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Investigating the Feasibility of Universal Basic Income in China: Based on Evidence from Hangzhou

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Abstract:

Improving the current welfare system in China has become more relevant and important as AI and automation have developed, and issues facing the Chinese economy have been revealed. As supported historically and contemporarily by scholars and technology visionaries, Universal Basic Income (UBI) can be an alternative. Since trials have yet to be conducted in China, extensive secondary research was conducted to combine and compare existing work, which primarily focuses on the Western context, with this study. The secondary research covers the history of UBI, alternatives and variants of UBI, the possible impacts of UBI, and an evaluation of China's economic condition. For primary research, this study adopts a questionnaire and applies Chi-squared, normality, and nonparametric tests to survey findings. Based on responses from 124 Hangzhou residents, it is concluded that UBI is generally feasible and increasing luxury tax can be a favorable funding option. However, the level of UBI needs to be carefully managed.

Keywords: Universal Basic Income, welfare system, technological unemployment, the Chinese economy, Hangzhou

1. Introduction

Effective policy instruments, among which the welfare system plays an imperative role, are fundamental for addressing social problems in a market economy [1]. In China, various benefits have been designed to alleviate poverty, reduce inequality, enhance economic stability during layoffs and retirement, and provide access to basic healthcare and education. However, as urbanization, population ageing, and employment diversification trends accelerate, China's social security system faces "under-coverage", which is the failure to include some migrant workers and employees of the gig economy [2]. Given the potential of AI and automation to cause massive displacement [3], considering reforms and alternatives has become increasingly important and relevant.

The idea of a Universal Basic Income (UBI) has been proposed repeatedly for several reasons. By definition, UBI is a government-set amount of money provided to every citizen on a regular basis [4]. It is unconditional, non-proportional to the level of income and wealth of the citizens, and exempt from taxation. The universality eliminates the under-coverage issue by design. Moreover, UBI can perform the aforementioned functions of the current welfare system while

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simplifying bureaucracy and improving recipients' experience and, thereby, their well-being [5]. Numerous pilot and similar programs, including the Finland Basic Income (BI) experiment and the Alaska Permanent Fund (APF), have been conducted worldwide to study the ramifications and feasibility of UBI [6, 7].

Although it is possible to extrapolate UBI's economic impacts from trials elsewhere, its potential effects in the unique context of China, with the country's high marginal propensity to save [8] and significant regional inequality [9], remain uncertain. This study targets China and aims to analyze how UBI could influence individuals and the economy based on evidence from Hangzhou.

Located in eastern China, Hangzhou is the capital and most populous city of Zhejiang province. The city's population is marginally below 12 million, ranking 11th among all first-tier and new first-tier cities [10]. While UBI is a nationwide policy instrument, Hangzhou is the focus of the primary research because of its potential for generalization. The survey responses will be the basis for how UBI might impact Chinese people regarding their willingness to work, well-being, and spending choices. Extensive secondary research will also be conducted to study factors influencing UBI's feasibility, like its impacts and support level, to produce a thorough evaluation of UBI's feasibility in China.

2. Literature Review

2.1 The Development of UBI Theories

UBI's core principle is the universal entitlement to the right to subsistence. Considering this a defining feature, scholars traced the earliest form of UBI to prehistoric periods. In the nomadic and hunter-gatherer age, all lands were treated as "commons", where people could forage but could not claim ownership [11]. According to the same author, the connection is that both the common land and a UBI grant everyone unconditional access to resources necessary for survival.

However, the modern definition of UBI was proposed in the 1790s. During the Enlightenment, Paine remarked that people should be compensated for private land ownership, depriving them of the right to hunt, gather, fish, or farm [12]. From a similar standpoint, Spence, the inventor of UBI, advocated higher taxes on land and a regular, unconditional cash income for everyone [13]. UBI gained significant support in the 20th century, particularly in Britain, where it was named a "social dividend" [14-16], "national dividend" [17], and "basic income" [18].

Between the 1960s and 1970s, UBI received larger support from three major forces, especially in the US and Canada, where several trials were launched [11]. The first of three forces is feminists and social activists, who were discontented with the inadequate welfare system with demeaning conditions and a stereotypical image of familial roles. Secondly, futurists suggested UBI to protect low-skilled workers from the computer revolution. Thirdly, some economists, including Milton Friedman, considered UBI a more effective alternative in combating poverty than existing approaches [19].

