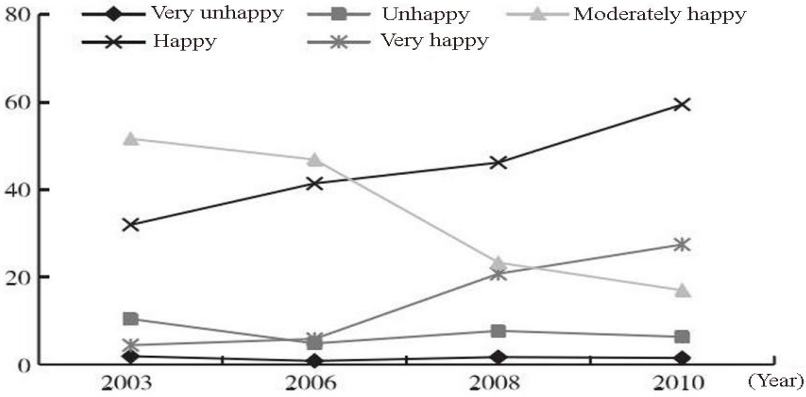


Fig. 2 The changing trend of urban residents' well-being from 2003 to 2010

2.2.3 Control variables

In addition to the employment status, in order to avoid omitted-variable bias, other explanatory variables are also controlled, which have been proven in the existing studies that they may affect well-being. Among them, the relationship between income and well-being is the core issue of happiness economics. The income variables in this study include absolute income and relative income. The total annual income of individuals (including occupational and non-occupational income) is taken as the indicator of absolute income. Similar to the method adopted in Run (2012), the subjective evaluation indicators for income-related socio-economic statuses in a broad sense are used to measure the relative income, including respondents' self-assessment of their current socio-economic statuses,<sup>①</sup> the comparison of the current economic situation with that of the past three or ten years, and evaluation of family's

<sup>①</sup> In the 2003 questionnaire, the respondents were asked, "Is your socio-economic status higher than, similar to, lower than or unclear for you compared with those of your peers?" Here, the answer "higher" is assigned 1, and the answer "similar" or "lower" is assigned 0 ("unclear" is defined as a missing value). In 2006, the respondents were asked, "In your opinion, are you from the upper, upper middle, middle, lower middle or lower class?" The answers "upper" and "upper middle" are assigned 1, representing higher economic status, while the rest answers are assigned 0. In 2008 and 2010, the respondents were asked to rate their socio-economic statuses on a scale of 1 to 10 by answering the question of "which level you think you are at" (1 represents the highest level and 10 the lowest). Accordingly, the authors redefine the scale of 1-4 as 1 to indicate higher socio-economic status, while the rest answers are assigned 0.

economic status,<sup>①</sup> so that improper selection for the reference group can be avoided when researchers measure relative income. In addition, a number of demographic characteristics are also included, such as gender, age, educational attainment and health status (1 for “relatively healthy” or “very healthy,” and 0 otherwise), as well as religious beliefs (1 for any belief, and 0 otherwise) and housing conditions (1 for having full housing ownership, and 0 otherwise). According to the studies on well-being, there is a U-shaped relationship between well-being and age. Therefore, age and its square term are controlled in the model.

Table 2 describes the basic characteristics of variables and their trends. It is found in the sample that the annual income level increased from 2003 to 2010. There was an increasingly higher proportion of people who believed that their socio-economic statuses in the past increased and it reached 47.58% in 2010. Gender, age and marital structure in the four surveys did not change significantly: women accounted for approximately 45% on average, with an overall average age of 38 and the married in a proportion of nearly 80%. In terms of educational attainment, the proportions of junior college and undergraduate students and above increased. And the proportion of members of the Communist Party of China was slightly low in 2006 and 2008, but rose to 19% in 2010.

### **2.3 Analytical method**

The explained variable in this study, namely subjective well-being, is the form of an ordered discrete variable. Following the general approach of research literature in and outside China, the authors adopted in the regression analysis an ordered probit model to study the effect of employment quality on well-being. And structural equation methods such as path analysis and latent variable measurement models were used in the

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<sup>①</sup> In 2003 and 2006, the respondents were asked, “Does your family is on the upper, upper middle, middle, lower middle, or lower level locally?” Here, binary dummy variables are constructed with the answers “upper middle” and “upper” assigned 1 and the answers “middle” and below assigned 0. And respondents in 2008 and 2010 were asked, “Which level is your family’s economic condition at in the local area?” (there were a total of five scales from far below the average to much higher than the average). Accordingly, here, the answers “higher than the average” and “far higher than the average” are assigned 1 and the answers “the average level” and below are assigned 0.

mechanism analysis and robust analysis.

