

Intergenerational Comparative Study on Consumption of Migrant Workers in China*

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Abstract: *Based on China urban labor survey data of 2016, this paper investigates the differences in consumption level and structure between the new and previous generation rural migrant workers in China and identifies the determinants of migrant workers' consumption. According to descriptive analysis, the new-generation migrant workers' households spend 26% more on an annual per capita basis compared with their previous generation. More specifically, the new-generation migrant workers' households spend 33% more on clothing, food, housing and travel, and 10% more on healthcare on an annual per capita basis compared with their previous generation, while their per capita spending on education is only 73% that of their previous generation. Result of regression analysis shows that with other factors under control, the new-generation migrant workers' households spend 14.9% more on clothing, food, housing and travel compared with their previous generation, and their per capita gross consumption is 10.9% higher than that of their previous generation. Consumption elasticity for clothing, food, housing and travel among the new-generation migrant workers' households and their overall consumption elasticity are both significantly higher than those of the previous generation migrant workers' households. Compared with their previous generation, the spending of the new-generation migrant workers' households on clothing, food, housing and travel represents a higher share of their overall consumption, and the share of their educational consumption is even lower.*

Keywords: *new-generation migrant workers, consumption level, consumption structure, consumption elasticity*

JEL Classification Codes: D12; J01; J10

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1. Introduction

At the beginning of 2010, the CPC Central Committee and the State Council issued the No.1 document for the year titled *Opinions on Enhancing Coordinated Urban and Rural Development and Further Strengthening Agricultural and Rural Development*. According to this document, “specific measures must be taken to address problems with the new-generation migrant workers.” This was the first time that the phrase “new-generation migrant workers” was used in the Party’s documents, which

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shows a high level of attention from the CPC Central Committee to this group of people. The fact that the new-generation migrant workers raised concerns is due to their unique characteristics compared with their previous generation. This study will discuss the consumption level and structure of the new-generation migrant workers, compare them with those of the previous generation migrant workers and examine the determinants of consumption by rural migrant workers.

Since reform and opening-up in 1978, China's implementation of the rural household contract responsibility system released tremendous surplus labor. In addition, reforms of the household registration system and urban welfare systems also facilitated urban employment of the rural workforce. According to monitoring and survey of rural migrant workers by the National Bureau of Statistics (NBS) in 31 Chinese provinces, municipalities and autonomous regions, in 2016, there were 282 million rural migrant workers in China, including 169 million migrant workers who worked outside their home townships (NBS, 2017). So far, China's labor migration from the countryside to cities has lasted for over three decades, and a new generation of migrant workers as a social group have also emerged. The new-generation migrant workers born after the 1980s became the largest group of migrant workers.

Studies show that compared with their previous generation, the new-generation migrant workers have brand-new human capital and employment characteristics. The new-generation migrant workers are more educated and a greater percentage of them have received training. In addition, a higher percentage of them are the only child of their family and grew up and received education in cities. With such uniqueness, the new-generation migrant workers are entirely different from their previous generation in terms of their consumption philosophies and behaviors (Cai, 2011). Their consumption status will affect migrant workers' overall consumption, and thus influence China's economic development. Unravelling the intergenerational differences in the consumption of migrant workers helps understand the new characteristics of China's labor market.

To date, there is a limited body of literature on the consumption of the new-generation migrant workers, and most of the few existing studies only made simple descriptions in terms of their consumption philosophies. The Project Team on "New Generation of Migrant Workers" (2011) noted that the new-generation migrant workers have a higher average propensity to consume; Li and Tian (2011) suggested that the new-generation migrant workers have a rather different consumption pattern compared with their previous generation; Liu and Wang (2013) concluded that the new-generation migrant workers have a higher level of consumption compared with their previous generation. Some studies analyzed certain consumption types of the new-generation migrant workers, such as conspicuous consumption (Jin and Cui, 2013; Jin *et al.*, 2015), educational and cultural consumption (Jin *et al.*, 2014) and developmental consumption (Jin and Yang, 2016). However, these studies were confined to descriptive analysis without comparing the consumption level and structure between the new and previous generation migrant workers and examining their determinants.

Based on China urban labor survey data of 2016 released by the Institute of Population and Labor Economics, Chinese Academy of Social Sciences, this study examines the differences in consumption level and structure between the new and previous generation migrant workers and the determinants of such differences. The remainder of this study is organized as follows: Section 2 offers an analysis of the new-generation migrant workers' consumption level and structure and compares them with those of their previous generation; Section 3 discusses the determinants of rural migrant workers' consumption level and structure, and the differences between the new and previous generation migrant workers; and Section 4 offers the paper's conclusions and policy recommendations.

