### 5. Destination Consumption

### Enabling migrants' propensity to consume

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### Introduction

The 2014 Central Economic Working Conference emphasised that China's economy has a 'new normal', characterised mainly by slower growth. One approach to fostering new sources of growth is to enable consumption to play a more significant role in boosting economic development in China. That potential is large, as the proportions of final consumption expenditure and household consumption expenditure in gross domestic product (GDP) have significantly declined since the period of reform and opening-up. In 2013 these two proportions were 48.2 per cent and 34.1 per cent respectively. In comparison, the proportions of final consumption expenditure and household consumption expenditure in GDP in the United States and Japan are both higher and have been increasing. For the United States in 2013, these rates were 83 per cent and 68 per cent and for Japan 82 per cent and 61 per cent, respectively.

There are many possible approaches to achieving the target of expanding consumption in China. Releasing migrant consumption potential is one of the most important. This relates, first, to the fact that the number of migrants and migrant income per capita have recently increased rapidly (Cai and Du 2011; Cai and Wang 2013; DRS NBS 2014; Li 2013). The resulting total migrant income pool is huge, and this offers large potential consumption. Second, the new generation of migrants has a higher marginal propensity to consume than the previous generation of migrants (Project Team on 'New Generation of Migrant Workers' 2011; Wang 2013). In this way, migrants are an emerging new consumer group whose impact on the shape of the new normal could be significant.

A number of factors could, however, be suppressing migrant consumption. The leading factor is that compared with urban residents, migrants are disadvantaged in employment conditions, income levels and access to social welfare and public services. Specifically, they usually do not have stable jobs, they earn lower incomes and they have fewer social security and public service entitlements (China Development Research Foundation 2010; Fan et al. 2013).

<sup>1</sup> Data are from World Bank (various years).

Yet microeconomics informs us that income is the fundamental determinant of consumption. Less directly, employment conditions, social security and public services have also been shown to affect consumption.<sup>2</sup>

This gulf between urban residents and migrants is driven by the strictures of China's *hukou* system, which has been hindering migration from rural to urban areas. Migrants do not have equitable access to education, health care, social welfares and public services with urban residents (Fan et al. 2013; Research Group of Development Research Center of the State Council 2010), though many reforms of the *hukou* system have been implemented in the past three decades (Cai 2011b). The gulf in migrants' rights could also be indicative of the potential to increase urban consumption levels via migrants. Cai (2011a) found that migrants' propensity to consume would increase were they able to obtain permanent and full rights in their adopted urban home.

Comparative analysis of migrant consumption potential requires micro-survey data from both migrants and urban residents. Unfortunately, most studies use the data compiled from surveys that exclusively sample migrants (for example, Cao et al. 2012; Kong and Su 2013; Su and Kong 2012). The work of Song et al. (2010) is an exception. Macroeconomic linkages between migrant rights and consumption demand and economic development were explored using a computable general equilibrium (CGE) model (Research Group of Development Research Center of the State Council 2010). Unfortunately, the macroeconomic focus hid microeconomic considerations. The CGE model also forces a lot of assumptions.

This study uses micro-survey data that include migrants and urban residents to explore the consumption potential of migrants if they enjoy comprehensive urban rights, taking urban residents as the reference group. It compares the consumption level and patterns of migrants and urban residents and explores the determinants of consumption for the two groups. The study also estimates the consumption potential of migrants if they are granted equivalent status to and consume the same as urban residents. Migrants in cities can be divided into rural-to-urban migrants and urban-to-urban migrants. This study focuses on rural-to-urban migrants.

The rest of this study is organised as follows: the second section introduces the data used for this analysis and analyses empirical trends in the consumption level and patterns of migrants, using urban residents as the benchmark. The third section examines the determinants of consumption for migrants and

<sup>2</sup> For example, many studies show that social security coverage can promote consumption (Feldstein 1974; Munnell 1974; Zhang 2008). In contrast, a lower social security coverage rate generates unstable expectations for the future, which can restrict consumption.

urban residents and estimates both the income elasticity of consumption and the marginal propensity to consume for the two groups. The fourth section estimates the consumption level and consumption pattern of migrants in the case of this group enjoying comprehensive urban rights; and the last section offers conclusions and policy suggestions.