As a possible solution to drastic technological and social changes, the idea has garnered a worldwide resurgence of support and ever-growing interest since the 2010s, such as during the 2008 financial crisis [20] and the COVID-19 pandemic [21]. Due to possible automation and AI-induced massive job displacement, scholars and tech-sector entrepreneurs have been vocal about UBI's potential to stimulate consumption and cushion the adverse effects of unemployment. This includes Elon Musk, who envisioned AI's provision of an age of abundance through a "universal high income", and Sam Altman, who has long supported a UBI amid the AI era [22, 23]. Additionally, UBI might contribute to mitigating global warming in the form of a carbon tax-and-dividend or cap-and-dividend [24], both of which combine pricing carbon emissions and an income guarantee.

2.2 Alternatives and Variants of UBI

As the concept of UBI evolves, variants and alternatives have been suggested, all of which share the same core but have diverse specific settings. For alternatives, negative income tax (NIT) is a system where, instead of paying taxes, people earning below a threshold receive money back from the government [25]. The payment level is a percentage of the difference between income and the threshold, which incentivizes recipients to strive for higher pay because, albeit receiving less NIT, people making little money will have better overall earnings than those without income. However, NIT might create incentives to work in the informal sector and underreport their earnings.

For variants, a recent innovation includes a "universal basic compute" suggested by Altman, which, instead of money, gives people a slice of deeded access to artificial general intelligence and thus a part of its productivity [23]. Additionally, to facilitate the transition to self-sufficiency, a tapered UBI (TUBI) is where the UBI decreases gradually to zero as perceived income grows to a threshold [26]. To avoid under-report, the TUBI level would be based on proxy indicators, such as consumption, for unobserved income. Nevertheless, the most pronounced weakness of this approach undermines the simplicity and universality of a flat UBI, which is its most pronounced weakness.

Hence, acknowledging similar concepts, this study will focus on the standard flat-rate UBI.

2.3 The Possible Impacts of a UBI

2.3.1 Fiscal Budget

As financing is fundamental to UBI's feasibility discussion, many scholars in this field have covered this issue. Although some feared that a UBI is financially impractical [27] or too expensive to fund at appropriate levels [28], others concluded that financing aUBI is possible if the political will exists [29-31]. Summarizing existing literature, the International Labor Organization (ILO) outlines four funding sources commonly proposed: reallocating government spending, increasing tax revenue, eradicating tax evasion, and lobbying for aid and transfers globally [32]. Regarding reallocation, the government can reduce non-welfare spending, such as current and capital expenditures [33]. Alternatively, UBI can replace other existing welfare payments [34]. To boost the tax revenue, the government can raise the taxes on income, luxury, and inheritance and impose new levies on capital ownership or profits earned through automation and labor displacement [35].

2.3.2 Poverty and Inequality

Many advocates have argued that UBI has the potential to alleviate poverty and inequality significantly. Hamilton and Martin-West found that, if the poverty line is incorporatedinto its design, a UBI can reduce both the number of incidents and the depth of poverty [5]. Moreover, since UBI does not diminish as income grows, it incentivizes higher earnings and overcomes the poverty trap inherent to the existing welfare system [36]. While how UBI would mitigate poverty is generally agreed upon, whether the instrument affects inequality is more debatable. Standing argued for greater equality as the same amount given to everybody represents a higher proportion of low-income people, who constitute a larger part of the population [37]. However, replacing a targeted system with a universal one merely dilutes government welfare payments if the total is constant. The problem, as Butterwegge claimed, is that a UBI is unnecessary for those who are already wealthy, while the same amount can be insufficient for the underprivileged [38]. Ultimately, UBI's precise impacts depend on key design parameters, including benefits level, capacity to meet end needs, coverage, and funding sources [32].

2.3.3 Employment

Views on employment changes are also mixed: While UBI can increase jobs directly and indirectly, it might also mean that people are no longer compelled to work for their livelihood.

UBI's unconditionality can encourage recipients to earn more by shifting to better-paid jobs or taking extra part-time jobs [36]. Also, more job opportunities might be available if UBI increases consumer spendingsince labor is a derived demand. Jones & Marinescu studied data from the APF and found a 1.8 percentage point increase in part-time jobs [6]. Meanwhile, however, voluntary unemployment may grow. Simpson et al. identified that "all the money transfer pilots have shown that a certain number of participants reduced their job prospects in the short term" [39].

From the APF's data [6], the overall impact on employment is insignificant, which aligned with the Finnish trial [7] and a thorough review of multiple empirical studies [40]. Possible explanations include the General Equilibrium Effect, where growth in employment offsets reductions [6], and the "lock-in effect", where a relatively short program duration may not allow participants to change their employment status substantially [41]. In general, there has yet to be evidence that a UBI would cause significant unemployment.