2. Consumption Level and Structure of the New-Generation Migrant Workers: Comparison with the Previous Generation Migrant Workers

This section explains how the new and previous generation migrant workers' households are defined

in this paper. While individual migrant workers can be classified into different generations according to their year of birth, it is more complicated to classify migrant workers' households because of the difference in age among their family members. This section also examines the consumption level and structure of the new-generation migrant workers' households and compare them with those of the previous generation migrant workers' households.

2.1 Definition of the New and Previous Generation Migrant Workers' Households

This study investigates the consumption of migrant workers using the unit of households. We divide migrant workers' households into new-generation migrant workers' households and previous generation migrant workers' households. It is relatively simple to classify individual migrant workers into different generations by the year of their birth, i.e. migrant workers born after 1980 are classified as new-generation migrant workers, and those born before 1980 are classified as previous generation migrant workers. However, it is more complicated to divide migrant workers' households into different generations because of the difference in age among their family members.

Since the in-school population normally do not make decisions for household consumption behavior, our classification of migrant workers' households is based on the age structure of not-in-school family members. Among a household's not-in-school family members, if all family members aged 16 and above were born after 1980, the household is classified as a new-generation migrant workers' household; if all family members aged 16 and above were born before 1980, the household is classified as a previous generation migrant workers' household. There is another type of households where some not-in-school family members aged 16 and above were born after 1980 while others were born before 1980. For a household of such type, if its family members born after 1980 account for over 50%, the household is classified as a new-generation migrant workers' household; if this percentage is less than 50%, it is classified as a previous generation migrant workers' household.

2.2 Consumption Level of the New-Generation Migrant Workers: Comparison with the Previous Generation Migrant Workers

Consumption of migrant workers' households takes place in cities. Our statistical analysis of their consumption is based on the consumption classification standard of the NBS urban and rural integrated household survey. In the survey, consumption includes the eight categories of food, clothing, housing, daily necessities and services, transportation and communication, education, culture and entertainment, and health care and other goods. It needs to be noted that this paper believes that educational consumption is different from cultural and entertainment consumption. While the former is human capital investment, the latter is not. Therefore, this study observes educational consumption and cultural and entertainment consumption separately (Table 1). In addition, this paper classifies consumption of food, clothing, housing, daily necessities and services, transportation and communication, culture and entertainment and other goods and services as consumption of clothing, food, housing and travel. In this manner, consumption is divided into three categories (clothing, food, housing and travel; educational consumption; and healthcare consumption) and nine sub-categories.

In terms of the overall consumption level, annual per capita consumption of the new-generation migrant workers' households is 29,987 yuan, and that of their previous generation is 23,866 yuan. The difference is 6,121 yuan (26% higher than the latter). For the three categories, annual per capita consumption of clothing, food, housing and travel of the new-generation migrant workers' households is 26,738 yuan, which is 6,699 yuan (33%) higher than that of their previous generation. Annual per capita healthcare consumption of the new-generation migrant workers' households is 1,340 yuan (124 yuan or 10% higher than that of their previous generation). However, per capita educational consumption of the new-generation migrant workers' households is only 73% that of their previous generation. For the sub-categories, the new-generation migrant workers' households spend more on food, clothing, housing,

Table 1: Comparison of Annual Per Capita Consumption Level between Both Generations of Migrant Workers' Households

Type of consumption	New-generation migrant workers' households (1) (yuan)	Previous-generation migrant workers' households (2) (yuan)	(1)-(2) (yuan)	(1)/(2)
Consumption of clothing, food, housing and travel	26,738	20,038	6,699	1.33
Food	9,527	7,741	1,786	1.23
Clothing	1,589	1,087	502	1.46
Housing	8,173	6,380	1,794	1.28
Daily necessities and services	680	450	230	1.51
Transportation and communication	5,621	3,622	1,999	1.55
Culture and entertainment	702	436	266	1.61
Other goods and services	446	323	123	1.38
Educational consumption	1,910	2,611	-702	0.73
Healthcare consumption	1,340	1,216	124	1.10
Total consumption	29,987	23,866	6,121	1.26

Source: Calculated based on China urban labor survey data of 2016.

daily necessities and services, transportation and communication, culture and entertainment and other goods and services compared with their previous generation. Specifically, they spend 50% more on daily necessities, services, transportation and communication compared with their previous generation, and 60% more on cultural and entertainment consumption.