# Consumption levels and consumption patterns of migrants and urban residents

This section introduces the data used for the analysis, describing the sampling method for the data and the main information included, as well as discussing the advantage of using these data for the analysis. It also analyses the consumption level and pattern of migrants, taking urban residents as the reference group.

#### The data

This study uses the data from the China Urban Labour Survey (CULS). The CULS was conducted in 2010 in six cities—Shanghai, Wuhan, Shenyang, Fuzhou, Xi'an and Guangzhou—by the Institute of Population and Labour Economics of the Chinese Academy of Social Sciences. There are two advantages of using these survey data. First, the survey includes both migrants and urban residents, which can be used for comparative analysis and prediction of the consumption potential of migrants using urban residents as the reference group. Second, the survey includes detailed information on employment, income, consumption and social security, which offers the possibility of examining the determinants of consumption for migrants and urban residents.

The CULS used population-sampling techniques to identify 700 representative urban households in each city, and then applied a two-stage interview procedure. First, each household head was questioned about the household and then all household members were interviewed individually. In each city, that process was repeated in interviews with 600 migrant households. Migrants included those who had moved from rural areas and those who had moved from one urban hub to another—that is, migrants in the survey held both agricultural and non-agricultural *hukou*. This study exclusively utilises the survey results of the migrant households holding an agricultural *hukou*. In other words, this study analyses rural-to-urban migrants.

Information captured by the survey can be divided into two categories: individual information of household members and household information. The individual information includes the basic demographics of household members such as human capital characteristics, employment situation, income and consumption

at the individual level, and social security situation. The household information includes housing, income and consumption at the household level and some other information. This study focuses on consumption results, which are very detailed. Samples from 4,148 urban households and 2,428 migrant households from the CULS are used.

### Comparative descriptive analysis of migrant consumption

The categories of consumption involved in the CULS study include food, clothing, household facilities, articles and services, health care and medical services, transport and communications, education, culture and recreation, and other articles and services. For simplicity, we combine these categories as follows. First, clothing, transport and communications, and cultural and recreation consumption are combined into work-related consumption; second, household facilities, articles and services and other articles and services are combined into facilities and services; third, health care and medical services and education are combined into human capital consumption. The four categories of consumption used in this study are thus food consumption, work-related consumption, facilities and services consumption, and human capital consumption.

The average yearly consumption per capita of migrants is RMB8,627, which is, on average, 22 per cent lower than that of urban residents (Table 5.1). The gap may relate to differences in facilities, services and human capital consumption between migrants and urban residents. Migrant facilities and services consumption is 37.6 per cent lower than that of urban residents, while human capital consumption is 47.9 per cent lower than that of urban residents. The difference between migrants and urban residents for food and work-related consumption is smaller. Migrants' food consumption is lower than that of urban residents by 14.7 per cent, and migrants' work-related consumption is 19.6 per cent lower than that of urban residents.

Table 5.1 Yearly consumption per capita of migrants and urban residents

Consumption category	Migrants (1) (RMB)	Urban residents (2) (RMB)	(1)-(2) (RMB)	[(1)-(2)]/(2)*100 (%)
Food	4,620	5,416	-796	-14.7
Work-related	2,707	3,367	-660	-19.6
Facilities and services	554	888	-334	-37.6
Human capital	747	1,433	-686	-47.9
Total	8,627	11,104	-2,477	-22.3

Source: Authors' calculations based on the China Urban Labour Survey (CULS) (2010).

For both migrants and urban residents, the proportion of food consumption in total consumption is about 50 per cent. The proportion of work-related consumption ranks second, and the proportions of other categories of consumption are all relatively low (Table 5.2). The proportions of work-related consumption and that of facilities and services are similar for migrants and urban residents, but there are some differences in the consumption patterns between the two groups. For example, the proportion of migrants' food consumption is higher than that of urban residents by 4.8 percentage points, while the proportion of migrants' human capital consumption is lower than that of urban residents by 4.2 percentage points.

Table 5.2 Consumption patterns of migrants and urban residents

Consumption category	Migrants (1) (%)	Urban residents (2) (%)	(1)-(2) (%)
Food	53.6	48.8	4.8
Work-related	31.4	30.3	1.1
Facilities and services	6.4	8.0	-1.6
Human capital	8.7	12.9	-4.2
Total	100	100	0.0

Source: Authors' calculations from CULS (2010).

