Research on the Impact of Flexible Employment on Household Income Tax Burden

Cong Wang

Business School, University of Shanghai for Science and Technology, Shanghai, 200093, China wangcong@usst.edu.cn

Abstract: Under the background of China's burgeoning internet technology and the advanced development of its tertiary sector, flexible employment has emerged as a novel labor arrangement. This paper draws on statistical data from the 2019 China Household Finance Survey (CHFS) database to examine the impact of flexible employment on household income tax burdens. The findings reveal a significant negative effect of flexible employment on household income tax burdens, particularly pronounced in the eastern region compared to the western and central regions. This suggests that flexible employees, compared to formal employees, are more likely to evade taxes and may earn lower incomes. Consequently, governmental and corporate efforts should focus on providing on-the-job training and opportunities for further education to flexible workers, establishing professional evaluation and promotion channels for them, and developing tax evasion early warning mechanisms within tax authorities.

Keywords: flexible employment; household; income tax burden

1. Introduction

In recent years, the development of digital technology has driven global economic and social transformation. Profound changes have occurred in the ways of social production, living, and working. Specialization has emerged in the labor market, and flexible employment has gradually become a new form of labor utilization, representing one of the important approaches to addressing downward pressure on the global economy and improving job quality. This employment mode has also received support from the Chinese government. In 2019, the "Opinions of the State Council on Further Improving Employment Stability" proposed the development of more job opportunities, advocating the creation of multiple channels for employment, supporting flexible employment and new forms of employment, and promptly clearing and canceling unreasonable restrictions on flexible employment.

At the same time, China's tax system is undergoing changes. As one of China's important tax categories, personal income tax directly affects the disposable income of individuals and families. The 2019 reform of China's personal income tax adjusted the tax collection method from classified collection to a combination of comprehensive and classified methods, and added special additional deductions, further enhancing the income distribution adjustment function of personal income tax.

China's current tax collection and management system is not yet sufficiently refined at the level of personal income tax in non-employment relationships. Compared to standard employment, does flexible employment lead to an increase or decrease in household income? Does it increase or reduce the tax burden on households? This paper focuses on micro-level households to explore the impact of flexible employment on household tax burdens in China. The findings of this study provide valuable insights for employment choices among workers.

2. Literature Review

Research on the concept of flexible employment. The International Labour Organization first introduced the concept of "informal employment" in 1972, which by 2003 had evolved to encompass work outside the traditional employer-employee relationship, defined as "non-standard employment." This includes jobs that, either legally or practically, fall outside national labor regulations, income tax systems, and social protections [1]. The International Labour Organization has not precisely defined flexible employment; currently, the accepted definition in academia and policy circles encompasses

various flexible forms of employment such as self-employment, part-time work, and emerging employment arrangements. Individual workers under flexible employment have the autonomy to choose their work hours, location, form, and compensation structure ^[2]. Flexible employment includes self-employment, part-time work, and emerging forms of employment. Workers under flexible employment lack a fixed employer and enjoy dual flexibility in terms of work hours and location, typically remunerated based on output or hours worked, tied directly to individual performance ^[3].

Regarding the distinction between flexible employment and regular employment, scholars hold varying viewpoints ^[4]. Most scholars argue that under flexible employment arrangements, labor is more adaptable and autonomous, thereby enhancing the efficiency of resource allocation in labor factors ^[5]. Flexible employment reduces information asymmetry in the labor market, broadens employment channels, and facilitates easier access to diverse and high-paying job opportunities ^[6]. It also creates more job opportunities and supplementary income channels for low-income earners, contributing to narrowing wage disparities among different labor groups ^[7].

However, some scholars, through theoretical and empirical research, have demonstrated significant wage disparities and unfairness between flexible and regular employees ^[8,9]. In the context of the digital economy, there is a tendency for a temporary decrease in the share of labor income and an increase in the share of capital income, exacerbating income gaps between capital owners and laborers, which to some extent may disadvantage flexible employees ^[10].