**Table 2** Analyses on the basic characteristics of the samples

Variables	Year 2003	Year 2006	Year 2008	Year 2010
Annual income (logarithm)	8. 17	8. 66	9. 56	9. 27
Relatively high individual socio-economic status	3. 93	3. 78	13. 12	5. 99
Rising socio-economic status	29. 84	20. 77	44. 61	47. 58
Relatively high family socio-economic status	4. 96	4. 71	6. 00	10. 42
Female	44. 97	45. 86	43. 18	45. 61
Age	38. 41	37. 28	36. 54	38. 70
Junior high school and below	39. 41	35. 46	32. 04	32. 83
Senior high school	35. 75	38. 14	35. 66	29. 22
Junior college	17. 04	16. 14	17. 24	19. 09
University education and above	7. 79	10. 25	15. 06	18. 86
Members of the Communist Party of China	18. 53	11. 48	16. 41	19. 00
Unmarried	11. 13	19. 90	20. 13	16. 50
Married	84. 60	76. 14	76. 21	78. 74
Divorced/widowed	4. 27	3. 96	3. 66	4. 75
Rural household registration	6. 61	14. 76	15. 51	19. 28
Religious belief	—	10. 49	7. 38	9. 38
Health	—	—	73. 71	72. 34
Full housing ownership	44. 10	48. 72	49. 07	—

Note: In addition to the number of observations in the table, the annual income (logarithm) and age are the average, and the remaining variables are in percentages (%). There are no religious beliefs and health status of respondents in 2003, health information of respondents in 2006, and information on housing property rights in 2010.

Due to the strong correlation between employment type and job satisfaction, taking Grun et al. (2010) as reference, the authors examined the impacts of job satisfaction and employment type on well-being in the estimation equation of well-being. First of all, the authors used the non-working sample as a reference group to construct the dummy variables of whether one is in employment or not, so as to examine the effect of employment on well-being, which was taken as the logical starting point of the analysis. Secondly, taking the sample having no job as a reference group, the employment sample was further divided according to

job satisfaction and the dummy variable group was constructed according to the job satisfaction scores. In this way, the relationship between the subjective evaluation of employment quality and well-being was examined. Thirdly, the employment sample was further divided according to the type of employment, so as to study the impacts of labor dispatch, casual work and other unstable low-quality employment on well-being and the influencing mechanisms.

### **3 Regression analysis results and discussion**

#### **3.1 Employment and well-being**

Theory predicts that work has a major impact on well-being. The results of ordered probit regression show (see Table 3) that, after controlling absolute income, relative economic income and individual characteristics, people who have jobs have a higher sense of well-being than those who do not. The results are consistent with the data from the four rounds of surveys in 2003, 2006, 2008 and 2010. In the meantime, in order to further test the reliability of the conclusions and to verify the growing trend of well-being, the authors used mixed cross-sectional data from 2003 to 2010 and taking into account potential capabilities, needs, expectations and other heterogeneous issues, classified them into urban household registration, rural household registration, male, female and other sub-samples to do relevant analyses. The results indicate that, except that in the rural household registration sample, the positive relationship between employment and well-being is consistently robust in the other sub-samples.<sup>①</sup> There is no significant relationship between the employment status of residents with rural household registration with their well-being: one possibility is that rural labor forces can return to rural areas to farm and thus the negative effect of losing jobs is small; another possible explanation is that the poor employment quality of those rural migrant labor forces makes employment not essential to improve

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<sup>①</sup> Due to the limited space, the regression results of the male and female subsamples are not listed here, and can be sent upon request.

well-being.

**Table 3** Ordered probit regression results on the influencing factors of well-being

Explanatory variables	Year 2003	Year 2006	Year 2008	Year 2010	Composite sample	Urban household registration	Rural household registration
Having a job	0.350***	0.266***	0.482***	0.154*	0.322***	0.357***	0.123
Female	0.210***	0.131***	0.265***	0.119**	0.175***	0.169***	0.176***
Age	-0.053**	-0.112***	-0.118***	-0.095***	-0.097***	-0.087***	-0.141***
Square of age	0.001**	0.001***	0.001***	0.001***	0.001***	0.001***	0.002***
Senior high school	0.038	0.161***	0.273***	0.067	0.123***	0.121***	0.104
Junior college	0.213***	0.298***	0.324***	0.189**	0.279***	0.283***	0.158
University education and above	0.245**	0.319***	0.466***	0.029	0.254***	0.257***	0.180
Member of Communist Party of China	0.232***	0.239***	0.079	0.157***	0.162***	0.160***	0.179
Married	0.393***	0.593***	0.236**	0.554***	0.449***	0.468***	0.385***
Divorced/widowed	-0.466***	-0.402***	-0.262	-0.245*	-0.343***	-0.344***	-0.366
Rural household registration	-0.071	-0.061	0.041	-0.087	-0.068*	—	—
Logarithm of annual income	0.019*	0.025**	0.057**	0.016	0.023***	0.021***	0.031**
Individual economic status	0.295***	0.245	0.248***	0.346***	0.326***	0.355***	0.031
Rising economic status	0.563***	0.396***	0.152***	0.201***	0.302***	0.313***	0.223***
Family economic status	0.520***	0.407**	0.155	0.304***	0.333***	0.328***	0.406***
Full housing ownership	0.092*	0.227***	0.124**	—	—	—	—
Religious belief	—	0.107	0.055	0.198**	—	—	—
Health	—	—	0.488***	0.510***	—	—	—
Year 2006	—	—	—	—	0.270***	0.292***	0.114
Year 2008	—	—	—	—	0.589***	0.595***	0.578***
Year 2010	—	—	—	—	0.668***	0.676***	0.598***
Sample size	2290	2402	1694	2611	9008	7738	1270
Goodness of fit R <sup>2</sup>	0.111	0.0955	0.0856	0.0818	0.0961	0.103	0.0761

Note: (1) This table presents the estimated coefficients of explanatory variables in the ordered probit model of well-being. (2) \*, \*\* and \*\*\* indicate significance levels at 10%, 5% and 1% respectively and the same held true for the following tables. (3) Due to the limitations of space, standard deviations are omitted and the regression coefficients of provincial dummy variable and the cut-off value of well-being are not listed.