The analysis above reveals differences in the consumption levels and patterns of migrants and urban residents. Descriptive analysis, however, cannot reveal if these differences are significant. The consumption level and patterns of a household are affected by many factors, such as household income level, social security coverage rate of household members, household size, age structure of household members, gender of household head, age of household head and educational level of household head. Use of an econometric model enables better exploration of the determinants of consumption for migrants and urban residents.

## The determinants of consumption for migrants and urban residents

This section uses an econometric model to analyse the determinants of consumption for migrants and urban residents. Specifically, it examines whether there is a significant difference in consumption level, income elasticity of consumption and marginal consumption propensity between the two groups. The model utilised is ordinary least squares (OLS).

## Income elasticity of consumption for migrants and urban residents: Sub-sample analysis

The household is the unit of analysis. The dependent variable is the log of consumption per capita of a household. Income is the fundamental factor affecting consumption, which is first included among independent variables in the model. The rate of coverage of social security of household members is an important factor affecting consumption, which is also included in the model. In addition, household size, the age structure of household members, individual characteristics of the household head and city dummy variables are included in the model. The model is specified as follows (Equation 5.1).

#### Equation 5.1

$$\ln conpc = \alpha + \beta \ln incpc + \psi ssp + \gamma hhsize + \eta pold + \lambda HEAD + \phi CITY + u$$

In Equation 5.1, lnconpc is the log of consumption per capita of a household; lnincpc is the log of disposable income per capita of a household;  $\beta$  (the coefficient of lnincpc) is the income elasticity of consumption; ssp is the pension coverage rate of household members; hhsize is household size; pold is the proportion of household members aged 65 and above; HEAD is a vector of individual characteristics of the household head (including gender, age and years of schooling); CITY is a group of city dummy variables (the reference group is Shanghai); and u is the error term. The independent variables in the model are listed in Table 5.3.

Table 5.3 Independent variables in the model

Independent variable	Variable type	Explanation
Disposable income per capita	Continuous	Household disposable income per capita
Coverage rate of pension	Continuous	Coverage rate of pension among household members aged 16 and above
Household size	Continuous	Number of household members
Proportion of household aged 65 and above	Continuous	Proportion of household members aged 65 and above
Household head is female	Dummy	Household head is female=1; household head is male=0
Age of household head	Continuous	Age of household head
Years of schooling of household head	Continuous	Years of schooling of household head
Wuhan	Dummy	Wuhan=1, otherwise=0
Shenyang	Dummy	Shenyang=1, otherwise=0
Fuzhou	Dummy	Fuzhou=1, otherwise=0
Xi'an	Dummy	Xi'an=1, otherwise=0
Guangzhou	Dummy	Guangzhou=1, otherwise=0

Income level is the fundamental factor affecting consumption. Disposable income per capita is included in the model to capture the effect of income on consumption. The positive effect of income on consumption has been proven by previous studies (for example, Feldstein 1974; Song et al. 2010). We can expect that income has affected consumption positively.

The coverage rate of social security has also affected consumption (Munnell 1974; Zhang 2008). We include the pension coverage rate of household members aged 16 and above in the model to capture the effect of social security coverage on consumption, which could be mixed. On the one hand, people covered by social security might have more stable expectations of future income, which could increase current consumption. On the other hand, expenditure on social security reduces current disposable income, which could reduce current consumption.

Variables relating to household size and the age structure of household members could also affect consumption. Household size is included in the model to capture whether there are economies of scale in household consumption. The proportion of those aged 65 and above is included in the model to capture the effects on some categories of consumption. For example, households with a higher proportion of members aged 65 and above might have higher levels of consumption of health care and medical services and less consumption of education.

A vector of variables of individual characteristics of the household head, including gender, age and years of schooling, is included in the model. These are all important characteristics of the household head, which could affect consumption decisions. For example, households whose head has more years of schooling might have greater consumption. Finally, a group of city dummy variables is included to reflect the city where the sample points were collected: Wuhan, Shenyang, Fuzhou, Xi'an and Guangzhou. This captures the regional factors that could affect consumption, and takes Shanghai as the reference group. The descriptive statistics on the independent variables are in Table 5.4.

Table 5.4 Descriptive characteristics of migrants and urban residents

Independent variable	Migrants	Urban residents
Disposable income per capita (RMB)	19,559	20,995
Coverage rate of pension	0.11	0.70
Household size	2.29	2.89
Proportion of household aged 65 and above	0.01	0.16
Proportion of households whose head is female	0.33	0.31
Age of household head	35	52
Years of schooling of household head	9.7	11.1

Source: Authors' calculations from CULS (2010).