2.3 Consumption Structure of the New-Generation Migrant Workers: Comparison with the Previous Generation Migrant Workers

In terms of consumption structure, annual per capita consumption of the new-generation migrant workers' households on clothing, food, housing and travel as a share in their total consumption is higher than that of their previous generation by 4.82 percentage points (Table 2). Conversely, educational consumption of the new-generation migrant workers' households as a share in their total consumption is 4.84 percentage points lower than that of their previous generation. Both generations of migrant workers' households have a similar share of healthcare consumption. For the sub-categories, annual average per capita consumption of the new-generation migrant workers' households of food, clothing, housing, daily necessities and services, transportation and communication, culture and entertainment and other goods and services as a share in their total consumption is higher than that of their previous generation.

Nevertheless, such descriptive information cannot give us a clear picture of the consumption level

Table 2: Comparison of Consumption Structure between Both Generations of Migrant Workers' Households

Unit: %

Type of consumption	New-generation migrant workers' households (1)	Previous-generation migrant workers' households (2)	(1)-(2)
Consumption of clothing, food, housing and travel	88.18	83.36	4.82
Food	35.15	34.86	0.29
Clothing	5.15	4.74	0.41
Housing	27.61	26.59	1.02
Daily necessities and services	2.35	1.91	0.43
Transportation and communication	14.87	12.54	2.33
Culture and entertainment	1.87	1.56	0.30
Other goods and services	1.18	1.14	0.04
Educational consumption	7.46	12.31	-4.84
Healthcare consumption	4.36	4.34	0.02
Total consumption	100	100	0.00

Note: Numbers in the table indicate the share of various consumption in total consumption.

Source: Calculated based on China urban labor survey data of 2016.

and structure of the new-generation migrant workers' households, or whether significant differences with their previous generation exist. The reason is that the consumption level and structure of migrant workers' households are also subject to factors like household disposable income, social protection coverage for family members, family size, age structure of family members, and the characteristics of the household head. In the following section, we will employ an empirical analysis model to examine the determinants of the consumption level and structure of migrant workers' households.

3. Determinants of Consumption Level and Structure of Migrant Workers

This section employs an econometric model to examine the determinants of consumption level and structure of migrant workers. First, this paper conducts regression analysis of the new and previous generation migrant workers' households to identify the determinants of per capita consumption and analyze their consumption elasticities. Then, both generations are combined to ascertain whether significant differences exist in their consumption level and consumption elasticities with other factors under control. This section also discusses the determinants of consumption structure of migrant workers' households to ascertain whether significant differences exist in the consumption structure of the new and

previous generation migrant workers' households with other factors under control.

3.1 Determinants of Migrant Workers' Consumption Level

The model's dependent variable is the natural logarithm of annual per capita household consumption. First included in the model is income, since income is the most important factor that affects consumption. Social protection coverage for family members is also an important factor that affects consumption and is therefore included in the model. In addition, the model also includes the size of household, the variable of family members' age structure, the variable of the personal characteristic of the household head, as well as the dummy variable of the city. This paper will employ the widely used ordinary least square method (OLS). The regression model is specified as follows:

$$\ln conpc = \alpha + \beta \ln incpc + \psi ssp + \gamma hsize + \eta MEMBER + \lambda HEAD + \phi CITY + u \quad (1)$$

Where, $\ln conpc$ is the natural logarithm of annual household per capita consumption; $\ln incpc$ is the natural logarithm of household per capita disposable income; $\ln incpc$'s coefficient β is consumption elasticity (or the income elasticity of consumption); ssp is pension insurance coverage ratio for family members; $hsize$ is the size of family; $MEMBER$ is a group of variables that reflect the age structure of family members (including the share of family members aged six and below and the share of family members aged between 7 and 15); $HEAD$ is a group of variables that depict household head characteristics (including household head gender, length of education and marital status), $CITY$ is a group of dummy variables for city (control group is Shanghai); u is stochastic error term. Independent variables employed in the model is shown in Table 3.

First, at any time point during any period, household income is the most important factor that influences consumption. In this paper's regression analysis, the natural logarithm of per capita household disposable income is included to observe the effect of per capita disposable income on consumption. Income's positive effect on consumption has been verified by many studies. Here, there are sufficient reasons to expect that income level has a significantly positive effect on consumption.

Second, some studies suggest that social protection is conducive to consumption (Feldstein, 1974; Munnell, 1974; Zhang, 2008). In this paper's regression analysis, the pension insurance coverage ratio¹ is included to examine the effect of pension insurance coverage on consumption. However, pension insurance coverage may have a two-way effect on current household consumption. While those who participate in pension insurance have a more stable expectation for their future income and may increase their current consumption, pension insurance participation will also reduce current disposable income and therefore reduce consumption.

