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Understanding Chinese consumption: The impact of hukou

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Christian Dreger, Tongsan Wang and
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Understanding Chinese consumption: The impact of hukou



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Christian Dreger, Tongsan Wang and Yanqun Zhang

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Abstract

Capital investment and exports have driven China's remarkable economic growth for decades, but recent trends have put pressure on the government to move to a more consumption-driven model of growth. Unfortunately, China's institutional framework does little at the moment to spur household consumption. While the country's weak social security setup and highly regulated financial markets are routinely cited as disincentives to private consumption, the role of the *hukou* household registration system in depressing consumption gets less attention. Controlling for income levels on datasets from 2002 and 2007, we show the average propensity to consume is significantly lower for internal migrants to cities. Official figures suggest that China in 2013 had about 260 million internal migrants. These individuals are often separated from their families for long periods and denied access to public services in the cities where they work. The government's current urbanization strategy calls for increasing migrant populations in cities, which, in the absence of *hukou* reform, is likely to further dampen consumption.

Keywords: Chinese private consumption, urbanization strategy, hukou system

JEL: E21, O15, R23

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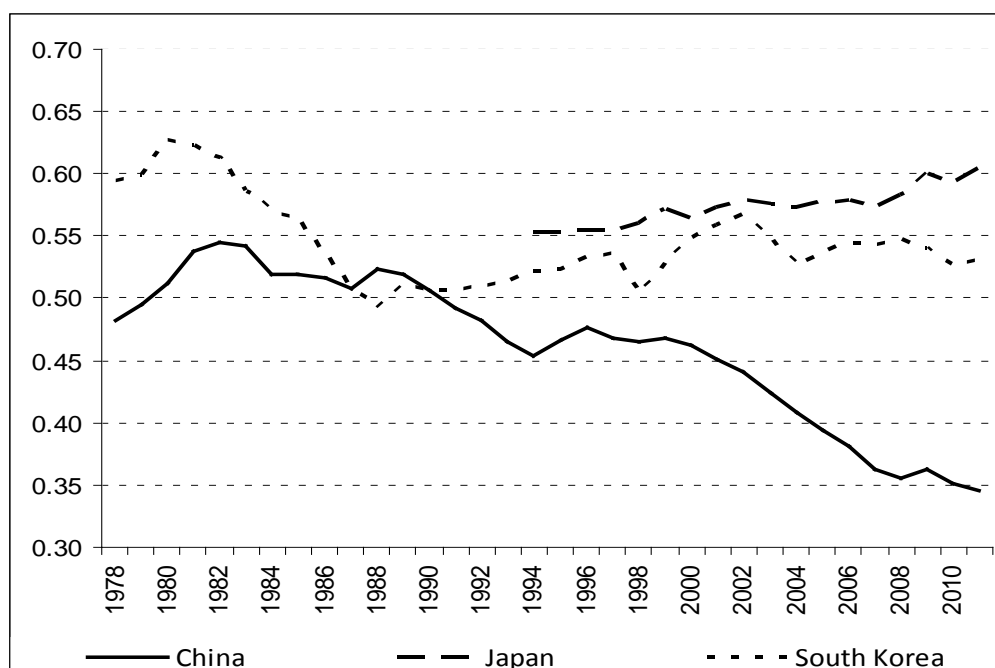
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1 Introduction

China has transformed itself in recent decades from a predominantly agricultural country to the global hub of manufacturing. In PPP-adjusted terms, the world's second largest economy now accounts for about 15 % of global GDP. This era of historically unprecedented sustained average annual GDP growth seems to have reached its end, however. Faced with falling export demand during the recent financial crisis, the Chinese government launched a huge fiscal stimulus package (Dreger and Zhang, 2011). While the stimulus helped sustain capital investment and economic growth, it also exacerbated internal imbalances. State-owned banks, tasked with channelling stimulus funds into the broad economy, largely lent to state-owned enterprises and local governments. As this lending was politically motivated in many cases, China now potentially faces a substantial rise in the stock of non-performing loans as credit provided under the stimulus program comes due.¹ Indeed, government debt is rising at the moment, especially at the provincial and local administration levels. State-backed investment projects have made overcapacity problems worse in some industries.

Figure 1 Private consumption in East Asian countries, share of GDP, %



Source: OECD Main Economic Indicators

¹ In the years prior to the financial crisis, banks made considerable progress in reducing the amount of bad loans on their balance sheets. See Allen, Qian, Zhang and Zhao (2012).

To get to a sustainable growth path, China needs to adopt forward-looking policies that reduce imbalances both internal and external. While the new leadership has responded to this challenge by promoting policies designed to boost the role of private demand in driving GDP growth, getting private households to increase their consumption spending calls for a reversal of the current trend. Chinese export and investment growth has consistently outpaced the expansion of private consumption for decades. In 2012, consumption had dwindled to just 35 % of GDP – the lowest level of any East Asian country (Figure 1). More alarming perhaps is that most of deterioration in the consumption trend has occurred since the turn of the millennium.

