глубокое понимание того, что «мир сталкивается с великими переменами, которых не было уже сто лет» / Канронг Джин // Научный форум по лидерству. – 2019. – С. 66–77.

4. 汪仕凯:《论政治大一统:内涵、本质和演进》,学海, 2022, 21–31页 = Ван, Шикай. О политическом единстве: коннотация, сущность и эволюция / Шикай Ван // Сюэхай. – 2022. – С. 21–31.

5. 罗建波:《中国对外援助模式:理论、经验与世界意义》, 国际论坛, 2020, 39–63+156–157页 = Ло, Цзянбо. Модель внешней помощи Китая: теория, опыт и мировое значение / Цзянбо Ло // Международный форум. – 2020. – С. 39–63, 156–157.

6. 王作成:《试论东亚一体化进程中文化认同的建构[J]. 沈阳大学学报, 2009, 67–70页 = Ван, Цзочэн, Экспериментальная дискуссия о формировании культурной идентичности в процессе восточноазиатской интеграции / Цзочэн Ван // Журн. Шэньянского ун-та. – 2009. – С. 67–70.

7. RCEP Agreement enters into force (2022). Retrieved from https://rcepsec.org/2022/01/14/rcep-agreement-enters-into-force.

#### Yuan Kefeng

Ningde Normal University (Ningde City, China) Tomsk State University (Tomsk, Russia)

**O. P. Nedospasova** Tomsk State University (Tomsk, Russia)

# THE IMPACT OF INTERNET USE PREFERENCE ON INDIVIDUAL LABOR INCOME: EVIDENCE FROM CHINA

At present, Internet information technology has a great impact on people's way of life, but also on people 's labor income. This paper analyzes the influence mechanism of Internet use on individual labor income and puts forward three hypotheses. Using China 's micro survey data, we empirically analyze the differences in the impact of Internet usage preferences on individual labor income. The results show that the frequent use of the Internet for leisure and entertainment, access to information and business transactions and other activities will help to enhance the level of personal labor income, but there are large differences between individuals and between urban and rural areas.

**Keywords:** *digital economy, internet use, personal preference, digital inequality gap.* 

В настоящее время информационные технологии Интернета оказывают большое влияние не только на образ жизни людей, но и на их трудовые доходы. В данной статье анализируется механизм влияния использования Интернета на индивидуальный трудовой доход и выдвигаются три гипотезы. На основе данных микроопроса в Китае эмпирически проанализированы различия во влиянии предпочтений в использовании Интернета на индивидуальный трудовой доход. Результаты показывают, что частое использование Интернета для досуга и развлечений, доступа к информации и деловым операциям и других видов деятельности поможет повысить уровень личного трудового дохода, но существуют большие различия между как отдельными людьми, так и городскими и сельскими районами.

**Ключевые слова:** цифровая экономика, использование Интернета, личные предпочтения, разрыв в цифровом неравенстве.

#### **1. Introduction**

In recent years, the Internet information technology update iteration and rapid popularization, Internet use has been involved in information acquisition, business transactions, social, entertainment, leisure, learning, investment and other aspects, a profound impact on people's way of life. Many scholars' research shows that the massive information resources in the Internet continue to gather, disseminate and share rapidly, and the knowledge spillover and information spillover effects continue to increase and expand, which significantly reduces transaction costs and information transmission costs, and has a significant impact on residents' consumption, income investment and other economic behaviors. But, because of individual differences in Internet usage preferences, everyone's Internet-based earnings also vary greatly. So which preferences of people will have a positive impact on labor income? Therefore, this paper uses China's survey data to empirically analyze the impact of Internet usage behavior preferences on personal occupational income.

#### 2. Literature review

## 2.1. Research on Computer Use for Personal Income Growth

Using data from the U.S. Census of Residents found that computer use has a significant effect on wage income, increasing personal income by 10 % to 15 %, and explaining one-third to one-half of returns to education, by controlling for variables such as gender, age, education, and region [1]. Miller & Mulvey used Australian population survey data to find that computer use can increase personal income by 12 % to 16 % [2].

## 2.2. Research on the Impact of Internet Use on Personal Income

Goss & Phillips found that the use of the Internet at work can bring 13.5 % extra pay, using U.S. 1998 census data [3]. DiMaggio & Bonikowski further pointed out that the use of the Internet, both in and out of work, can make individuals get higher wages [4]. Philip studied the impact of Internet diffusion on residents and businesses in rural areas, especially in remote rural areas, and found that the construction of Internet infrastructure can improve the degree of information dissemination in rural areas and has a significant positive impact on the income of residents in rural areas [5].

However, scholars' research mainly focuses on the impact of the use of computers and the Internet on labor income [6]. There are few studies on the differences in labor income caused by individual Internet use preferences. Therefore, this paper focuses on the analysis of the influence mechanism of Internet use preference on individual labor income and uses China's micro survey data to verify it.