2.3.4 Consumption

Although arguments have been made on both sides, a UBI will likely increase consumption.

Scholars who disagree usually cite Friedman's Permanent Income Hypothesis to suggest that households will maintain a constant consumption level over their lifetime [42]. Empirically, based on his interpretation of APF data, Hsieh found little evidence that consumption responds to payments like UBI [43]. Challenging Hsieh's choice of statistical method, Kueng observed excess sensitivity of consumption: the MPC increased from 15% (calculated from the national average) to roughly 25% on average [44]. This might be explained by mental accounting and social interaction, meaning the fund is considered an annual windfall that has possibly altered Alaska's social norm. Furthermore, following a similar mechanism to government stimulus packages [45], UBI augments purchasing power and encourages consumption.

2.3.5 Economic Well-Being

Economic well-being generally improves, including economic security, quality time, and benefit-claiming experience. UBI can raise the commencing salary to above zero, possibly lessening uncertainty-related stress and risks of personal financial crisis [36]. Moreover, UBI can renew the future plans and hopes of recipients by abating the "scarcity mentality" [20], where poverty-related concerns erode the mental capacity for other aspects of life. For quality time, participants at B-MINCOME were found to have better social relations and more time

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with family and friends [41]. Compared with the current means-tested system, UBI has a significant advantage in simplifying the claiming process. As Hamilton and Martin-West discussed, UBI's unconditionality reduces stigma and enhances citizenship [5]. And, as Standing explained, universality blurs the line between people with unemployment, low earnings, and social assistance, thereby addressing the under-coverage problem [36]. In general, as the Finnish BI program showed, recipients of UBI reported better overall well-being than the control group, with higher life satisfaction, less mental strain, and more positive perceptions of their cognitive abilities [46].

2.4 Evaluation of China's Economic Condition to Implement UBI

It is no coincidence that the three countries that have shown immense interest in UBI historically have been at the forefront of research. With the UK, the US, and Canada as their primary focus, most past and ongoing pilot programs and discussions have been in the Western context. Comparatively, UBI in China has been less investigated. Although the United Nations Development Program (UNDP) thoroughly examined UBI's prospects in China, the working paper was written in 2017. The COVID-19 pandemic and property sector crisis have significantly altered the country's economic growth. Therefore, an updated overview of the Chinese economy is necessary to assess the implementation of UBI in contemporary China.

China's economic progress has slowed down due to the crisis-hit real estate sector and three years of zero-COVID policy. With a consistent GDP growth of 6% to 7% in pre-pandemic periods [47], China eradicated absolute poverty in 2021 [48]. However, zero-COVID lockdowns have restricted economic activities and increased uncertainty, leading to higher precautionary savings and sluggish consumer demand [49]. The latest property sector crisis, meanwhile, revealed the fundamental weakness of China's investment-driven growth model [50]. Hence, demand deficiency characterizes China's current economic situation, underscoring the role of demand-side policies in boosting consumer confidence and consumption.

Meanwhile, inequality has persisted across various dimensions. Nationwide, the Gini coefficient has persisted around 0.467 for a decade [51]. Across regions, households in Eastern China earned over 1.5 times more than their Western China counterparts [52]. So far, government redistribution has only led to a 4% reduction for top earners in China as opposed to 25% in France and 19% in the US [53]. This, along with the under-coverage issues facing the current welfare system [2], demonstrates the system's lack of efficacy in mitigating inequality.

All of the aforementioned necessitate effective institutional reforms, which grow even more critical as China's automation and AI development accelerates. China is the world's largest market for industrial robots measured by annual installations [54]. Also, 262 start-ups have been competing in the domestic generative AI market [55]. Given that the International Monetary Fund forecasts the number of jobs prone to automation and AI to be 40%, the examination of UBI's feasibility in contemporary China is both relevant and important [3].

The existing literature summarized above is the theoretical foundation for the rest of the article. What differentiates my research is the Chinese context under which UBI is assessed. With a more current understanding of the country's status quo, this study aims to contribute to the latest wave of the UBI debate and draw attention specifically to its feasibility in China.

3. Methodology

3.1 Overview

Both primary and secondary research were incorporated. For primary research, a questionnaire was designed to study how Chinese individuals might respond to UBI. Meanwhile, secondary research served as the basis for further discussions of survey results and general feasibility evaluation.

The purposes of this study are as follows:

1) To investigate UBI's impacts on key economic indicators at an individual level, including willingness to work, spending habits, mental well-being, opinions on various funding sources, and overall support.