Moreover, the variables of household size and family members' age structure may also influence household consumption. Inclusion of household size in the regression equation aims to control the effect of economies of scale on household consumption. Inclusion of the percentage of persons aged six and below and the percentage of persons aged between 7 and 15 aims to control the impact of family members' age structure on certain types of consumption. For instance, a household with a higher percentage of persons aged between 7 and 15 is more likely to have higher per capita educational consumption.

In the regression equation, a group of household head characteristic variables are included, i.e. the gender, level of education and marital status of the household head. These variables may influence consumption. Although the age of the household head is an important personal characteristic, it is not included since the new and previous generation migrant workers' households are classified according to

¹ Participation in Urban Employee Basic Pension Insurance, Urban Resident Pension Insurance or New Rural Social Pension Insurance is considered as pension insurance coverage.

Table 3: Explanation of Independent Variables Employed in the Model

Independent variable	Type	Definition
Logarithm of per capita disposable income	Continuous variable	Natural logarithm of household per capita disposable income
Pension insurance coverage ratio	Continuous variable	Percentage of not-in-school population aged 16 and above with pension insurance coverage
Size of household	Continuous variable	Number of persons in a household
Variable of age structure of family members		
Percentage of persons aged six and below	Continuous variable	Percentage of persons aged six and below to total persons in a household
Percentage of persons aged between 7 and 15	Continuous variable	Percentage of persons aged between 7 and 15 to all persons in a household
Variable of household head characteristics		
Household head is female	Dummy variable	Household head is female=1, household head is male=0
Length of household head education	Continuous variable	Length of household head education
Household head is married	Dummy variable	Household head is married=1, household head is unmarried=0
Dummy variable of city		
Wuhan	Dummy variable	Wuhan=1, others=0
Shenyang	Dummy variable	Shenyang=1, others=0
Fuzhou	Dummy variable	Fuzhou=1, others=0
Xi'an	Dummy variable	Xi'an=1, others=0
Guangzhou	Dummy variable	Guangzhou=1, others=0

family members' age information.

Lastly, a group of dummy variables of the city are included in the regression equation, i.e. Wuhan, Shenyang, Fuzhou, Xi'an and Guangzhou, and Shanghai are control group. Such inclusion aims to control for region-related factors such as the price level that may affect household consumption.

Table 4 offers descriptive statistics of independent variables employed in the model. Per capita disposable income of the new-generation migrant workers' households is 42,609 yuan, and that of their previous generation is 30,953 yuan. The former is 38% higher than the latter. Pension insurance coverage ratio for the new-generation migrant workers' households is 55%, which is six percentage points lower than that of their previous generation (61%). The average size of the new-generation migrant workers' households is 3.16 persons, which is slightly smaller than that of their previous generation (3.18). On average, 14% of persons in a new-generation migrant workers' household are aged six and below, which

Table 4: Descriptive Statistics of Independent Variables

Independent variable	New-generation migrant workers' households	Previous-generation migrant workers' households
Per capita disposable income (yuan)	42,609	30,953
Pension insurance coverage ratio	0.55	0.61
Size of household (persons)	3.16	3.18
Percentage of persons aged six and below	0.14	0.04
Percentage of persons aged between 7 and 15	0.11	0.15
Percentage of households whose household heads are female	0.20	0.15
Length of household head education (years)	10.97	8.95
Percentage of households whose household heads are married	0.84	0.96

Source: Calculated based on China urban labor survey data of 2016.

is 10 percentage points higher compared with their previous generation. In the new generation migrant workers households, 11% of persons are aged between 7 and 15 years, which is four percentage points lower compared with their previous generation.

Of the new generation migrant workers' households, 20% have a female household head, which is five percentage points higher compared with their previous generation. The average length of education for the new-generation migrant workers' households is 10.97 years (roughly equivalent to high school Grade 2), and the average length of education for the previous generation migrant workers is 8.95 years (slightly below junior middle school Grade 3). The difference in the length of education between both generations of migrant workers is 2.02 years, which is significant. Both generations of migrant workers' households have rather high percentages of household heads who are married.

Table 5 is the regression result of Model (1). This paper separates the samples of the two generations of migrant workers' households to conduct regression analysis of per capita consumption on clothing, food, housing and travel, educational consumption, healthcare consumption and total consumption. Dependent variables of various models are all the natural logarithms of various types of consumption. The regression model has strong explanatory power, and the regression results of independent variables are consistent with expectations.