In the control variables, the results show that both absolute income and relative income are the determinants of well-being, providing new evidence for similar studies in the past. Not only is the absolute income of individuals positively correlated with the level of well-being, but also socio-economic status, family socio-economic status, and changes in socio-economic status all have significant impacts on well-being. People from the “upper” or “upper middle” class have higher levels of well-being than those from the “average,” “lower middle” or “lower” class. Family socio-economic status also has a similar effect on well-being. From the

perspective of history and dynamic changes, a rise in socio-economic statuses of individuals has a significant impact on well-being, as compared to that over the past period.

It was worth mentioning that the regression results on the dummy variable of year in the mixed data regression model showed that the level of residents' well-being has an upward trend. The finding is robust in the subsamples of urban household registration, rural household registration, male and female. Combining the regression coefficients in Table 3 and the trend in the mean of the variables in Table 1 above, we can conclude that an important explanation for the rise in well-being over the last decade may be the improvement in employment quality. For example, job satisfaction in 2008 significantly improved, compared to that in 2003. The relationship between employment quality and well-being is the focus of the analysis below.

The influences of other control variables on well-being are basically consistent with the existing literature. Women's well-being or life satisfaction is higher than that of men, and well-being and age are in a U-shaped relationship. At the same time, educational attainment has a positive impact on well-being: the sampled people having received senior high school, junior college, university education and above, have a significantly higher level of well-being than those with a junior high level of education and below. Being a member of the Communist Party of China has a significant impact on well-being, especially for those with urban household registration. Marriage makes people happy, as the authors find that the sample of people married or having common-law partners has a significantly higher level of well-being than the unmarried sample. However, "unfortunate" marriage also makes people feel less happy, as the well-being of the divorced or widowed is significantly lower than the unmarried group. Consistent with the conclusion of Li et al. (2011) and Lin et al. (2012), those people who have purchased houses (of complete property rights) have a higher level of well-being. As for the relationship between religious belief and well-being, the results in the paper are consistent with the findings of Bian and Xiao (2014); that is, there is no significant relationship between them except for the significantly positive

correlation between the two in 2010. Good health conditions can significantly improve well-being: people who perceive themselves as “relatively healthy” or “very healthy” have a higher sense of well-being than others.

### **3.2 Job satisfaction and well-being**

The above analyses show that people who have jobs are happier than those who do not have jobs. So does it follow that having any job is better than having no job? The authors take job satisfaction as an indicator of employment quality to examine the relationship between it and well-being (see Table 4).

The results support the conclusion that subjective feelings in the workplaces are positively correlated with well-being, which is consistent with the findings of Nielsen, Smyth and Yin (2011) and Yang et al. (2010).<sup>①</sup> As can be seen from Table 4, only people with the job satisfaction at “average” “satisfied” and “very satisfied” levels have a higher level of well-being than those not having jobs. Employees who have jobs but are “unsatisfied” or “very unsatisfied” with their job are not happier than those do not have jobs. The results of the study are consistent in male, female and urban subsamples (relevant results are not listed due to space limitations). For rural migrant workers, only those who are “very satisfied” with their jobs have a higher level of well-being than those who do not have jobs, while those who are “unsatisfied” or “very unsatisfied” with their jobs have even a lower level of well-being than those who do not have jobs. Thus, it helps explain the conclusion obtained from the above analyses that the well-being of rural migrant workers is not significantly higher than those not having jobs, unlike that of the urban residents. This also reflects indirectly the objective reality that the employment environment and conditions of China’s rural migrant workers are relatively poor.

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<sup>①</sup> In comparing the working samples, with the “very unsatisfied” sample as the reference group, it is found that the well-being of those who are “unsatisfied” with their jobs do not change significantly and only those who are “moderately satisfied,” “satisfied” and “very satisfied” with their jobs show higher levels of well-being.



The above analyses suggest that job satisfaction, as a subjective evaluation index of employment quality, is significantly correlated with overall life satisfaction or well-being. However, given the complexity of the relationship between job satisfaction and well-being, the direction of causality remains to be further analyzed. The discussion about this is conducted in the following through methods such as structural equation model and latent variable measurement model of well-being and job satisfaction.

### 3.3 Job stability and well-being

Based on the significant relationship between job satisfaction and well-being, it can be expected that the job characteristics that affect job satisfaction may directly influence well-being. Because of the poor performance of casual work and labor dispatch in job stability, salary and benefits, working conditions and other aspects, the authors decided whether employment quality is high or not according to whether people working for permanent employers or not, and examined the relationship between employment quality and well-being (see Table 5).

**Table 4** Impacts of job satisfaction on well-being

Explanatory variables	Year 2003		Year 2006		Year 2008		Years 2003 and 2008	
	All	Rural areas	All	Rural areas	All	Rural areas	All	Rural areas
Very unsatisfied	-0.217	-0.896	-0.191	-0.223	-0.159	-0.118	-0.189	-0.581*
Unsatisfied	-0.015	-0.688	-0.042	-0.635**	0.074	-0.699	0.009	-0.646**
Moderately satisfied	0.297***	0.253	—	—	0.464***	0.054	0.320***	0.009
Satisfied	0.723***	0.308	0.577***	-0.110	0.854***	0.437	0.770***	0.388
Very satisfied	1.173***	1.489*	1.474***	0.776**	1.152***	-0.039	1.130***	0.422
Sample size	2256	141	2095	316	1607	256	3863	397
Goodness of Fit R <sup>2</sup>	0.138	0.318	0.137	0.163	0.103	0.158	0.135	0.153

Note: The reference group is the sample with people having no jobs; the control variables are consistent with those in Table 3 (the results are omitted); there was no survey on job satisfaction in 2010.