Table 5.5 presents the regression results. From the descriptive analysis, we saw that food consumption is an important part of total consumption, occupying about 50 per cent of total consumption. We thus run regressions on total consumption and food consumption. The R squared for all regression models is above 20 per cent, and the regression results are basically in line with our expectations.

Table 5.5 Income elasticity of consumption for migrants and urban residents (subsample)

Dependent variable:	Total co	nsumption	Food consumption	
Log of consumption per capita	Migrants	Urban residents	Migrants	Urban residents
Log of disposable income	0.247	0.279	0.189	0.201
per capita	(10.21)***	(18.35)***	(8.55)***	(14.29)***
Coverage rate of pension	0.109	0.020	0.078	0.002
	(2.89)***	(0.91)	(1.81)*	(0.09)
Household size	-0.033	-0.087	-0.053	-0.124
	(3.01)***	(11.74)***	(4.64)***	(16.17)***
Proportion of household	0.149	0.037	-0.094	0.045
aged 65 and above	(0.81)	(1.09)	(0.72)	(1.30)
Household head is	0.048	0.045	-0.006	0.031
female	(2.05)**	(2.84)***	(0.23)	(1.85)*
Age of household head	-0.004	-0.002	0.001	-0.000
	(3.60)***	(2.86)***	(0.63)	(0.17)
Years of schooling of	0.031	0.028	0.025	0.018
household head	(7.97)***	(11.47)***	(6.00)***	(6.99)***
City dummy variables	Omitted	Omitted	Omitted	Omitted
Constant term	6.515	6.559	6.507	6.852
	(25.49)***	(42.49)***	(26.86)***	(47.74)***
R squared	0.29	0.36	0.23	0.31
Number of observations	2428	4148	2428	4148

<sup>\*\*\*</sup> significant at 1 per cent.

Note: t statistics in parentheses.

Source: Authors' calculations from CULS (2010).

The dependent variable of the model is log of consumption per capita. The coefficient of log of disposable income per capita is income elasticity of consumption. The income elasticity of total consumption for migrants is 0.247, which indicates that, if migrants' income per capita increases by 1 per cent, 0.247 per cent of this will be used for consumption. Similarly, the income

<sup>\*\*</sup> significant at 5 per cent.

<sup>\*</sup> significant at 10 per cent.

elasticity of food consumption for migrants is 0.189, which indicates that, if migrants' income per capita increases by 1 per cent, 0.189 per cent of this will be used for food consumption. For migrants and urban residents, both income elasticity of total consumption and income elasticity of food consumption are significantly positive.

The pension coverage rate has a positive effect on both total consumption and food consumption for migrants, but almost no effect on total consumption and food consumption for urban residents. This implies that pension coverage expansion would promote migrants' consumption. This is consistent with conclusions of the existing literature (for example, Feldstein 1974; Munnell 1974). Therefore, expanding pension coverage is an important way to promote migrants' consumption.

Household size has a negative effect on total consumption and food consumption for both migrants and urban residents. This indicates that total consumption per capita and food consumption per capita are lower in larger households. This suggests that households enjoy economies of scale in total consumption and food consumption. For example, the coefficient on household size for migrants' total consumption is -0.033, which indicates that migrants' total consumption per capita decreases by 3.3 per cent with one additional household member. The coefficient of household size for migrants' food consumption is -0.053, which indicates that migrants' food consumption per capita decreases by 5.3 per cent with each additional household member.

Compared with households whose heads are males, in households whose heads are females total consumption per capita is higher, for both migrant and urban households. The age of the household head has a consistent effect also, but this is negative, which indicates that the total per capita consumption of households whose head is older is less. The age of the household head does not, however, have a significant effect on food consumption.

The years of schooling of the household head have a positive effect on total consumption and food consumption, for both migrants and urban residents. This indicates that, after controlling for other factors, total consumption per capita and food consumption per capita of households whose heads have had more years of schooling are higher for both migrants and urban residents. Therefore, improving educational levels is an important way to promote consumption.

## Income elasticity of consumption for migrants and urban residents: Pooled sample

As has been pointed out, due to the different characteristics of migrants and urban residents, migrant attitudes to consumption could be different from those of urban residents. In order to examine this prospective difference, we pool the samples of migrants and urban residents and add a dummy variable, M (M=1 if migrant, M=0 otherwise) to run the regressions. This model is specified as follows (Equation 5.2).