Dependent variable of the equation is the natural logarithm of per capita consumption. The coefficient of the natural logarithm of per capita disposable income is actually consumption elasticity. Consumption elasticities for clothing, food, housing and travel and overall consumption elasticities among the new and previous generation migrant workers are all significantly positive. Consumption elasticities for clothing, food, housing and travel among the new and previous generation migrant workers are 0.246 and 0.187 respectively, and overall consumption elasticities among them are 0.248 and 0.165. Consumption elasticity for education among the new-generation migrant workers is significantly positive, and consumption elasticity for education among the previous generation migrant workers is not

Table 5: Determinants of Migrant Workers' Level of Consumption (OLS Model)

Independent variable	Logarithm of consumption of clothing, food, housing and travel		Logarithm of educational consumption		Logarithm of healthcare consumption		Logarithm of total consumption	
	New gen.	Previous gen.	New gen.	Previous gen.	New gen.	Previous gen.	New gen.	Previous gen.
Logarithm of per capita disposable income	0.246 (5.59)***	0.187 (5.12)***	0.454 (1.73)*	0.092 (0.44)	0.005 (0.02)	0.274 (1.07)	0.248 (5.15)***	0.165 (4.71)***
Pension insurance coverage ratio	0.073 (1.17)	-0.007 (0.11)	0.500 (1.67)*	0.572 (1.57)	0.109 (0.33)	0.514 (1.32)	0.112 (1.77)*	0.034 (0.54)
Size of household	-0.186 (7.17)***	-0.178 (5.93)***	0.261 (1.34)	1.526 (7.68)***	0.406 (2.74)***	0.198 (1.09)	-0.153 (5.91)***	-0.113 (3.69)***
Percentage of persons aged six and below	-0.210 (0.92)	0.580 (1.70)*	9.409 (6.82)***	-1.951 (0.69)	-0.468 (0.43)	3.686 (1.91)*	-0.106 (0.47)	0.401 (1.14)
Percentage of persons aged between 7 and 15	-0.564 (2.70)***	-0.101 (0.64)	15.005 (11.33)***	9.338 (9.41)***	-3.427 (2.98)***	-1.348 (1.20)	-0.361 (1.75)*	-0.042 (0.26)
Household head is female	0.023 (0.36)	-0.003 (0.05)	0.656 (1.85)*	0.647 (1.83)*	0.971 (3.06)***	-0.164 (0.33)	0.064 (1.01)	0.007 (0.12)
Length of household head's education	0.003 (0.36)	0.011 (1.29)	0.032 (0.61)	0.098 (1.76)*	0.048 (0.95)	-0.090 (1.40)	0.002 (0.24)	0.009 (1.18)
Household head is married	0.012 (0.15)	-0.143 (1.06)	0.655 (1.81)*	-0.481 (0.66)	1.038 (2.19)**	-0.274 (0.37)	0.037 (0.47)	-0.149 (1.15)
Dummy variable of city	Included	Included	Included	Included	Included	Included	Included	Included
Constant term	7.971 (17.04)***	8.289 (22.53)***	-5.536 (1.94)*	-1.837 (0.84)	3.301 (1.37)	2.962 (1.17)	7.935 (15.62)***	8.556 (23.64)***
R ²	0.46	0.28	0.51	0.49	0.09	0.06	0.38	0.19
Number of observations	781	597	781	597	781	597	781	597

Note: Numbers in parenthesis are t values; ***, ** and * denote significance at the 1%, 5% and 10% level respectively; the dummy variable of cities is all included in the model.

Source: Calculated based on China urban labor survey data of 2016.

significant. Consumption elasticities for healthcare are insignificant among both generations of migrant workers.

Pension insurance coverage ratio has a positive effect on educational consumption and total consumption for the new-generation migrant workers. Household size has a negative effect on the per capita consumption of both new and previous generation migrant workers on clothing, food, housing and travel and total consumption, which implies a negative correlation between household size and per capita consumption on food, clothing, housing and travel and total consumption. In other words, household size has the effect of economies of scale on both consumption on clothing, food, housing and travel and total consumption. For the consumption of the new-generation migrant workers on clothing, food, housing and travel, the coefficient of household size is -0.186, which means that an increase in household size by one person leads to an 18.6% reduction in the per capita consumption of the new-generation migrant workers' households.

The percentage of persons aged six and below has a significantly positive effect on educational consumption for the new-generation migrant workers, and also positively affects the consumption of the previous generation migrant workers on clothing, food, housing, travel and healthcare. The percentage of persons aged between 7 and 15 has a significantly positive effect on the educational consumption of both generations of migrant workers. Most children in this age group are attending school, which justifies the high educational consumption. The percentage of persons aged between 7 and 15 has a significantly negative impact on the consumption of the new-generation migrant workers on clothing, food, housing, travel and healthcare and their total consumption.