**Table 5** Impacts of job stability on well-being

Explanatory variables	Year 2003	Year 2006	Year 2008	Year 2010	Composite sample	Urban household registration	Rural household registration
Labor dispatch and casual work	-0.042	-0.310**	0.262*	0.032	0.050	0.044	-0.032
Working for permanent employers	0.415***	0.326***	0.516***	0.186**	0.368***	0.404***	0.167
Sample size	2290	2402	1694	2611	9008	7738	1270
Goodness of fit R <sup>2</sup>	0.114	0.100	0.0868	0.0825	0.0981	0.105	0.0777

Note: The reference group is the sample of people having no jobs, and the control variables are the same as those in Table 3 (the results are omitted).

With regard to the relationship between job stability and well-being, annual and composite samples yield substantially robust results. As expected, unstable informal employment cannot improve well-being. Working for a permanent employer is conducive to the enhancement of well-being, while compared with no jobs, labor dispatch and casual work and other unstable employment do not significantly improve well-being in life. This conclusion is validated in the other subsamples (except for the regression result of the 2008 subsample). Even in the model of 2006 survey data, the well-being of employees in labor dispatch and casual work is lower than the sampled people without jobs; that is, having a poor job may be even worse than having no job. However, there is no significant difference between the well-being of the employed with rural household registration and that of the unemployed, which is consistent with the above results.

At the same time, when restricting the employment sample and taking the employment by permanent employers as reference, the study finds that the well-being of the employees in labor dispatch and casual work is lower than those working for permanent employers. This is similar to the conclusions in a large amount of research in and outside China that job instability reduces well-being (Dawson et al., 2014). On this basis, it can be expected that job stability has a significant impact on job satisfaction, and then on well-being. Combining with the reality in the labor market, the problem of different salaries for labor dispatch employees and formal employees in the same work is prominent in China, resulting in a sense of income inequity and further reducing subjective well-being. Thus, this study identifies and tests the path through which unstable informal employment exerts impacts on well-being by focusing on the perspectives

of job satisfaction and income fairness. Taking into account the availability of data, this study mainly uses the 2008 data from the CGSS, and the results of the path analysis support the research hypothesis (see Fig. 3)

It can be seen from Figure 3 that labor dispatch and casual work not only have a direct negative correlation with well-being, but can also indirectly reduce well-being through their negative impacts on job satisfaction (the path coefficients are all statistically significant at the significance level of 1%). In addition, due to the well-known and widely-criticized issue of “different salaries for the same work,” labor dispatch and casual work indirectly affect well-being by reducing the sense of income equity (the path coefficients are all statistically significant at the significance level of 1%). It follows that the research findings also provide evidence for previous findings that income gap or inequity reduces well-being.

Up to this point, the authors have examined the impacts of employment status, job satisfaction, and the types of jobs on well-being. The research conclusions support the conclusion in previous literature that employment is an important determinant of well-being. The research in this paper also indicates that no matter with job satisfaction as an indicator of employment quality or by use of labor dispatch and casual work and other unstable employment to measure employment quality, the results consistently show that only “a good job” gives people a higher level of well-being.

#### **4 Robust and extensive analysis**

Both well-being and job satisfaction are variables that cannot be directly observed, and thus potential measurement errors, inverse causal relationship and omitted variables can all lead to biases in the findings. Although the single self-report inventory method is widely recognized, the indicators of well-being or satisfaction obtained from the multiple-choice self-report inventory are more reliable. In the following sections of this study, the authors use the multidimensional scale and latent variable measurement model, structural equation, and bivariate ordered probit model to conduct a robust analysis and test on the causal relationship

between variables.

#### **4.1 Another way of measuring well-being: multi-dimensional life satisfaction**

In the existing literature, life satisfaction was commonly used as a measurement indicator of well-being. In 2006, the CGSS evaluated the satisfaction in areas of life such as family economy, family relations, interpersonal relationship, health, housing and living environment (community) (no similar scales in other years). Since the score of the observed well-being or life satisfaction may be affected simultaneously by employment status and other unmeasurable background variables, the satisfaction score or the average score of satisfaction in all dimensions is not an effective measurement indicator of well-being itself. The appropriate way is to extract highly abstract potential measurement indicators from the scores of multidimensional indicators. At the same time, considering the complex causal relationship between life satisfaction and employment status, and given that the structural equation model incorporates the latent variable measurement, simultaneous equation model and path analysis, the construction of linear causality model is achieved while the unobserved latent variables are extracted. Therefore, the authors adopt the structural equation model that is applicable to latent variables to carry out correlation analysis.