Current issues surrounding flexible employment indicate incomplete institutional support. According to Ding and Xia, the emergence of new forms of flexible employment poses fresh challenges to China's existing labor regulatory policies. The tax burden and the construction of harmonious labor relations involved in the flexible employment group urgently require extensive attention and in-depth research from the academic community and society [11]. Tang points out that under the personal income tax legislative framework, many freelancers end up paying more taxes than their formally employed counterparts, contradicting principles of tax fairness. This situation not only undermines the healthy and orderly development of freelancing but also starkly contradicts the legislative intent and ideals of the Employment Promotion Law, constituting a form of tax discrimination [12].

3. Theoretical Mechanisms

Flexible employment has both positive and negative impacts on household income tax burdens.

3.1 Positive Impact of Flexible Employment on Household Income Tax Burden — Tax System Differences

Both regular employees and flexible employees fall within the category of individual laborers, but they are subject to different personal income tax rates. According to the provisions of the "Personal Income Tax Law," the income of self-employed flexible employees is taxed based on the income from individual industrial and commercial operations. In contrast, income earned by regular employees and non-self-employed flexible employees is taxed based on comprehensive income calculations. Both comprehensive income and operating income are subject to progressive tax rates, as shown in Table 1.

Level	Comprehensive income		Business income	
	Annual taxable income	Tax rat (%)	Annual taxable income	Tax rat (%)
1	Not exceeding \$36,000	3	Not exceeding \$30,000	5
2	Over \$36,000 to \$144,000	10	Over \$30,000 to \$90,000	10
3	Over \$144,000 to \$300,000	20	Over \$90,000 to \$300,000	20
4	Over \$300,000 to \$420,000	25	Over \$300,000 to \$500,000	30
5	Over \$420,000 to \$660,000	30	Over \$500,000	35
6	Over \$660,000 to \$960,000	35		
7	Over \$960000	45		

Table 1: Scale of applicable tax rates for individual income tax in China

From the table, it can be seen that the tax burden of comprehensive income may be higher than that of business income only when the annual taxable income exceeds RMB 960,000. In 2023, the disposable income per capita of Chinese residents was RMB 39,218, which shows that the tax burden of comprehensive income is lower than that of business income in most cases. Therefore, if the flexible employers switch to self-employment in pursuit of high income, it would lead to a high tax burden for

the flexible employment group. This leads to the first hypothesis of the paper:

H1: The higher the number of flexible employments in the household, the higher the income tax burden.

3.2 Negative Impact of Flexible Employment on Household Income Tax Burden — Differences in Characteristics

According to the study by Li and Wang [13], compared to regular employees, Chinese flexible employees exhibit several distinct characteristics, including lower average educational attainment, lower average wage levels, and limited opportunities for career advancement, indicative of a "glass ceiling" phenomenon. It can be inferred from this that the flexible employment group may face more tax avoidance issues due to less proactive tax reporting, thereby affecting their overall tax burden. This leads to the formulation of the second hypothesis of the paper:

H2: The higher the number of flexible employments in the household, the lower the income tax burden.

4. Data and Methods

4.1 Data Sources

In this paper, the statistical data from the 2019 China Household Finance Survey (CHFS) database is selected as the research sample. The database sample is distributed in 29 provinces, 367 counties (districts and county-level cities), and 1,481 communities in China. The final sample size is 16,599 after excluding extreme and missing values.

4.2 Data Description

(1) Explained variable

Family tax burden rate (tax). This paper selects the ratio of household personal income tax to pre-tax income as the explanatory variable.

(2) Explanatory variable

Number of flexible employment (employment). In the CHFS survey questionnaire, samples are classified as flexible employees if they are not engaged in farming, regular employment, or long-term contracts (over 1 year), and if they reported any form of income.

(3) Control variables

Includes household characteristics variables and personal characteristics variables. Individual characteristic variables include gender, health, and education of the head of household. Household characteristics variables include the number of household members with income (amount), annual household income (income), and the geographic area in which the household is located (east, west).

Descriptive statistics of the main variables are shown in Table 2. It can be seen that the difference between the highest and the lowest values of the household tax burden rate (tax) is large, and the average value is only 0.784%, indicating that the household tax burden rate is lighter overall. The standard deviation of the number of flexible employment (employment) is smaller, indicating a more concentrated distribution.