The new-generation migrant workers' households whose household heads are female spend more on education and healthcare; the previous generation of such migrant workers' households spend even more on education. This implies that female household heads attach greater importance to their families' education and health. The previous generation migrant workers' households whose household heads are more educated also spend more on education on a per capita basis. The new-generation migrant workers' households whose household heads are married spend more on education and healthcare.

3.2 Differences in Consumption Level and Consumption Elasticity between the New and Previous Generation Migrant Workers

In order to discuss whether differences exist in consumption level between the new and previous generation migrant workers when other factors are the same, this paper mixes the samples of both generations of migrant workers and includes the dummy variable "the new-generation migrant workers' households" into Model (1) (the new-generation migrant workers' households=1, the previous generation migrant workers' households=0) to further estimate the regression model (OLS model).

$$\ln conpc = \alpha + \sigma_{new} + \beta \ln incpc + \psi ssp + \gamma hsize + \eta MEMBER + \lambda HEAD + \phi CITY + u \quad (2)$$

In Model (2), *new* refers to the dummy variable of "new-generation migrant workers' households". Definitions of other variables are the same with Model (1). In order to investigate whether any differences exist in consumption elasticities between new and previous generation migrant workers, we include the interaction term between "new-generation migrant workers' households" and "logarithm of per capita disposable income" (*new * ln incpc*) to specify Model (3). If the coefficient ω of the interaction term is significant, the implication is that difference exists in consumption elasticities for new and previous generation migrant workers. Significantly positive coefficient ω means that new-generation migrant workers have a higher consumption elasticity compared with their previous generation, and vice versa.

$$\ln conpc = \alpha + \sigma_{new} + \beta \ln incpc + \omega_{new} * \ln incpc + \psi ssp + \gamma hsize + \eta MEMBER + \lambda HEAD + \phi CITY + u \quad (3)$$

Table 6 is the regression result of Models (2) and (3). The regression model employs mixed

Table 6: Differences in Consumption Levels and Elasticities between the New and Previous Generation Migrant Workers (OLS Model)

Independent variable	Logarithm of consumption of clothing, food, housing and travel		Logarithm of educational consumption		Logarithm of healthcare consumption		Logarithm of total consumption	
	Model (2)	Model (3)	Model (2)	Model (3)	Model (2)	Model (3)	Model (2)	Model (3)
New-generation migrant workers' households	0.149 (3.31)***	-0.828 (1.49)	-1.176 (4.12)***	-3.423 (1.06)	0.112 (0.39)	0.893 (0.28)	0.109 (2.35)**	-1.137 (2.03)**
Logarithm of per capita disposable income	0.225 (7.71)***	0.173 (4.78)***	0.232 (1.34)	0.113 (0.52)	0.141 (0.83)	0.182 (0.74)	0.214 (7.04)***	0.148 (4.36)***
Interaction term		0.095 (1.77)*		0.220 (0.70)		-0.076 (0.25)		0.122 (2.24)**
Pension insurance coverage ratio	0.032 (0.69)	0.032 (0.70)	0.534 (2.21)**	0.534 (2.21)**	0.318 (1.24)	0.318 (1.24)	0.072 (1.60)	0.073 (1.60)
Size of household	-0.177 (8.92)***	-0.177 (8.96)***	0.793 (5.50)***	0.794 (5.52)***	0.317 (2.79)***	0.317 (2.79)***	-0.131 (6.57)***	-0.131 (6.60)***
Percentage of persons aged six and below	0.027 (0.15)	0.067 (0.37)	5.788 (4.68)***	5.881 (4.66)***	1.041 (1.12)	1.009 (1.08)	0.027 (0.16)	0.079 (0.45)
Percentage of persons aged between 7 and 15	-0.291 (2.33)**	-0.267 (2.12)**	12.032 (14.92)***	12.087 (14.86)***	-2.509 (3.16)***	-2.528 (3.19)***	-0.174 (1.43)	-0.144 (1.16)
Household head is female	0.010 (0.21)	0.009 (0.19)	0.613 (2.20)**	0.610 (2.20)**	0.629 (2.28)**	0.630 (2.28)**	0.042 (0.87)	0.040 (0.85)
Length of household head's education	0.010 (1.73)*	0.010 (1.63)	0.071 (1.89)*	0.070 (1.86)*	-0.011 (0.29)	-0.010 (0.28)	0.010 (1.58)	0.009 (1.46)
Household head is married	-0.077 (1.17)	-0.071 (1.08)	0.399 (1.19)	0.413 (1.22)	0.618 (1.66)*	0.613 (1.64)	-0.060 (0.91)	-0.052 (0.80)
Dummy variable of city	Included	Included	Included	Included	Included	Included	Included	Included
Constant term	7.924 (26.41)***	8.440 (23.10)***	-2.616 (1.45)	-1.429 (0.66)	2.691 (1.57)	2.278 (0.94)	8.068 (25.83)***	8.726 (25.26)***
R ²	0.42	0.43	0.49	0.49	0.06	0.06	0.34	0.34
Number of observations	1378	1378	1378	1378	1378	1378	1378	1378

Note: Interaction term refers to the interaction term between "the new-generation migrant workers' households" and "logarithm of per capita disposable income"; numbers in parenthesis are t values; ***, ** and * denote significance at the 1%, 5% and 10% level respectively; the dummy variable of cities is also included in the model.