The results of the latent variable measurement model show that there is a significantly positive correlation between potential life satisfaction and satisfaction scores in seven areas (e.g., family economy), with the internal reliability exceeding 0.7; thus, the life satisfaction index constructed is reasonable. On this basis, the regression analysis of the structural equation model is carried out on whether one have a job and on the dummy variables of job type, respectively; other control variables are in line with those in the above analyses. The study finds that working conditions and employment quality have robustly consistent relationship with well-being.<sup>①</sup>

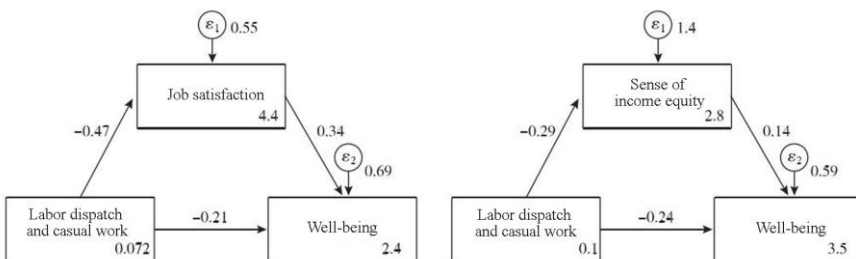
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<sup>①</sup> Due to the limitations of space, the relationship between other variables and well-being is not discussed here, and only that between the central explanatory variables and well-being is listed in

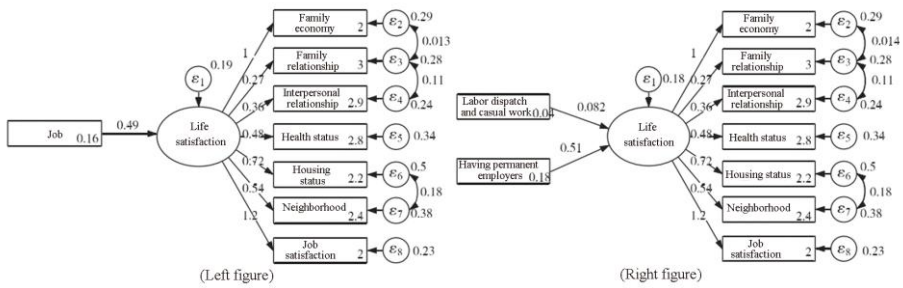
From the left figure in Figure 4, we can see that the average level of life satisfaction of the working sample is significantly higher than that of non-working sample (the robust standard error is 0.031,  $p = 0.000$ ). However, further analysis finds that labor dispatch and casual workers have no significant effect on life satisfaction ( $p = 0.173$ ), and only those working for permanent employers have significantly higher levels of life satisfaction than those unemployed ( $p = 0.000$ ). Thus, after controlling endogeneity and measurement errors through structural equation modeling, the authors still find that employment and employment quality have robust and consistent positive impacts on well-being.

### 4.2 The multidimensional measurement of job satisfaction and the causality

Following the previous examples, the authors still use the structural equation model to extract potential job satisfaction indicators from multidimensional job satisfaction scores and analyze the impacts of the latent variables of job satisfaction on well-being scores. The data come from the 2008 survey in which respondents evaluated job satisfaction scores in eight sub-dimensions, such as salary, benefits and working conditions. The results of the measurement model show that the path coefficients of potential job satisfaction and sub-dimensional satisfaction such as salary and benefits all pass the significant test, and the measurement reliability is relatively high ( $\alpha = 0.8370$ ); thus the satisfaction evaluation indicators constructed are reasonable.



**Fig. 3** The effect path of labor dispatch and casual work on well-being



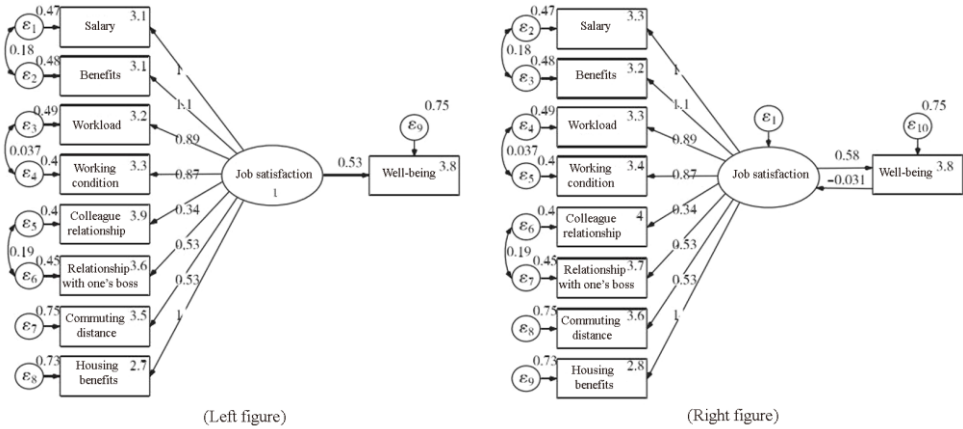
**Fig. 4** Regression results of the life satisfaction latent variable model

The causality between latent variables of job satisfaction and well-being scores is verified by the structural equation modelling. As shown in the left figure of Figure 5, the latent variables of job satisfaction extracted from the multidimensional indicators have a significantly positive effect on well-being (the robust standard error is 0.040,  $p = 0.000$ ). Thus, the results of the data analysis once again demonstrate that the positive effect of job satisfaction on well-being is robust and reliable. However, there is no definite conclusion on both theoretical and empirical evidence as to whether there exists a reverse causal relationship between job satisfaction and well-being (Bowling, Eschleman and Wang, 2010). On the one hand, job satisfaction and well-being can be deemed to be in the relationship between the parts and the whole, and the causality is job satisfaction affecting well-being. On the other hand, well-being may be a more generalized or deeper emotional tendency that affects the perception of job satisfaction in areas such as work and life. So the authors expanded the above structural equation model and tested the data after adding the causality of well-being influencing job satisfaction. As shown by the regression results in the right figure of Figure 5, the causality of job satisfaction on well-being remains robust (the path coefficient is positive and significant,  $p = 0.000$ ), but the causality of well-being on job satisfaction is not statistically significant (the path coefficient is not significant,  $p = 0.368$ ). These strong evidences show that job satisfaction can improve well-being, but being happy not necessarily means high job satisfaction, which is consistent with the findings of Coad and Binder (2014) and other scholars.