#### Equation 5.2

$$\ln conpc = \alpha + \sigma M + \beta \ln incpc + \psi ssp + \gamma hhsize + \eta pold + \lambda HEAD + \phi CIT$$

Furthermore, to examine for any difference in the income elasticity of consumption of migrant and urban residents, we add a term  $(M^*lnincpc)$  to Equation 5.2, which is the interaction of M and the log of disposable income per capita, forming Equation 5.3.

#### Equation 5.3

$$\ln conpc = \alpha + \sigma M + \beta \ln incpc + \omega M * \ln incpc + \psi ssp + \gamma hhsize + \eta pold + \lambda HEAD + \phi CITY + u$$

If the coefficient of the interaction term ( $\omega$ ) is significant, it means there is a difference in income elasticity of consumption between migrants and urban residents. Positive  $\omega$  means the income elasticity of consumption for migrants is higher than for urban residents, and negative  $\omega$  means the income elasticity of consumption for migrants is lower than for urban residents.

The regression results of Equations 5.2 and 5.3, which use pooled samples of migrants and urban residents on total consumption per capita and food consumption per capita, respectively, are shown in Table 5.6. The regressions results are basically in line with our expectations.

For Equation 5.2, we focus on the dummy variable M. The coefficient of M is negative for both total consumption and food consumption. This means that, compared with urban residents, for migrants, total consumption per capita and food consumption per capita are both less. Specifically, total consumption per capita for migrants is lower than for urban residents by 24.4 per cent, and food consumption per capita for migrants is lower than for urban residents by 14.5 per cent.

In Equation 5.3, we focus on the interaction term of M and log of disposable income per capita. If the coefficient of the interaction term is significant, it means there is a difference in the income elasticity of consumption of migrants and urban residents. The regression results show that the coefficient of the

interaction term is not significant for total consumption and food consumption, which means there is no difference in income elasticity of consumption between migrants and urban residents.

Table 5.6 Income elasticity of consumption for migrants and urban residents (pooled sample)

Dependent variable:	Equati	on 5.2	Equation	on 5.3
Log of consumption per capita	Total consumption	Food consumption	Total consumption	Food consumption
Migrant	-0.244	-0.145	0.106	-0.000
	(12.47)***	(7.14)***	(0.45)	(0.00)
Log of disposable	0.266	0.195	0.281	0.201
income per capita	(19.93)***	(16.03)***	(19.29)***	(14.94)***
Interaction term			-0.036	-0.015
			(1.48)	(0.67)
Coverage rate of pension	0.046	0.023	0.047	0.024
	(2.50)**	(1.21)	(2.55)**	(1.24)
Household size	-0.064	-0.094	-0.065	-0.094
	(10.37)***	(14.50)***	(10.41)***	(14.49)***
Proportion of household	0.076	0.058	0.072	0.056
aged 65 and above	(2.41)**	(1.80)*	(2.25)**	(1.73)*
Household head is	0.047	0.015	0.047	0.014
female	(3.58)***	(1.01)	(3.57)***	(1.00)
Age of household head	-0.003	0.000	-0.003	0.000
	(4.25)***	(0.58)	(4.32)***	(0.56)
Years of schooling of	0.030	0.021	0.029	0.020
household head	(14.49)***	(9.52)***	(14.29)***	(9.39)***
City dummy variables	n.a. <sup>1</sup>	n.a.	n.a.	n.a
Constant term	6.605	6.748	6.473	6.694
	(47.86)***	(52.13)***	(44.05)***	(48.73)***
R squared	0.36	0.28	0.36	0.28
Number of observations	6576	6576	6576	6576

Notes: t statistics in parentheses.

Source: Authors' calculations from CULS (2010).

<sup>&</sup>lt;sup>1</sup> n.a. = not applicable.

\*\*\* significant at 1 per cent.

\*\* significant at 5 per cent.

\* significant at 10 per cent.

## Marginal consumption propensities for migrants and urban residents: Sub-sample

In the previous sections, we discussed income elasticity of consumption for migrants and urban residents. In addition, we would like to understand the marginal propensity to consume of the two groups. From Equation 5.1, if both log of consumption per capita and log of disposable income per capita are changed to their original values but other variables remain as they are, Equation 5.4 is formed as follows, in which the coefficient of disposable income per capita  $(\beta)$  is marginal consumption propensity (Equation 5.4).