Source: Calculated based on China urban labor survey data of 2016.

samples of new and previous generation migrant workers to conduct a regression analysis of per capita consumption on clothing, food, housing and travel, educational consumption, healthcare consumption and total consumption. The regression model has strong explanatory power, and the regression results of independent variables are consistent with expectations.

For Model (2), the independent variable with which this study is most concerned is the dummy variable of “the new-generation migrant workers’ households.” Regression analysis found that for per capita consumption on clothing, food, housing and travel, the variable “the new-generation migrant workers’ households” is significantly positive. This result shows that per capita consumption of the new-generation migrant workers’ households is significantly higher than that of their previous generation. With other conditions being the same, per capita consumption of the new-generation migrant workers’ households is 14.9% higher than that of their previous generation. As far as educational consumption is concerned, the variable “the new-generation migrant workers’ households” is significantly negative. The implication is that with other factors under control, per capita educational consumption of the new-generation migrant workers’ households is smaller than that of their previous generation.

The variable “the new-generation migrant workers’ households” has a significantly positive effect on consumption on clothing, food, housing and travel, a significantly negative effect on educational consumption, and no impact on healthcare consumption. Altogether, the positive effect of “the new-generation migrant workers household” on consumption on clothing, food, housing and travel outweighs its negative impact on educational consumption. Therefore, the variable “the new-generation migrant workers’ households” still has a significantly positive effect on per capita total consumption. With other factors under control, annual per capita consumption of the new-generation migrant workers’ households is 10.9% higher than that of their previous generation.

For Model (3), the interaction term between the new-generation migrant workers’ households and the logarithm of per capita disposable income is a key variable for this paper’s concern. The interaction term is significantly positive for both per capita consumption on clothing, food, housing and travel and per capita total consumption. This result shows that compared with their previous generation, the new-generation migrant workers’ households have a significantly higher consumption elasticity for clothing, food, housing and travel and total consumption elasticity. Yet their educational consumption elasticity and healthcare consumption elasticity are not significantly different from those of their previous generation.

3.3 Differences in Consumption Structure between the New and Previous Generation Migrant Workers

As can be seen from the foregoing descriptive analysis, differences exist in the consumption structure of the new and previous generation migrant workers’ households. This paper is also interested to learn whether significant differences exist in the consumption structure between both generations of migrant workers’ households with other factors under control. Therefore, this paper has estimated the regression model whose dependent variable is the proportion of various types of consumption to total consumption. Dependent variable is a variable between 0 and 1, and is estimated in this paper using the standard fractional logit model to ensure that its forecast value is also between 0 and 1 (Wooldridge, 2002). The model specification satisfies two conditions. First, the model is appropriate for all types of consumption; second, the model satisfies the value additivity principle, i.e. the sum of marginal propensities to consume for all types of consumption equals 1. The model is specified as follows:

$$pconpc = \alpha + \sigma new + \pi \ln concpc + \zeta \ln concpc^2 + \psi ssp + \gamma hsize + \eta MEMBER + \lambda HEAD + \phi CITY + u \quad (4)$$

Where, $pconpc$ is the share of a certain type of consumption in total consumption; new is the dummy variable of “new-generation migrant workers’ household”; $\ln concpc$ is the natural logarithm of annual household per capita total consumption; $\ln concpc^2$ is the quadratic term of the natural logarithm

Table 7: Differences in Consumption Structure between the New and Previous Generation Migrant Workers