Variable Sample size Minimum Maximum Standard error Mean Average tax 16599 0.00058.824 0.7843.739 0.00016599 0.790 employment 0.000 5.000 0.816 1.000 amount 16599 1.000 6.000 1.580 0.688 1.000 16599 2.572 0.954 health 1.000 5.000 3.000 edu 16579 1.000 9.000 3.752 1.726 3.000 16599 56690.368 46890.243 43200.000 income 2500.000 216000.000

Table 2: Descriptive statistics of numerical variables

4.3 Model Establishment

Since the sample is cross-sectional data from 2019, this paper constructs an OLS (Ordinary Least Squares) model for analysis. China has a large geographic area, so we control the region to make the results more robust.

$$tax_{i} = \beta_{0} + \beta_{1}employment_{i} + \beta_{2}amount_{i} + \beta_{3}Health_{i} + \beta_{4}edu_{i} + \beta_{5}gender_{i} + \beta_{6}income_{i} + \beta_{6}area_{i} + \varepsilon_{i}$$

$$(1)$$

Where tax_i is the negative household income tax rate of the *i*th household, $employment_i$ is the number of flexible employment in the ith household, control variables include individual and household variables, and ε_i denotes the random error term.

5. Empirical Tests

5.1 Benchmark Regression Analysis

Table 3 presents the results of the OLS model benchmark regression. From column (1) of the table, it can be observed that the number of flexible employment members in households has a negative impact on household tax burden at the 1% significance level, indicating a significant reduction in household income tax burden due to flexible employment. This suggests that the taxable income of flexible employment groups tends to be at lower levels, thereby positively affecting tax avoidance strategies within households. In column (2) of the table, which includes regional dummy variables, the regression results show that the number of flexible employment members continues to have a negative impact on household tax burden at the 1% significance level.

(1)(2) Variable tax tax -0.370*** -0.360*** employment (-9.38)(-9.17)0.093 0.087 amount (1.56)(1.56)-0.031-0.028health (-1.06)(-0.95)0.288*** 0.288*** edu (11.90)(11.94)-0.027 -0.031 gender (-0.37)(-0.42)0.000*** 0.000*** income (7.78)(7.99)0.279*** east (4.44)0.171** west (2.57)-0.517*** -0.652*** con (-3.19)(-4.29)16579 16579 N \mathbb{R}^2 0.056 0.057

Table 3: Benchmark regression results

Note: The symbols for 10% and 1% levels of statistical significance are * and ***, respectively.

5.2 Heterogeneous regression analysis

Considering that there is an imbalance in the economic development between regions in China, this paper next divides the geographic location of the family into three regions: east, central and west, and the regression results of the grouping are shown in Table 4.

As can be seen, the regression coefficients of the variable flexible employment of the family's

geographical location in the eastern, central and western regions are -0.419, -0.300 and -0.348, respectively, and all of them pass the test at the 1% significance level. This indicates that flexible employment can significantly reduce the household income tax burden, and the reduction effect is more obvious in the eastern region. The possible reason is that flexible employment in the eastern region is more mature, with more tax avoidance, while the income of the formally employed is relatively higher.

. 11	(1)	(2)	(3)
variable	east	central	west
14	-0.419***	-0.300***	-0.348***
employment	(-5.563)	(-4.401)	(-4.314)
om ovet	0.064	0.116	0.186**
amount	(0.773)	(1.480)	(1.965)
health	-0.009*	-0.015	-0.127**
nearm	(-0.165)	(-0.332)	(-2.303)
edu	0.444***	0.143***	0.162***
edu	(13.583)	(4.728)	(4.552)
gandar	-0.048	0.121	-0.187
gender	(-0.416)	(1.212)	(-1.547)
income	0.000***	0.000***	0.000***
ıncome	(8.417)	(3.223)	(4.248)
200	-1.031***	-0.149	0.254
con	(-4.087)	(-0.668)	(0.966)
N	7315	5181	4083
R ²	0.081	0.021	0.040

Table 4: Grouped regression results by different household locations

Note: The symbols for 10% and 1% levels of statistical significance are * and ***, respectively.