#### Equation 5.4

$$conpc = \alpha + \beta incpc + yssp + \gamma hhsize + \eta pold + \lambda HEAD + \phi CITY + u$$

We run regressions on migrants and urban residents respectively, using Equation 5.4. The regression results are shown in Table 5.7 and are basically in line with our expectations. We focus on the variable capturing disposable income per capita and its coefficient, the marginal consumption propensity. We do not discuss results of other independent variables in detail.

Table 5.7 Marginal consumption propensities of migrants and urban residents (sub-sample)

Dependent variable:	Total consumption		Food consumption	
Consumption per capita	Migrants	Urban residents	Migrants	Urban residents
Disposable income per	0.161	0.102	0.065	0.024
capita	(5.64)***	(3.23)***	(4.16)***	(2.75)***
Coverage rate of pension	1,214.369	71.024	774.982	40.777
	(1.50)	(0.18)	(1.54)	(0.18)
Household size	-426.084	-1,314.904	-406.435	-945.193
	(2.54)**	(8.37)***	(5.23)***	(9.88)***
Proportion of household	1,556.470	935.788	-558.701	404.275
aged 65 and above	(1.18)	(1.55)	(1.01)	(1.32)
Household head is female	282.475	368.961	-19.287	-52.010
	(0.75)	(1.34)	(0.12)	(0.37)
Age of household head	-71.971	-24.857	-13.790	-0.897
	(4.14)***	(1.84)*	(1.56)	(0.11)
Years of schooling of household head	221.350	390.871	96.130	135.229
	(4.15)***	(7.09)***	(3.32)***	(6.26)***
City dummy variables	Omitted	Omitted	Omitted	Omitted

Dependent variable:	Total consumption		Food consumption	
Consumption per capita	Migrants	Urban residents	Migrants	Urban residents
Constant term	7,424.812	10,555.847	4,425.996	7,309.175
	(5.38)***	(9.29)***	(5.53)***	(11.54)***
R squared	0.19	0.22	0.19	0.14
Number of observations	2428	4148	2428	4148

<sup>\*\*\*</sup> significant at 1 per cent.

Notes: t statistics in parentheses.

Source: Authors' calculations from CULS (2010).

The marginal propensities of total consumption and food consumption are positive for both migrants and urban residents. The marginal propensity of total consumption for migrants is 0.161, which means that RMB0.161 is used for total consumption if migrants' disposable income per capita increases by RMB1. Marginal propensity of food consumption for migrants is 0.065, which means that RMB0.065 is used for food consumption if migrants' disposable income per capita increases by RMB1.

### Marginal consumption propensities of migrants and urban residents: Pooled sample

To further examine marginal propensity of consumption, we pool together the samples of migrants and urban residents and add a dummy variable (M) to examine the differences in consumption of migrants and urban residents to Equation 5.4, which forms Equation 5.5.

#### Equation 5.5

$$conpc = \alpha + \sigma M + \beta incpc + \psi ssp + \gamma hhsize + \eta pold + \lambda HEAD + \phi CITY + u$$

In order to examine whether there is a difference in the marginal consumption propensities of migrants and urban residents, we add a term  $(M^*incpc)$  to Equation 5.5, which is the interaction of M and disposable income per capita, forming Equation 5.6. If the coefficient of the interaction term  $(\omega)$  is significant, this means there is a difference in marginal consumption propensities between migrants and urban residents. A positive  $\omega$  means that the marginal consumption propensity for migrants is higher than for urban residents, while a negative  $\omega$  means that the marginal consumption propensity of migrants is lower than that of urban residents.

<sup>\*\*</sup> significant at 5 per cent.

<sup>\*</sup> significant at 10 per cent.

#### Equation 5.6

 $conpc = \alpha + \sigma M + \beta incpc + \omega M * incpc + y ssp + y hhsize + \eta pold + \lambda HEAD + \phi CTTY + u$ 

The regression results of Equations 5.5 and 5.6 are shown in Table 5.8. We use pooled samples of migrants and urban residents to run regressions on total consumption per capita and food consumption per capita, respectively. The regression results are basically in line with our expectations.