	Share of consumption on clothing, food, housing and travel	Share of educational consumption	Share of healthcare consumption
New-generation migrant workers' households	0.385 (3.78)***	-0.461 (3.27)***	0.197 (0.54)
Logarithm of per capita total consumption	-1.101 (0.65)	4.022 (1.47)	1.955 (0.61)
Square of logarithm of per capita total consumption	0.041 (0.48)	-0.197 (1.45)	-0.053 (0.35)
Pension insurance coverage ratio	-0.219 (2.17)**	0.228 (1.73)*	0.249 (0.90)
Size of household	-0.325 (7.07)***	0.309 (5.75)***	0.191 (1.31)
Percentage of persons aged six and below	-0.415 (1.13)	0.436 (0.69)	-0.686 (0.66)
Percentage of persons aged between 7 and 15	-1.065 (4.19)***	1.880 (5.65)***	-1.468 (2.23)**
Household head is female	-0.278 (2.70)***	0.309 (2.56)**	-0.111 (0.28)
Length of household head's education	0.012 (0.70)	0.011 (0.63)	-0.112 (2.24)**
Household head is married	-0.526 (2.33)**	0.869 (2.85)***	1.018 (1.20)
Dummy variable of city	Included	Included	Included
Constant term	10.050 (1.19)	-24.779 (1.80)*	-17.719 (1.08)
Number of observations	1378	1378	1378

Note: Numbers in parenthesis are z values; ***, ** and * denote significance at the 1%, 5% and 10% level respectively; the dummy variable of cities is also included in the model.

Source: Calculated based on China urban labor survey data of 2016.

of household annual per capita total consumption. In the model, the definitions of other variables are consistent with those in Model (1). Table 7 is the regression result of Model (4). The regression model employs mixed samples of new and previous generation migrant workers to conduct a regression analysis of consumption on clothing, food, housing and travel, educational consumption, healthcare consumption and total consumption.

With other factors under control, consumption of the new-generation migrant workers' households on clothing, food, housing and travel accounts for a higher share of their total consumption compared with their previous generation, while educational consumption accounts for a smaller share. There is no significant difference in the share of healthcare consumption between both generations of migrant workers. Most of the other variables in the model are consistent with expectation, and some interesting results are revealed. For instance, a larger household size corresponds to a smaller share of consumption on clothing, food, housing and travel; a higher percentage of family members aged between 7 and 15 corresponds to a higher share of educational consumption. All these results coincide with common sense. In addition, if the household head is female, household educational consumption tends to represent a higher share, which shows that female household heads attach greater importance to human capital investment. This is consistent with the conclusions of other relevant studies (Wang, 2012; De & Ratha, 2005).

4. Conclusions and Policy Implications

Based on China urban labor survey data of 2016, this study describes the differences in consumption level and structure between the new and previous generation migrant workers, examines the determinants of migrant workers' consumption level, and investigates whether significant differences exist in consumption level, elasticity and structure between both generations of migrant workers' households.

In terms of the overall consumption level, annual per capita consumption of the new-generation migrant workers' households is 29,987 yuan, and that of their previous generation is 23,866 yuan. The difference is 6,121 yuan (26% higher than the latter). For the three categories of consumption, annual per capita consumption of the new-generation migrant workers' households on clothing, food, housing and travel is 26,738 yuan, which is 6,699 yuan (33%) higher than that of their previous generation. Annual per capita healthcare consumption of the new-generation migrant workers' households is 1,340 yuan, which is 124 yuan higher than that of their previous generation (10%). However, per capita educational consumption of the new-generation migrant workers' households is only 73% that of their previous generation.

Result of regression analysis shows that consumption elasticities for clothing, food, housing and travel and total consumption elasticities are significantly positive among both the new and previous generation migrant workers. Consumption elasticities for clothing, food, housing and travel among the new and previous generation migrant workers are 0.246 and 0.187 respectively; overall consumption elasticities are 0.248 and 0.165. With other conditions held constant and on a per capita basis, the new-generation migrant workers' households spend 14.9% more on clothing, food, housing and travel compared with their previous generation, and their total consumption is 10.9% higher. Consumption elasticity for clothing, food, housing and travel and the total consumption elasticity among the new-generation migrant workers' households are significantly higher than those of their previous generation. With other factors under control, consumption of the new generation migrant workers' households on clothing, food, housing and travel accounts for a higher share of their total consumption compared with their previous generation, while educational consumption accounts for a smaller share.

According to NBS monitoring and survey data for migrant workers, in 2016, the new-generation migrant workers accounted for 49.7% of all migrant workers, and their number reached 139 million persons (NBS, 2017). After the dawn of the new century, the monthly income of China's migrant workers who left their home townships for urban employment continued to rise, and the actual annual average growth rate of their monthly income during 2001-2016 reached 9.6%. As shown in this paper's empirical analysis, with other conditions held constant and on a per capita basis, the new-generation migrant workers' households spend more on clothing, food, housing and travel compared with their previous generation, and their overall consumption is higher as well. Consumption elasticity for clothing,

food, housing and travel and total consumption elasticity among the new-generation migrant workers' households are both significantly higher than those for their previous generation. As their income rises steadily, the new-generation migrant workers will become a huge emerging consumer group - an important trend for China's economy that cannot be overlooked. ■

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