# **3.** Analysis of the Mechanism of the Impact of Internet Use on Individual Labor Income

3.1. Technology growth effect

The popularity of the Internet has brought about changes in production methods and organizational methods for society. The rapid development of the Internet has enriched market activities, promoted the rise of new industries or changes in existing industries, such as the rapid development of e-commerce platforms, enhanced social vitality, and spawned many employment opportunities. The use of the Internet has enabled residents to have more employment opportunities, which in turn has a positive impact on the improvement of personal income levels.

**Hypothesis 1**: Internet use has a positive impact on the improvement of individual labor income.

3.2. Information acquisition effect

With the development of the Internet and new media, people are now living in an era of 'information explosion', and information capacity is increasing rapidly. The Internet brings value to residents through economic information, policy information, technical information, market information, and other aspects, so that residents have useful information for their value development. At the same time, the rapid development of the Internet makes it easier for residents to find personal matching information resources through the Internet, reduces the cost of information search, and largely overcomes geographical obstacles so that residents' employment and entrepreneurship, and product sales are not limited by geographical distance. The Internet has also reduced information asymmetry, increased market efficiency, and reduced transaction costs for residents to work and start businesses.

**Hypothesis 2**: The information acquisition effect of the Internet has a positive impact on individual labor income.

3.3. Digital inequality divide

In the process of global digitization, due to the information gap caused by the difference in ownership, application, and innovation ability of information and network technology among different countries, regions, industries, enterprises, and communities, leads to the trend of further polarization between the rich and the poor(DiMaggio et al., 2001).

**Hypothesis 3**: The digital divide between urban and rural residents makes the income divide between the two significant.

## 4. Model setting, data source, and variable setting

## 4.1. Model setting

Since the use of the Internet is essentially an important means of obtaining information to improve personal information ability and employment radius, it is necessary to compare the differences between Internet usage preferences and education. This paper expands the Mincer income equation and uses Internet use behavior preference as an endogenous variable to study how the preference difference of Internet use affects individual labor income.

$$In(Income) = \alpha + \beta_{use} + \gamma_i control_i + \varepsilon_i.$$
(1)

In the formula 1, ln(Income) refers to the logarithm of individual labor income, use refers to Internet usage preference, control, refers to other control variables, and  $\varepsilon$  is the residual term.

## 4.2. Data source

Chinese General Social Survey (CGSS) is the earliest national, comprehensive, and continuous academic survey project for families in China. Since 2003, the survey team has conducted a questionnaire survey on individuals from 10,000 households in 1000 neighborhood (village) committees, 500 sub-districts (townships and towns), and 125 counties (districts) across the country every year. It has systematically and comprehensively collected data on multiple levels of society, communities, families, and individuals in China, summarized the trends of social changes, and provided data support for this study. To ensure the scientific and timeliness of data analysis, we selected the data from China General Social Survey (CGSS ) in 2017 and eliminated the missing values.

## 4.3. Variable Settings

(1) Dependent variable: personal labor income. According to the questionnaire, 'What was your labor income last year?' The answer to is used as the source data.

(2) Independent variable: Internet usage preference. According to the questionnaire, 'In the past 1 year, how often have you surfed the Internet for social activities / self-presentation / online rights protection / entertainment/access to information / business transactions?' The answer to is used as the source data.

(3) Control variables: mainly including gender, age, physical health, education level, and whether living in the city.

## 5. Empirical analysis

5.1. Method selection

As there are a large number of individual labor income values of 0 phenomena, so we choose the zero-inflated negative binomial Poisson regression method.

## 5.2. Analysis of Empirical Results

The article uses Stata 16 software to carry out regression analysis on related variables. The results in Table 1 show that the three hypotheses proposed by the author are all valid. Specifically:

(1) Frequently conducting leisure and entertainment activities on the Internet can significantly increase personal labor income. Today's world is a fast-paced, high-efficiency society, which inevitably brings a lot of tension and stress to people, and also causes a bad state of emotions. Online leisure and entertainment are a way of life for modern people. It can improve people's physical and mental health, which in turn helps to increase labor income.

(2) Frequent access to information on the Internet can significantly increase personal labor income. There is a large amount of useful knowledge, data, and other information on the Internet, which is undoubtedly beneficial to those who are good at using and capturing this information. For example, the founders of companies such as Google, Facebook, Alibaba, and JD.com started on the Internet.

(3) Frequent online transaction activities can significantly increase personal income. In the era of the digital economy, online transactions have deeply penetrated all walks of life. In particular, well-known e-commerce platforms such as Amazon, eBay, and Alibaba have significantly improved the scope of transactions, information transparency, and convenience, thereby increasing personal labor income.