2) To combine analysis on the individual and economy levels and evaluate UBI's feasibility and effectiveness as a welfare policy instrument.

3) To identify potential trends in preferences and support for UBI by categorizing people into different income ranges, ages, and genders.

3.2 Secondary Research

Overall, this research follows the CRAAP principle when examining literature.

Secondary research involved a thorough literature exploration using authoritative academic journals such as JSTOR, the National Bureau of Economic Research (NBER), and the American Economic Review (AER). The information was unbiased and verified across different works.

Past research provides a framework for this feasibility assessment. Papers on UBI's impacts have been both theoretical analyses and findings from worldwide trials. Based on their central themes, these works are categorized into government budget balances, poverty, inequality, employ-

ment, and consumption. Also, economic indicators pertinent to UBI's implementation in China were derived from existing analysis, after which more recent and specific data were collected.

To ensure the reliability of the research outcome, the literature's currency was also considered. The time frame of the secondary research varies between sections. For "The Development of UBI Theories" and "Alternatives and Variants", the time frame was not restricted because UBI has an enduring history, and some centuries-old ideas are relevant today. Since new studies often incorporate content from earlier work, the majority of the referenced literature on UBI's impacts was written in the last decade. China's economic data were more recent because most of the socio-economic phenomena arose in the last five years.

3.3 Primary Research

Trials have yet to be conducted in China to study the impacts of UBI on individuals, which are key to evaluating its effectiveness. Therefore, a questionnaire was designed to bridge the gap.

Besides basic background information, the questionnaire (Appendix 1) comprised 13 questions in four areas: economic impacts on individuals (spending habits and willingness to work), impacts on multiple facets of their economic well-being, support for various funding options, and overall support for UBI. The extent to which respondents endorse this policy, both on financing and overall, was included to indicate the likely acceptance level of UBI in China. These findings can also inform localized adaptations.

Regarding questionnaire design, potential funding options were simplified to facilitate respondents' understanding. Additionally, the questionnaire has specified the amount of UBI to be ¥2490 (approximately £270), which is the current minimum income guarantee level in Hangzhou. The level was set because it can influence how respondents perceive the money and, thus, their decisions. For instance, the disincentive to work might be more potent if the money is enough for recipients to live comfortably. Nevertheless, concerning funding feasibility, a high-level UBI might be unlikely.

The sample was taken from Hangzhou because, as an emerging first-tier city, it combines the characteristics of both fully developed cities of Shanghai and Beijing and more economically backward ones. Additionally, data from Hangzhou was more accessible to the researcher.

Hence, the major population screening index is whether respondents are Hangzhou residents, who were then categorized by gender, age, employment status, and income range. Full-time students were excluded because factors of interest such as the "current income level" and the "inclination to work" are inapplicable to them.

The final sample size was 153. The IP addresses recorded by the survey app Star were used to keep responses from Hangzhou residents only. During this process, an IP in Hangzhou is considered a necessary and sufficient condition for a Hangzhou resident. By this definition, valid samples total 129. After excluding full-time students, the final adjusted sample size is 124.

The full sample breakdown can be found in Appendix 2. Overall, the sample predominantly comprised individuals aged 18-55, mainly employed full-time, with a significant proportion having an after-tax income between ¥2490 and ¥7921.

Various types of question settings and data analysis approaches were used. The question on spending choices asked respondents to rank their preferences. Afterward, an overall score for each option was calculated by assigning the 1st, 2nd, and 3rd rank three, two, and one point as weights, respectively, and applying the formula, $\frac{\sum frequency \times weight}{total}$. The score, as a weighted mean, reflects overall spending preference. Hence, the higher the score, the more preferable a particular way of spending is to recipients.

The 5-point Likert scale was adopted for questions about economic well-being, funding sources, and overall support. In this case, the overall score is calculated by assigning weights, from 5 to 1, to options from "strongly agree" to "strongly disagree" and applying a similar formula for the weighted mean as aforementioned.

To process the data, single-factor descriptive analysis and cross-factor tests were conducted. Regarding overall support and UBI's impacts on well-being improvements, this research adopted Chi-squared and nonparametric tests to identify potential patterns.