Table 5.8 Marginal consumption propensities of migrants and urban residents (pooled sample)

Dependent variable:	Equati	on 5.5	Equation 5.6	
Consumption per capita	Total	Food	Total	Food
Migrant	-2,500.342	-750.115	-3,473.584	-1,537.236
	(7.32)***	(3.87)***	(4.38)***	(5.04)***
Disposable income per	0.119	0.035	0.107	0.026
capita	(4.16)***	(3.36)***	(3.32)***	(2.85)***
Interaction term			0.044	0.036
			(1.12)	(2.14)**
Coverage rate of pension	446.476	331.065	352.477	255.042
	(1.24)	(1.52)	(1.01)	(1.26)
Household size	-964.451	-738.352	-945.096	-722.699
	(7.73)***	(11.20)***	(8.05)***	(11.28)***
Proportion of household	1,316.799	521.165	1,413.048	599.008
aged 65 and above	(2.35)**	(1.93)*	(2.55)**	(2.22)**
Household head is female	237.770	-108.936	262.247	-89.140
	(1.08)	(0.96)	(1.19)	(0.79)
Age of household head	-39.120	-3.900	-39.296	-4.043
	(3.68)***	(0.63)	(3.71)***	(0.66)
Years of schooling of	333.261	119.996	340.017	125.460
household head	(7.81)***	(6.34)***	(7.95)***	(7.01)***
City dummy variables	Omitted	Omitted	Omitted	Omitted
Constant term	10,162.353	6,397.481	10,338.443	6,539.897
	(9.91)***	(11.39)***	(10.01)***	(12.17)***
R squared	0.22	0.15	0.22	0.16
Number of observations	6576	6576	6576	6576

<sup>\*\*\*</sup> significant at 1 per cent.

Notes: t statistics in parentheses.

Source: Authors' calculations from CULS (2010).

<sup>\*\*</sup> significant at 5 per cent.

<sup>\*</sup> significant at 10 per cent.

In Equation 5.5, we focus on the dummy variable M. The coefficient of M is negative for both total consumption and food consumption. This means that, compared with urban residents, for migrants, total consumption per capita and food consumption per capita are both less.

In Equation 5.6, we focus on the interaction term of M and disposable income per capita. If the coefficient of the interaction term is significant, it means there is a difference in marginal consumption propensity between migrants and urban residents. The regression results show that the coefficient of the interaction term is not significant for total consumption; however, the coefficient of the interaction term is significant and positive for food consumption. This means that there is no difference in the marginal propensities of total consumption between migrants and urban residents, but the marginal propensity of food consumption for migrants is higher than for urban residents.

# Consumption potential of migrants: Taking urban residents as a reference group

The analysis above informs us that across all categories of consumption migrant consumption is lower than that of urban residents. After controlling for other factors, however, there is no significant difference in the marginal propensity of total consumption between migrants and urban residents, but the marginal propensity of food consumption for migrants is higher than for urban residents. Since migrant incomes have been increasing rapidly in recent years, we can expect that, if migrants are able to enjoy resident rights in terms of access to services and facilities, social security and so on in their adopted urban home, their consumption potential is huge.

To estimate how huge, we assume that migrants will follow the same consumption patterns as urban residents when they have access to the same rights and benefits. We can use the regression model of consumption for urban residents (Equation 5.4) to calculate the consumption of migrants under that assumption (Table 5.9).

If migrants consume like urban residents, their consumption level will become similar to that of urban residents. Examining by category, we find that migrants' estimated consumption of food and of facilities and services will be very similar to those of urban residents. Estimated work-related consumption for migrants will be higher than that of urban residents, by 9.1 per cent. Meanwhile, the estimated human capital consumption for migrants will be much lower—28.4 per cent lower—than that for urban residents.

Table 5.9 Estimation of consumption potential of migrants

Category	Estimation for migrants (1) (RMB)	Urban residents (2) (RMB)	(1)-(2) (RMB)	(1)-(2)/(2)*100 (%)
Food	5,393	5,416	-23	-0.4
Work-related	3,674	3,367	307	9.1
Facilities and services	868	888	-20	-2.3
Human capital	1,026	1,433	-407	-28.4
Total	10,960	11,104	-144	-1.3

Note: Estimates for migrants refer to migrants' yearly consumption per capita if they follow the same paths to consumption as urban residents.

Source: Authors' calculations from CULS (2010).