(4) Personal characteristics such as age, health status, and education level are important factors that have significant differences in the labor income of different individuals.

(5) The digital divide between urban and rural residents further exacerbates the inequality of individual labor income.

Variables	Social activities	Self- presentation	Network rights protection	Leisure and entertainment	Getting information	Business transaction
Personal labor	0,00674	-0,00395	0,0475	0,111**	0,0921*	0,211***
income						
Gender	0,260*	0,260*	0,261*	0,222*	0,207	0,185
Age	-0,0427*	-0,0426*	-0,0428*	-0,0404*	-0,0413*	-0,0267
Health status	0,229***	0,229***	0,229***	0,233***	0,238***	0,232***
Education level	0,143***	0,144***	0,140***	0,142***	0,129***	0,104***
Live in the city	0,612***	0,611***	0,606***	0,588***	0,577***	0,578***
$p^* < 0.05, p^* < 0.01, p^* < 0.001$						

Table 1. Regression result

Data source: Calculated by the author using software.

#### 6. Conclusions and suggestions

According to the above analysis, leisure and entertainment, access to information, business transactions, and other Internet usage preferences have a significant positive impact on the labor income of Chinese residents. Obviously, in the era of the digital economy, having the necessary digital literacy for individuals is a necessary condition for survival and development. Given this, the author makes the following recommendations based on the dual pressures of China's digital economy and population aging: (1) Eliminate the urban-rural digital divide. In the face of this information gap between urban and rural areas in China, first of all, we should increase infrastructure construction and accelerate the informatization of rural areas. Then, to break the rural information block, resource dispersion, and poor communication bottleneck, with the help of the Internet integrate all kinds of scattered resources and accelerate the interconnection between urban and rural technical resources, and human resources. Online life skills and production skills training (e-commerce training, online agricultural technology training, etc.) should also be provided for farmers.

(2) Constructing a national digital literacy cultivation and evaluation system. Learn from foreign experience and combined with China's national conditions, take segmentation (youth, adulthood, old age), grading (general application, technical promotion, innovation, and creation), and classification (normal groups, special groups) to build to enhance China's national digital literacy cultivation system and evaluation system.

(3) Reducing the burden of family upbringing. On the one hand, the government should formulate more preferential personal income tax payment policies for families; on the other hand, it provides more inclusive infant care institutions for families. As a result, the time for family Internet learning and labor supply is increased.

(4) Promote the construction of a healthy network environment. Pay attention to strengthening the guidance of Internet user behavior, and prevent the negative effects of excessive entertainment and Internet addiction on employment and income. Under the principle of moderate management, the government should strengthen the supervision of public opinion on the Internet environment, and control the excessive entertainment and vulgar information, content, and programs in the Internet environment.

#### Acknowledgement

The reported study was funded by RFBR and VASS, project No 21-510-92007.

## References

1. Alan, B. K. How Computers Have Changed the Wage Structure: Evidence from Microdata, 1984–1989 / B. K. Alan. – The Quarterly Journal of Economics. – 1993. – № 108 (01). – P. 33–60.

2. Miller, P. W. Computer skills and wages / P. W. Miller, C. Mulvey // Australian Economic Papers. – 1997. – № 6 (68). – P. 106–113.

3. Goss, E. P. How information technology affects wages: Evidence using Internet usage as a proxy for IT skills / E. P. Goss, J. M. Phillips // Journal of Labor Research. -2002. -N 23 (3). -P. 463–474.

4. DiMaggio, P. Make Money Surfing the Web? The Impact of Internet Use on the Earnings of U.S. Workers / P. DiMaggio, B. Bonikowski // American Sociological Review. – 2008. – № 73 (2). – P. 227–250.

5. The digital divide: Patterns, policy and scenarios for connecting the 'final few' in rural communities across Great Britain / Lorna Philip [et al.] // Journal of Rural Studies.  $-2017. - N_{\odot} 54. - P. 386-398.$ 

6. The Social Implications of the Internet / Paul DiMaggio [et al.] // Annual Review of Sociology. – 2001. – № 27. – P. 307–336.

#### **Zhang Xiaoxia**

Tomsk State University (Tomsk, Russia) Ningde Normal University (Ningde City, China) **O. P. Nedospasova** 

Tomsk State University (Tomsk, Russia)

# RESEARCH ON DIGITAL IDENTITY OF THE ELDERLY IN THE DIGITAL AGE: EXPERIENCE FROM CHINA

With the gradual deepening of Internet usage and penetration rate, the global social development mode has rapidly transformed into digitalization, and has greatly changed the social production and lifestyle of residents. Among them, the impact on the elderly is the most significant, and many elderly people have become 'digital survivors'. In this context, this paper