4. Results and Discussions

4.1 Impacts of UBI

4.1.1 Spending Decisions

Similar to other government welfare payments, UBI provides additional disposable income to recipients and is expected to boost consumption. The level of increase, however, depends on the marginal propensity to save (MPS) [56]. Since the Chinese generally have a high MPS [8], this research examines whether and how UBI might

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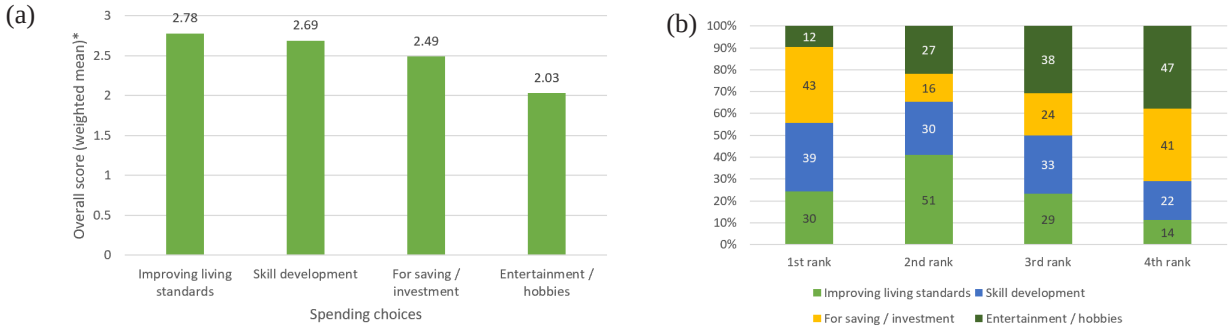
be spent to study its likely effectiveness.



*The higher the overall score, the more likely people are to spend UBI in this way.

Figure 1 The likelihood of each spending choice for respondents

The overall scores (Figure 1a) show that, if they have sufficient income, respondents are very willing to purchase higher-quality products to improve living standards (2.78) and spend money on skill development (2.69), such as education and retraining. Thus, UBI can augment consumption and, if spent on education, productivity. This result aligns with Kueng's conclusion that the UBI, as a windfall, will increase consumption due to excess sensitivity [44].

For the actual ranking (Figure 1b), about 35% of respondents set their primary choice as saving or investment, marginally higher than that for skill development, which is roughly 30%. Since the Chinese tend to have precautionary saving and the economy is still recovering from previous downturns [49, 57], it is reasonable that many people's preferred option remains saving and investing. Meanwhile, it is equally rational for the Chinese to invest in themselves and diversify their skills amid rapid advancements in automation and AI [3, 54].

Generally, there is mixed evidenceon how UBI will impact consumption in China. While saving habits can influence people's money spending over a long time, the introduction of welfare policies like UBI might alter perceptions about saving and spending. Therefore, UBI's impacts on consumption will likely be dynamic instead of static. Based on the patterns identified in the survey, consumption and even productivity might grow as recipients spend UBI on training and better-quality goods.

4.1.2 Willingness to Work

Alongside money spending, motivation for work is another important area because, if UBI creates a dependency culture, employment will decline, constraining economic and productivity growth.

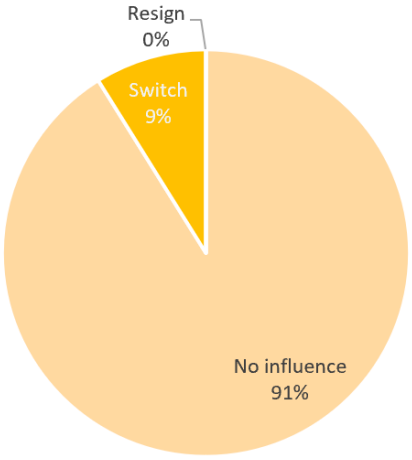


Figure 2 Employment decision of respondents after receiving the UBI

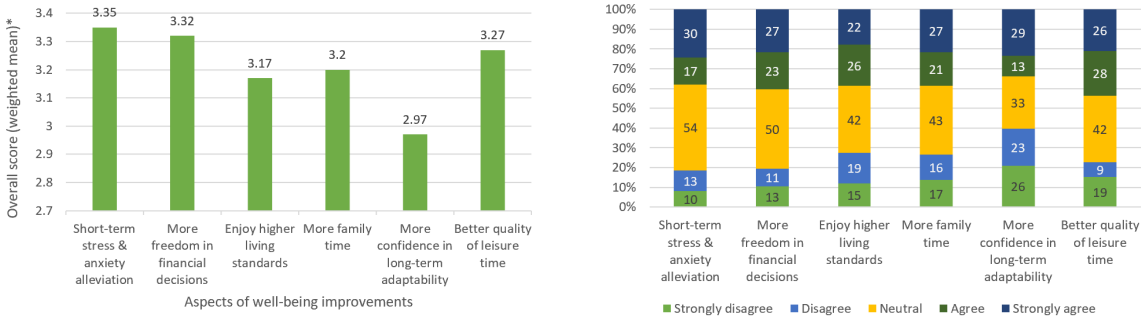
Most Chinese surveyed opt to stay with their current job, and nobody would resign. Albeit differing from Standing's view that UBI incentivizes people to shift to better-paid jobs or take extra part-time jobs to earn even more, this result echoes trial findings that a UBI has no significant impact on employment [7, 36, 40]. Moreover, this result offers an alternative explanation for UBI's insignificant impact on employment, apart from the General Equilibrium Effect outlined by Jones and Marinescu [6]. Specifically, by remaining in their current positions, people receive both their current earnings and the additional income provided by UBI, as opposed to only the UBI amount if they choose to resign.