The current institutional setup discourages consumption and promotes saving (i.e. postponed consumption). Savings are at record levels, reflecting China's inadequate social security safety net and the profound impacts of the one-child policy on retirement plans. Credit constraints in China's highly regulated financial markets make matters worse. Thus, the government's goal of shifting from an investment-led paradigm to consumption-led growth cannot succeed without structural reform.

The current five-year plan, launched in 2011, calls for increasing the pace of urbanization to promote further transformation of the Chinese economy. On its surface, such policy should stimulate private consumption as cities provide greater opportunities for consuming than rural areas. However, the *hukou* system of household registration counters attempts to foster consumption-led growth in cities. Official figures put the total pool of migrants at around 260 million, and that migration to distant cities applies to about 160 million within that group.² Migrants often find themselves separated from family and shut out from access to public services in the cities where they work. Their second-class status forces them to save more of their income to deal with potential risks.

Our analysis, based on a large data set of urban households and migrants, reveals the profound impact of the *hukou* institution on consumption demand. It accounts for about half of the decline in the consumption ratio over our observation period. Thus, there is a tangible risk that China's current urbanization strategy will increase the number of mi-

² The true number of migrants is difficult to quantify. Official NBS figures based on 2010 population census and annual sample surveys conducted since suggest the migrant population numbered around 260 million people in 2013. Of these, some 100 million commuted to work in nearby cities. The remaining 160 million consisted mainly of single individuals who had moved to a distant city and left family members behind (*hukou* makes access to public schools and day-care for migrant children particularly problematic). There was also a much smaller contingent of migrants who moved with their entire family despite the challenges. Even if official estimates were off by, say, 20 million, the affected population would still be over 10 % of the population.

grants affected by *hukou* restrictions and defeat measures to promote consumption-led growth.

The rest of the paper is organized as follows. The literature on private savings and consumption is reviewed in section 2, and basic principles of the *hukou* system and migration trends are discussed in section 3. Section 4 describes the data and presents our empirical results on consumption behaviour of urban citizens and migrants. Finally, section 5 provides some policy conclusions.

2 Chinese consumption and savings behaviour

High savings rates are typical in East Asian countries. They reflect cultural and religious norms that encourage restraint, thrift, self-discipline and modesty. Family ties are strong and intergenerational altruism is expected. Children support elderly parents and grandparents help bring up grandchildren. Even from the Asian perspective, however, the Chinese obsession with saving is exceptional. Overall savings rose from 37 % to 53 % of GDP over the last decade – the highest rate in the world (Ma and Yang, 2013). Yang (2012) notes the rise in household savings to 25 % of GDP was the biggest contributor to this increase. Moreover, the phenomenon is not linked to low-income dynamics; Chinese wages increased faster than GDP over the period.

Moreover, the rise in the household saving rate is difficult to reconcile with standard models of intertemporal consumption behaviour. When permanent income is high, households are expected to borrow against future income to smooth consumption. The result is a normal bell-shaped profile of savings over the life cycle. Young workers save little as they anticipate future higher incomes as their careers advance. Saving rates peak in middle age as wage earners pay down loans, enjoy solid income and good health. With retirement, income declines and health expenditures rise. In contrast, a U-shaped pattern of savings is observed for China. Younger and older cohorts, in particular, save heavily (Chamon and Prasad, 2008).

To understand the savings behaviour of private households in the Chinese context, we must consider the role of social security. Income gains in China have often come with increased uncertainty (Blanchard and Giavazzi, 2005). For example, many households were formerly covered under the “the iron rice bowl” of job security and cradle-to-grave benefits provided by state-owned enterprises. This ended with pension reform in the 1990s.

The one-child policy further reinforced the need for savings to cover expenses for health and retirement. Feng, He and Sato (2011) argue that the decline in the replacement ratio since the 1990s pension reform stimulated savings rates, especially among younger members of the labour force. If the state were to provide more comprehensive social security arrangements, it would likely reduce private saving rates. Barnett and Brooks (2010) assert that increasing public health expenditures would boost consumption, especially in urban areas.

On the other hand, pension reforms were largely in place by 1995, so they do not fully explain the sharp rise in the savings rate after 2000.

Wei and Zhang (2011) suggest some of the increase in the savings rate may relate to the gender imbalance created by the one-child policy. Lower female births increase competition for brides in the marriage market. Parents of a boy may save in an attempt to increase the marital prospects of their son.