### **4.3 Endogenous test of job stability**

In the above analyses, we used the latent variables and the structural equation model to solve measurement errors and endogenous problems of well-being and job satisfaction, and verified the causal relationship between variables. Unstable jobs and well-being can also have potentially endogenous problems because of reverse causality and omitted variables (e.g., personality traits that affect both well-being and job stability), making the estimates unreliable. The common method to solve endogenous problems is the instrumental variable method. However, because the well-being and the types of job that indicate job stability are all discrete variables, the instrumental variable method based on two-stage regression of continuous variables is no longer valid and thus it is necessary to adopt bivariate an ordered probit model (Sajaia, 2008). This model which adopts the maximum likelihood estimation of complete information and the Monte Carlo simulation is more effective than the two-step method or two-stage least squares method, and has been widely recognized and used by the academic circle (Suknark, Sirisrisakulchai and Sriboonchitta, 2016).

Thus, the authors constructed a bivariate ordered probit model and used the 2008 survey data for analysis. In the determination model of labor dispatch and casual work, the demographic characteristics of workers were controlled. The labor contract signing rates in prefectural-level cities that respondents are from were used to measure the intensity of regulation on labor market and taken as an instrumental variable of labor dispatch and casual work. The stronger the intensity of labor regulation is, the greater the law enforcement and supervision are; therefore, the better the employment protection is, the lower the probability of flexible and unstable jobs such as labor dispatch is, but it is not directly related to well-being (see Table 6).



**Fig. 5** Measurement of job satisfaction and its causality with well-being

**Table 6** Regression of job stability and well-being by the bivariate ordered probit model

Variable	Dispatch and casual work	Well-being
Signing rate of labor contract	-0.760***	—
Dispatch and casual work	—	-0.528**
Female	-0.167	0.308***
Age	0.131***	-0.148***
Square of age	-0.002**	0.002***
Senior high school	-0.592***	0.451***
Junior college	-0.495***	0.471***
University education and above	-0.488***	0.626***
Member of Communist Party of China	-0.465**	0.234
Married	-0.197	0.271**
Divorced/widowed	0.016	-0.293
Rural household registration	0.275**	-0.016
Logarithm of annual income	—	0.055
Individual economic status	—	0.234**
Rising economic status	—	0.132**
Family economic status	—	0.162
Full housing ownership	—	0.181***
Religious belief	—	0.056
Health	—	0.493***
$\rho(\text{athrho})$	-0.189(.255)	—

The regression results in Table 6 show that neither the auxiliary parameter  $\rho(\text{athrho})$  of the endogeneity test, nor the logarithmic likelihood ratio passes the significance test, and that the hypothesis of labor dispatch and casual work as exogenous variables cannot be rejected, indicating that there is no serious endogenous problem. According to the



first-stage regression results, an increase in labor contract signing rate at the prefectural level can reduce the probability of labor dispatch and casual work, which is in line with the predicted analysis. After taking into account the underlying endogenous problems, the authors still find that the well-being scores of labor dispatch and casual work employees are significantly lower than those of people working for permanent employers, which is consistent with the previous results; therefore, the conclusion that unstable jobs can reduce well-being is reliable. At the same time, the relationship between well-being and other control variables also remains robust.

To sum up, the conclusion that quality of employment can enhance subjective well-being is convincing. After latent variables are used to improve the measurement of well-being and job satisfaction, the results of the structural equation model support the causality of job satisfaction on well-being, and the reverse causality of well-being on job satisfaction is not supported. At the same time, after further addressing the endogenous problems of labor dispatch and casual work, the authors still find that only the stable jobs with permanent employers have a significantly positive effect on well-being.

## **5 Conclusions and implications**

This study uses national random sampling data in multiple rounds of surveys to conduct an in-depth and thorough analysis of the relationship between employment status and well-being, and provides an explanation for the changes in subjective well-being of urban residents from the point of view of employment. It enriches and deepens the academia's understanding of how employment status affects subjective well-being and the influencing mechanism, and also provides evidence for the significance of employment quality to people's livelihood, having rich implications for research and policy making.

The results of this study provide evidence for the conclusion that employment has a positive effect on well-being, but through further analyses, we find that not any job but only high-quality jobs can improve well-being. After absolute income and relative income, as well as such

individual characteristics as gender, age and marital status are controlled, in-depth analysis reveals that only a satisfactory job could enhance well-being; workers who are unsatisfied or very unsatisfied with their jobs have even lower levels of well-being than those who do not have jobs, although the average level of well-being of employed persons is relatively higher. Consistent with the results of the analysis in which job satisfaction was used as a subjective evaluation indicator of employment quality, there is no significant difference in the level of well-being between workers in unstable low-quality employment such as labor dispatch and casual workers, and those having no jobs. In fact, compared with the stable employment by permanent employers, unstable employment such as labor dispatch and casual work has a significantly negative correlation with the subjective well-being levels of urban residents. Path analysis finds that labor dispatch and casual work have not only a direct negative effect on well-being, but also an indirect negative impact on well-being by reducing job satisfaction and the sense of income equity.