The analysis suggests that, if set at a suitable level, like the minimum income guarantee, a UBI is unlikely to create a dependency culture in China.

4.1.3 Economic Well-Being

Welfare systems are designed to provide financial assistance and foster holistic improvements. Thus, if UBI enhances well-being, it can be viewed as advancing the inte-

gral welfare system. This perspective guides this research in investigating whether UBI can benefit the population's well-being.



*The higher the overall score, the more strongly people agree with the statement.

Figure 3 Rating of UBI's impacts on various economic well-being aspects of respondents

The survey results indicate that respondents have generally positive expectations for improvements in areas such as financial freedom and quality time following the introduction of a UBI, with scores exceeding three (Figure 3a). These results are consistent with existing work that the money will likely provide more financial security to recipients [36] and positively impact their family and leisure time [41].

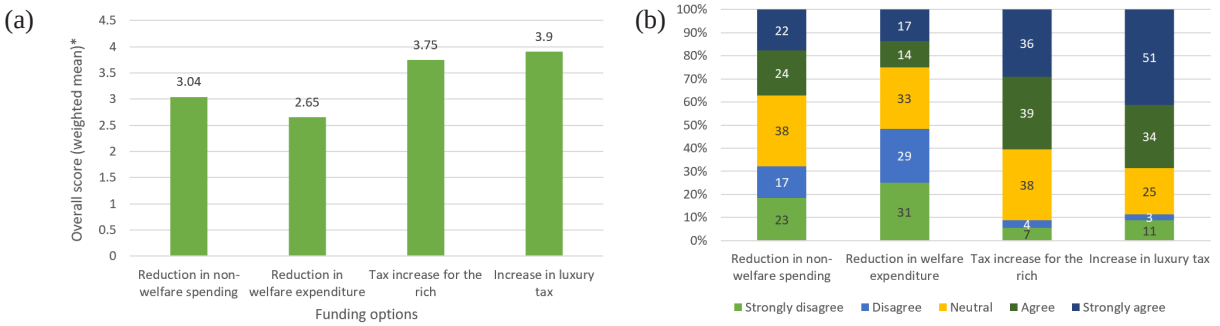
However, the results cannot show whether this positive mental effect is long-lasting or short-lived. Although, according to OpenResearch, mental health improvements fade after the first year, UBI was not the only variable in their study [58]. For instance, macroeconomic factors like the US's high inflation might have eroded the real value of income, limiting the benefits for recipients. Hence, the mental effect of UBI requires further investigation in the future.

The only category with negative responses is the "confidence in adapting to future challenges", with an average of 2.97 (Figure 3a), differing from what Singh et al. argued that a UBI could renew future plans and hopes [20]. Given that approximately 30% of respondents voted to agree or above (Figure 3b), this effect, at least to some degree, works in China. However, the bleak economic backdrop is inescapable for most consumers and businesses, who, as a result, might generally feel less confident and more pessimistic about the future [49].

4.2 Acceptance Levels of UBI

4.2.1 Funding Options

Since funding is instrumental to UBI's implementation, the consequences of different financing options are incorporated, including increasing taxes and reallocating the budget. Since individual reactions to the options can significantly impact overall economic outcomes, this section aims to identify the financing options that will likely face less opposition and receive more support.



*The higher the overall score, the more strongly people agree with the statement.

Figure 4 Support level for each financing option of UBI

Hangzhou residents sampled favor wealth, income, and luxury tax increases significantly more than a re-allocation of government spending. According to overall scores, the support for higher taxes on luxury items is 3.9 and higher taxes on the rich 3.75 (Figure 4a). Figure 4b also shows that the two funding sources receive the largest proportion of people voting "strongly agree" and "agree", at approximately 70% and 60%, respectively. With a low

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of 2.65, about half of respondents disagree or strongly disagree that current welfare, like means-tested benefits and pensions, should be cut to fund a UBI. These results are the same as conclusions from a conjoint experiment in Finland conducted by Rincón et al. [59].