6. Conclusion and recommendations

This paper utilizes data from the 2019 CHFS (China Household Finance Survey) to construct OLS models analyzing the impact of flexible employment on household income tax burden. The findings include the following: Firstly, flexible employment significantly reduces household income tax burden. Specifically, as the number of individuals engaged in flexible employment within a household increase, their actual tax rate decreases, leading to higher levels of tax avoidance. Secondly, the reduction in income tax burden due to flexible employment is more pronounced in the eastern region. This may be attributed to higher incomes among formal sector employees in the eastern region, coupled with greater proficiency in tax avoidance practices associated with flexible employment.

Based on these, to further enhance the skill levels of flexible workers and achieve fairness in employment taxation, this paper proposes the following recommendations:

Firstly, opportunities for on-the-job training and further education should be provided by governments and businesses for flexible workers. Research indicates that current income levels among flexible workers are lower compared to those in formal employment. Therefore, on one hand, governments and businesses should offer free on-the-job training to enhance their professional skills and adaptability to the labor market. On the other hand, targeted scholarships and loans should be provided to assist young flexible workers in furthering their education, thereby improving their academic qualifications and future income prospects.

Secondly, establishing promotion pathways through professional title evaluations can motivate flexible workers and create opportunities for career advancement. As occupational classifications enter a new phase of development, more flexible workers require professional title evaluations. A management perspective on professional title evaluations for flexible workers can effectively address their career development and societal recognition challenges, positively impacting individual qualifications and income levels.

Thirdly, tax authorities can analyze factors influencing income tax evasion and develop a tax evasion warning mechanism to ensure the orderly development of tax activities in China. Compared to formal employees, flexible workers find tax evasion relatively easier. Tax authorities should recommend reasonable and effective preventive measures, enhance tax administration capabilities, thereby safeguarding China's tax revenue to a certain extent.

References

- [1] International Labour Organization. World non-standard employment: understanding challenges, shaping the future. Geneva: International Labour Organization, 2016.
- [2] Qi Y, Ding S, Liu C. Internet use and labor supply of flexible workers in the context of the digital economy: theory and evidences[J]. Contemporary finance & economics. 2021, (05): 3-16.
- [3] Mulcahy D. Will the gig economy make the office obsolete? [J]. Harvard business review. 2017(03):2-4.
- [4] Zhang X, Wan G, Wu H. Narrowing the digital divide: the development of digital finance with Chinese characteristics [J]. Social sciences in China, 2021(8):35-51.
- [5] Wood A J, Mark G, Vili L, et al. Good gig, bad gig: autonomy and algorithmic control in the global gig economy[J]. Work employment and society, 2019, 33(1):56-75.
- [6] Bauernschuster S, Falck O, Woessmann L. Surfing alone? The internet and social capital: evidence from an unforeseeable technological mistake[J]. Journal of public economics, 2014, 117(1):73-89.
- [7] He Q, Yang Y, Cheng Y. A study on the differences in the factors affecting the employment choice of platform-type flexible employment workers in the shared economy: a case study of "We dong network" [J]. Macroeconomics, 2019, (08):142-155.
- [8] Zhang K, Liu C, Ding S. Research on the wage differences between formal employment and informal employment [J]. Chinese journal of population science, 2018,(01):83-94+128.
- [9] Sun H, Zhu L, Gao G. The wage disadvantage of informal employees in different sectors—based on multiple selection bias correction[J]. Labor economic review, 2021, 14(02):211-247.
- [10] Karabarbounis L, Neiman B. The global decline of the labor share[J]. Quarterly journal of economics, 2013, 129(01):61-103.
- [11] Ding S, Xia Z. On the regulation of flexible employment in the context of digital economy[J]. Theoretical exploration, 2022, 253(01):114-119.
- [12] Tang J. The negative impact of unfair tax treatment on non self-employed flexible workers[J]. Taxation research, 2008,(10):92-94.
- [13] Li C, Wang Y. On the working status and career development of flexible employees[J]. Journal of China University of Labor Relations, 2022, 36(04):31-37.