If migrants consume the same as urban residents, their consumption will increase by a large extent—compared with their actual consumption (Table 5.10). Specifically, total consumption per capita of migrants will increase by RMB2,333, or by about 27 per cent. Food consumption will increase by 16.7 per cent, which is the lowest increase among all categories of consumption. Work-related consumption and human capital consumption will increase by 35.7 per cent and 37.3 per cent, respectively. Facilities and services consumption will increase by a massive 56.7 per cent.

Table 5.10 Consumption per capita of migrants: Actual and estimated

Category	Estimated (1) (RMB)	Actual (2) (RMB)	(1)-(2) (RMB)	(1)-(2)/(2)*100 (%)
Food	5,393	4,620	773	16.7
Work-related	3,674	2,707	967	35.7
Facilities and services	868	554	314	56.7
Human capital	1,026	747	279	37.3
Total	10,960	8,627	2,333	27.0

Note: 'Estimated' refers to migrants' yearly consumption per capita if they follow the same paths to consumption as urban residents. 'Actual' refers to migrants' actual yearly consumption per capita. Source: Authors' calculations from CULS (2010).

A monitoring survey of migrants conducted in 31 provinces by the National Bureau of Statistics of China (NBS) shows that the number of those having migrated beyond their home township for a period longer than six months reached 145 million in 2009 (DRS NBS 2014). Our analysis shows that migrants' yearly consumption per capita is RMB8,627. Total consumption of migrants was thus RMB1.251 trillion in 2009.

Similarly, our analysis finds that if migrants consume the same as urban residents, their consumption per capita will increase by RMB2,333. The total consumption of migrants will also increase, by RMB338.3 billion, and reach RMB1.589 trillion. Since GDP was RMB34.090 trillion in 2009, total consumption of migrants thus occupied 4.7 per cent of GDP.

Estimation of migrants' consumption potential in this chapter is based on the assumption that migrants' characteristics remain as they are. The regression results show that income, pension coverage and educational level can promote migrants' consumption levels. For migrants, income has been increasing rapidly, pension coverage has been expanding and the educational level has been improving in recent years. If improvements in these aspects are considered, the potential consumption of migrants is more substantial.

### Conclusions and policy suggestions

This study used China Urban Labour Survey data from 2010 to compare the consumption level and patterns of migrants and urban residents. It analysed the determinants of consumption and examined the income elasticity of consumption and the marginal propensity to consume of the two groups. Using the regression results, it estimated the consumption potential of migrants under the assumption that migrants achieve full residency and access rights in their adopted home and that their characteristics are otherwise unchanged.

This study shows that migrants' total consumption per capita is 22 per cent lower than that of urban residents. The income elasticity of total consumption and the income elasticity of food consumption are positive for both migrants and urban residents. There is no difference between the two groups in income elasticity of total consumption and income elasticity of food consumption.

Factors affecting consumption include pension coverage, which has a positive effect on total consumption per capita and food consumption per capita for migrants. Household size negatively affects total consumption and food consumption per capita, for both migrants and urban residents, possibly due to scale effects. The years of schooling of the household head affect total consumption and food consumption per capita positively for both migrants and urban residents. The marginal propensities of total consumption and of food consumption are positive for both migrants and urban residents. There is no significant difference between migrants and urban residents in the marginal propensity of total consumption. The marginal propensity of food consumption is higher for migrants than for urban residents.

If migrants are granted equivalent status and consume the same as urban residents, and other characteristics are held constant, total migrant consumption per capita will increase by 27 per cent—to a level similar to that of urban residents. The regression results suggest that increases in income, pension coverage and educational attainment can promote migrant consumption.

Through the urbanisation process of recent years, these characteristics have been improving rapidly for migrants. The combination of implied changes in consumption levels that would be enabled through improvements in areas of these demographic characteristics could in turn produce an enormous lift to aggregate consumption—that is, migrants have the potential to become a huge emerging consumer group and to play an important role in boosting domestic demand and promoting China's economic development.

Therefore, granting migrants full residency rights, such as access to education, health care and social security, is not only an important task and challenge of urbanisation, but also appears to be an intrinsic requirement for China's economic development. In recent years, China has made great efforts to provide more and better public services and social welfare for migrants (Cai 2011b; China Development Research Foundation 2010). Several documents have been issued to elaborate issues concerning rural-to-urban migrants since 2014. Continued promotion of migrant livelihoods is crucial to further tap the economic benefits of their consumption potential.

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