Taxing the rich more, both directly or indirectly, is supported, possibly because of its implications on equality. The rationale is similar to income redistribution, which reallocates money from the rich to people with lower incomes, thereby mitigating inequality [60]. This idea may be particularly prevalent today since inequality has been stark in China [51]. Meanwhile, the opposition to cutting welfare benefits to the disadvantaged might be attributed to moral considerations.

Based on the aforementioned, increasing luxury tax would be a relatively more appropriate funding source for UBI in China.

4.2.2 Overall Support

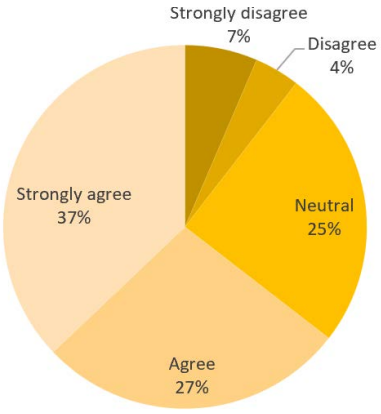

Figure 5 Overall support level for UBI

In general, UBI is found to receive considerable support in China, with approximately two-thirds of all respondents expressing "agree" or "strongly agree" with this idea.

To conclude, a UBI will likely improve living standards, allow people to seek further education and training, and enhance economic well-being. Meanwhile, it will unlikely significantly influence employment. Concerning individual reactions, it is advisable that the UBI in China be financed by increasing the luxury tax.

4.3 Breakdowns of Findings

4.3.1 Income and Support Levels

Theoretically, everyone favors a windfall like UBI. However, given that some funding options require more taxes from high-income earners, attitudes towards UBI might vary for people from different income strata. This research examines whether income levels affect an individual's support for UBI using a Chi-squared test.

Table 1 Chi-squared test on whether wage level influences overall support

Factor	Degree	After-tax monthly income (%)				Total	$\chi 2$	p
		Above ¥15000	Below ¥2490	¥2491-¥7921	¥7922-¥15000			
Overall support	Agree	4(21.05)	2(28.57)	14(21.88)	14(41.18)	34(27.42)	10.556	0.567
	Disagree	1(5.26)	0(0.00)	2(3.13)	2(5.88)	5(4.03)		
	Neutral	7(36.84)	1(14.29)	15(23.44)	8(23.53)	31(25.00)		
	Strongly agree	6(31.58)	3(42.86)	27(42.19)	10(29.41)	46(37.10)		
	Strongly disagree	1(5.26)	1(14.29)	6(9.38)	0(0.00)	8(6.45)		
Total		19	7	64	34	124		
* p<0.05 ** p<0.01								

Since *p* is larger than 0.05, there are no significant differences in attitudes between people from various employment income levels. This consistency may be attributed to the universal appeal of economic security and shared belief in social safety nets [5]. Specifically, UBI can provide a buffer in times of need, such as economic downturns, layoffs, and illness [36]. The fact that this feature stays relevant across different income groups, except for the extremely rich, might result in a broad embrace for UBI. Also, because UBI can alleviate poverty and improve the lives of many [5], the societal benefits might transcend personal self-interest and lead to widespread support. This outcome would thus provide positive evidence for the general acceptance of UBI in China.

Alternatively, the research setting might have caused this insignificance. Since the extremely rich likely to oppose UBI is less accessible to the researcher, their responses might have been underrepresented.

4.3.2 Normality Test for Well-Being Improvements

UBI has been found to enhance economic well-being collectively. The sum of the scores each individual assigned to the statements is calculated to represent the overall level of their mental health improvements. The higher the score, the more significant the enhancement of well-being. With these total scores, the research studies whether these improvements are tilted towards certain groups of individuals like lower-income earners or women.

To determine the suitable statistical tool, the distribution of the total scores undergoes normality testing (Table 2). Since the sample size is above 50, K-S testing is adopted.

Table 2 Normality test for the total score for economic well-being

Factor	Sample size	Mean	Standard deviation	Skewness	Kurtosis	Kolmogorov-Smirnov testing	
						Statistic D value	p
Total score of economic well-being	124	19.282	6.471	-0.176	-0.258	0.123	0.000**

As *p* is smaller than 0.05, total scores for economic well-being are tested to be non-normally distributed. Hence, nonparametric testing, instead of ANOVA, is used in the following analyses.