On this basis, this study used the latent variable measurement, structural equation model and bivariate ordered probit model to solve the measurement problems of well-being and job satisfaction as well as endogenous problems. The analysis demonstrates that the causality of job satisfaction and unstable employment on well-being is reliable, and subjective well-being has no significantly reverse causal relationship with job satisfaction. In addition, the results of analyses based on sub-samples of different years and different groups are also consistent. However, due to data limitations, the authors discussed the quality of employment mainly by using job satisfaction and unstable employment such as labor dispatch to make generalized measurement of employment quality. Follow-up research can deepen the studies on employment quality and well-being on the basis of further subdividing the connotations and dimensions of employment quality.

This study provides a way of thinking about the U-shaped trend of subjective well-being among urban residents in China. In controlling income changes, the well-being levels of residents rose steadily from 2003 to 2010. Obviously, economic growth is not sufficient to explain the

changes in the well-being of residents, since it is inconsistent with the rapid economic growth and the decline in well-being in the 1990s. However, the changing trend of well-being is in line with the employment status. Since the gradually incremental reform of the “permanent” employment system in the middle to late 1980s, China has further implemented radical inventory reforms with the goal of “downsizing to improve efficiency” from 1997 to 2000, so that a large number of workers were laid off, and the urban unemployment rate rose sharply, reaching its maximum during the period of 2000 to 2003 (Cai, 2004; Zeng and Yu, 2006). For the first time in 2002, the 16th National Congress of the Communist Party of China set forth the goal of “relatively full employment in society,” starting to implement a proactive employment policy and making employment promotion a goal of the government’s macro-regulation and control; latter, the strategy of full employment and that of employment priority were put forward successively. The unemployment rate has stabilized and started to decline since the beginning of the 21st century (Du and Lu, 2011). At the same time, the construction of labor system has been strengthened, and significant effects have been achieved in legalizing and standardizing the labor market through regulations on informal employment such as the Labor Contract Law. While the employment rate is rising, the research data in this study show that employment quality has also improved. It follows that, the conclusion of this study on the relationship between employment quality and well-being is a feasible way to understand the changing trend of urban residents’ subjective well-being.

Employment quality is not only a key factor in enhancing the well-being of residents, but also plays an important role in promoting economic and social transformation and development. Improving the quality of employment and paying more attention to improving people’s livelihood and well-being will not exacerbate the employment pressure on China’s labor market, but may instead promote the transformation and upgrading of economic and social development, and improve the quality and efficiency of economic growth. Because in the context of demographic changes and upgrading of quality, an important way to improve labor

productivity and promote economic transformation and development is to improve employment quality, it is hard to imagine that low-quality jobs can maintain sustained economic and social development. Thus, promoting higher-quality employment is both the aspiration of the people in pursuit of happiness and the inherent demand of the current economic restructuring and development, which needs to be given a high priority. The basic principle is to uphold the development concept of expanding employment and improving the quality of employment at the same time, so as to achieve inclusive economic and social development. The construction of the labor market system should be strengthened and improved to create and provide more and better jobs, so that hundreds of millions of workers can share the fruits of economic and social development. In the current context of the new economic normal, it is necessary to subdivide the labor groups, to understand their needs, and to adopt stratified and targeted measures so as to enhance employment quality and the well-being of residents. For low-quality employment such as labor dispatch and casual work, this study supports the conclusion that necessary regulations on labor dispatch and the flexible employment system need to be implemented to prevent the abuse of labor dispatch employment, to promote the normalization of the labor market and to enhance the stability and safety of jobs. In terms of white-collar workers, it is necessary to increase their opportunities in career development and self-actualization, to promote work-life balance, and to improve the quality of work and life, thereby enhancing labor efficiency and promoting economic restructuring and development.

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## **References**

- [1] Bian, Y. & Xiao, Y. *Sociological Study* (社会学研究), (2) (2014).
- [2] Cai, F. *Chinese Journal of Population Science* (中国人口科学), (3) (2004).