4.3.3 Income Level and Well-Being Improvements

Table 3 Nonparametric test for income level and well-being improvements

Factor	After-tax monthly income M(P_{25},P_{75})				Kruskal-Wallis test statistic H-value	p
	Above ¥15000 (n=19)	Below ¥2490 (n=7)	¥2491-¥7921 (n=64)	¥7922-¥15000 (n=34)		
Total score of economic well-being	17.000(14.0,19.0)	23.000(21.0,30.0)	20.500(18.0,25.8)	18.000(14.0,21.3)	13.276	0.004**
* p<0.05 ** p<0.01						

As calculated, *p* is below 0.01, indicating that the extent to which UBI makes people better off economically varies distinctly between income levels. The median total score tends to be higher for people from lower income ranges.

This is understandable because income increases have diminishing marginal returns [61]. Individuals with lower incomes often need UBI more and thus experience more pronounced improvements in happiness from income growth.

By bringing extra benefits to the lower end of the income distribution, UBI can potentially address poverty mentality and non-monetary inequality [20]. Meanwhile, although higher-income earners demonstrate less significant well-being improvements, they are overall positively influenced. Therefore, this piece of finding strengthens arguments in favor of UBI.

4.3.4 Gender and Well-Being Improvements

Welfare policies often have socio-economic implications that go beyond merely economic ones. This sub-section focuses on UBI's potential to empower women and address gender inequality, which has been one of the key social topics discussed.

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Table 4 Nonparametric test on gender and well-being improvements

Factor	Gender M(P_{25},P_{75})			Kruskal-Wallis test statistic H-value	p
	Female (n=65)	Male (n=58)	Others (n=1)		
Total score of economic well-being	19.000(14.0,22.0)	19.500(17.0,24.0)	22.000(22.0,22.0)	1.514	0.469
* p<0.05 ** p<0.01					

After examining the level at which different genders experience well-being improvements, *p* is found to exceed 0.05. Hence, the cross-gender difference is insignificant, indicating that women will unlikely be notably better off than other recipients, mainly men, after receiving the UBI. To explain, UBI's primary objective is economic, including covering basic needs and granting people the right to subsistence [4]. This result echoes Lombardozzi, who argues that UBI alone might be insufficient to improve women's condition and gender inequality drastically because some patriarchal norms have been rooted in society [62]. Thus, as Uhde remarked, for UBI to address broader socio-economic challenges, other institutional designs should be incorporated [63].

5. Evaluation

The research has three limitations, which suggest directions for future studies. To begin, the assumption made in data screening, which relied on the IP address identified, might leave out responses from Hangzhou residents who were not in the city when they filled out the questionnaire. This could potentially be a source of bias and inaccuracy. However, since the size of this omission is uncertain, it is hard to deduce the precise level of influence it has on the research outcome. Moreover, the sample size of 124 is relatively small, which might limit the representativeness of data interpretations. Furthermore, although Hangzhou has some levels of representativeness, the conclusion would be more accurate if the sampling was extended geographically to economically different regions across China. Finally, although it is not a focus of this research, the quantity of UBI is important because it directly influences funding sources and feasibility, willingness to work, as well as cross-region equality in China. Thus, the level should also be examined more carefully in future research.

6. Conclusion

This research examines various aspects of UBI in China amid the growing relevance and importance of the policy instrument. Based on the findings from primary and secondary research, UBI is generally feasible in China for three reasons. Firstly, the money will likely increase both consumption and savings. Given thatone of the most popular preferences is skill enhancement and education, UBI will likely improve productivity. Also, UBI's influence on employment is found to be insignificant, providing reassurance to those concerned about its potential impact on the job market. Overall, most Chinese people are in favor of this policy proposal.

Additionally, gender and stereotypical social roles might not have as strong an influence on people's perception of well-being as economic factors like income level.

Given its high popularity, raising the luxury tax can be a workable funding source for the specific policy design. Another popular choice is placing a higher tax on the rich, but it needs to proceed with caution. Potential hazardous consequences, such as capital flight, must be carefully considered and managed if this financing option is to be implemented.

This research contributes valuable insights into UBI's feasibility in China. Specifically, it adds knowledge to potential implications, funding options, and support levels of UBI in China for the government, all of which can be incorporated into future welfare policy designs. Contemporarily, discussions surrounding welfare policies have become more prevalent and prominent, primarily because of Technology or AI-induced uncertainty. This research pioneers the particular area of UBI's implementation in China, representing forward-looking ideas worth further exploration.

Ultimately, the government's role in the economy might need a rethink: should institutions prioritize welfare or economic development, and is there a middle ground? Future studies can focus on this aspect to provide more instrumental governance philosophies to help the government develop policies that can better accommodate the changes.

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