- [3] Chen, Z., Xu, T. & Liu, X. *The Journal of World Economy* (世界经济), (4) (2012).
- [4] Du, Y. & Lu, Y. *The Journal of World Economy* (世界经济), (4) (2011).
- [5] Lai, D., Su, L. Meng, D. et al. *Economic Theory and Business management* (经济理论与经济管理), (11) (2011).
- [6] Li, T., Shi, Y. & Chen, B. *Economic Research Journal* (经济研究), (9) (2011).
- [7] Lin, J., Zhou, S. & Wei, W. *Finance & Trade Economics* (财贸经济), (5) (2012).
- [8] Liu, J., Xiong, M. & Su, Y. *Social Sciences in China* (中国社会科学), (12) (2012).
- [9] Luo, C. *China Economic Quarterly* (经济学 (季刊)), (2) (2006).
- [10] Run, B. *Statistical Research* (统计研究), (10) (2012).
- [11] Wu, Y. & Cai, F. *China Labor Economics* (中国劳动经济学), (2) (2006).
- [12] Yang, Y., Li, H. & Zhai, Q. *Soft Science* (软科学), (2) (2010).
- [13] Zeng, X. & Yu, Y. *Social Science in China* (中国社会科学), (4) (2006).
- [14] Berger, E. M., Happy Working Mothers? Investigating the Effect of Maternal Employment on Life Satisfaction. *Economica*, Vol. 80, No. 317, 2013, pp. 23–43.
- [15] Bowling, N. A., Eschleman, K. J. & Wang, Q. A Meta-analytic Examination of the Relationship Between Job Satisfaction and Subjective Well-being, *Journal of Occupational & Organizational Psychology*, Vol. 83, No. 4, 2010, pp. 915–934.
- [16] Breton, F., Clinch, J. P., & Ferreira, S., Employment and Life-Satisfaction: Insights from Ireland. *Economic and Social Review*, Vol. 39, No. 3, 2008, pp. 207–234.
- [17] Brockmann, H., Delhey, J., Welzel, C., & Yuan, H., The China Puzzle: Falling Happiness in a Rising Economy. *Journal of Happiness Studies*, Vol. 10, No. 4, 2009, pp. 387–405.
- [18] Buddelmeyer, H., Mcvicar, D., & Wooden, M., Non-Standard “Contingent” Employment and Job Satisfaction: A Panel Data Analysis. *Industrial Relations*, Vol. 54, No. 2, 2015, pp. 256–275.
- [19] Carr, E., & Chung, H., Employment Insecurity and Life Satisfaction: The Moderating Influence of labour Market Policies across Europe. *Journal of European Social Policy*, Vol. 24, No. 4, 2014, pp. 383–399.
- [20] Clark, A., What Makes a Good Job? Evidence from OECD Countries. In Bazen, S., Lucifora, C., Salverda, W. (eds.), *Job Quality and Employer Behaviour*. Basingstoke: Palgrave Macmillan, 2005, pp. 11–30.
- [21] Coad, A., & Binder, M., Causal Linkages between Work and Life Satisfaction and their Determinants in a Structural VAR Approach. *Economics Letters*, Vol. 124, No. 2, 2014, pp. 263–268.
- [22] Dawson, C., Veliziotis, M., & Hopkins, B., Temporary Employment, Job Satisfaction and Subjective Well-Being. *Economic and Industrial Democracy*, 2014, forthcoming.
- [23] Dockery, A. M., The Happiness of Young Australians: Empirical Evidence on the Role of Labour Market Experience. *Economic Record*, Vol. 81, No. 255, 2005, pp. 322–335.
- [24] Dolan, P., Peasgood, T., & White, M., Do we Really Know What Makes US Happy? A Review of the Economic Literature on the Factors Associated with Subjective Well-Being, *Journal of Economic Psychology*, Vol. 29, No. 1, 2008, pp. 94–122.
- [25] Drobnic, S., Beham, B., & Prag, P., Good Job, Good Life? Working Conditions and Quality of Life in Europe. *Social Indicators Research*, Vol. 99, No. 2, 2010, pp. 205–225.
- [26] Easterlin, R. A., Morgan, R., Switek, M., & Wang, F., China’s Life Satisfaction, 1990–2010. *Proceedings of the National Academy of Sciences*. Vol. 109, No. 25, 2012, pp. 9775–9780.
- [27] Grun, C., Hauser, W., & Rhein, T., Is Any Job Better Than No Job? Life Satisfaction and Re-employment. *Journal of Labor Research*, Vol. 31, No. 3, 2010, pp. 285–306.
- [28] Jiang, S., Lu, M., & Sato, H., Identity, Inequality, and Happiness: Evidence from Urban China. *World Development*, Vol. 40, No. 6, 2012, pp. 1190–1200.
- [29] Knabe, A., & Ratzel, S., Better an Insecure Job Than No Job at All? Unemployment, Job Insecurity and Subjective Well-Being, *Economics Bulletin*, Vol. 3, No. 30, 2010, pp.

- 2486–2494.
- [30] Knight, J., & Gunatilaka, R., Does Economic Growth Raise Happiness in China? *Oxford Development Studies*, Vol. 39, No. 1, 2011, pp. 1–24.
- [31] Leschke, J., & Andrew, W., Challenges in Constructing a Multi-dimensional European Job Quality Index. *Social Indicators Research*, Vol. 118, No. 1, 2014, pp. 1–31.
- [32] Munoz De Bustillo, R., Fernandez–Macias, E., Esteve, F., & Anton, J., E Pluribus Unum? A Critical Survey of Job Quality Indicators. *Socio–Economic Review*, Vol. 9, No. 3, 2011, pp. 447–475.
- [33] Nielsen, I., Smyth, R., & Yin, L., The Moderating Effects of Demographic Factors and Hukou Status on the Job Satisfaction–Subjective Well-being Relationship in Urban China. *International Journal of Human Resource Management*, Vol. 22, No. 6, 2011, pp. 1333–1350.
- [34] Sajaia, Z., Maximum Likelihood Estimation of a Bivariate Ordered Probit Model: Implementation and Monte Carlo Simulations, *The Stata Journal*, Vol. 4, No. 2, 2008, pp. 1–18.
- [35] Suknark, K., Sirisrisakulchai, J. & Sriboonchitta, S., Modeling Dependence of Health Behaviors Using Copula-Based Bivariate Ordered Probit. In Huynh, V., Kreinovich, V., & Sriboonchitta, S. (eds.), *Casual Inference in Econometrics*. Springer International Publishing, 2016, pp. 295–306.
- [36] Witte, H. D., Job Insecurity and Psychological Well-being: Review of the Literature and Exploration of Some Unresolved Issues. *European Journal of Work and Organizational Psychology*, Vol. 8, No. 2, 1999, pp. 155–177.