Liquidity constraints have also been suggested as a driver of the high savings rate. Borrowing restrictions like those in China and many other countries with underdeveloped financial markets, limit the possibilities of individuals and certain firms from borrowing against future income and thereby keep the marginal utility of consumption constant. As households are unable to obtain sufficient credit from banks at the optimal point in their life, they are forced instead to save for their big-ticket purchases. This phenomenon can be observed in the Chinese housing market, where owning real estate has become increasingly important. Renters or owners of poor-quality residences must save more if they hope to catch up with rising real estate prices of homes, while owners of prime properties see their wealth buoyed by the housing market (Chamon and Prasad, 2010). Wu and Xie (2013) report a positive relationship between housing prices and savings for owners of less desirable properties. Because of the low interest rates on bank deposits, housing is seen as providing a better return than other assets (Fawley and Wen, 2013). This may explain why apartments in cities are often sold before they are completed and why apartments remain unoccupied for long periods despite demand. In this vein, the Chinese housing boom reflects the desire of households to seek investments that act as stores of wealth. There is also evidence of some reverse causality, but the effects of housing prices on the savings rate seem to be rather modest (Wang and Wen, 2012).

Only a few studies highlight the dissimilarities of urban and rural consumption behaviours, yet urban households account for 75 % of aggregate private consumption.

Cristadoro and Marconi (2011) argue that urban (not rural) consumers drive the rise in the savings rate due to their precautionary behaviour, liquidity constraints and insufficient social security. Analysing the effects of remittances on savings in rural areas, Zhu, Wu, Wang, Du and Cai (2011) find that migrants save less than rural non-migrants. Thus, remittances are insufficient to reach the level of capital accumulation needed for country residents to catch up with their urban counterparts. Chen, Lu and Zhong (2012) calculate that migrants without *hukou* rights have a 30-percentage-point-lower marginal propensity to consume out of income than urban residents.

We believe the distinguishing among consumption and savings behaviour of urban households, rural households and migrants is the first step in understanding China's future growth potential. It appears the *hukou* institution is a big factor in shaping these differences.

3 The *hukou* institution and urbanization trends

China's *hukou* household registration system creates two societies living side by side. In every city you will find urban residents with local *hukou*, and migrants without it. The former are favoured in resource allocation.³ People without urban *hukou* are excluded from many public-sector jobs and have limited access to social insurance and other welfare such as low rent housing. Children of migrants are often not allowed to enrol in urban public schools, so they must live with their grandparents or other relatives to attend school in their hometown or village.

The government established the *hukou* system after the communist revolution to control migration from the rural to urban areas (Cheng and Selden, 1994). Barriers to migration have been gradually been reduced since then to encourage higher rural mobility after the abolition of large, inefficient agricultural collectives (Chan and Buckingham, 2008). Under the current setting, rural residents can register their temporary residency to legalize their work in cities. Furthermore, the inheritance of *hukou* rights has broadened to allow succession through the lines of father and mother, which corrected the former disadvantage against rural women.

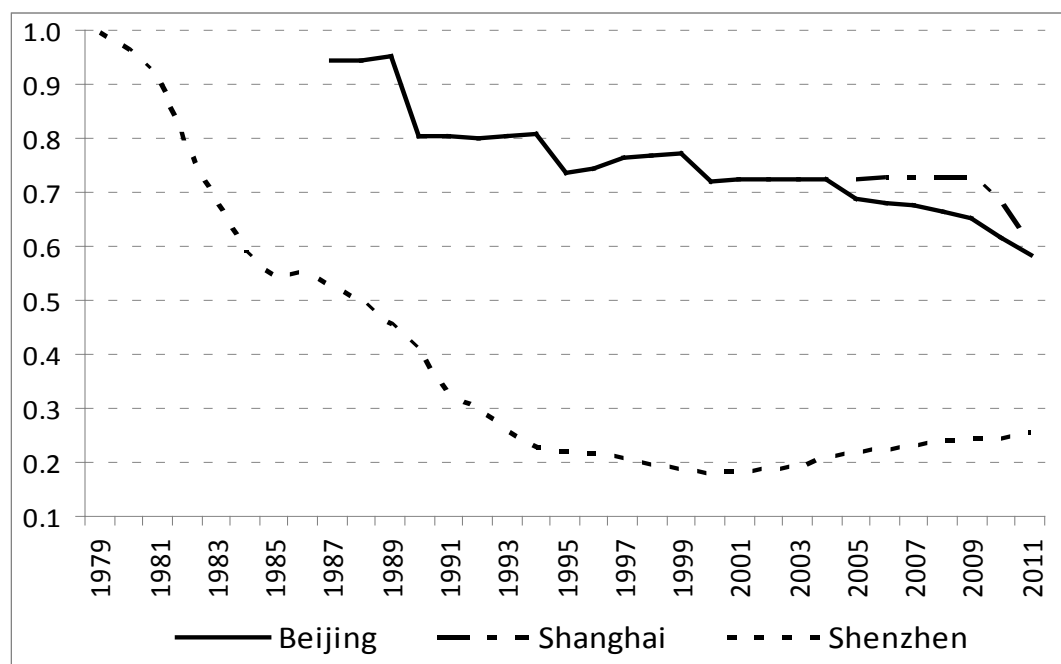
³ See Naughton (2007) for a detailed discussion of the *hukou* system.

Many Chinese still live outside their officially registered regions and thus lack access to many public services. Past reforms replaced the old system of an agricultural and non-agricultural *hukou* with status based on the location of permanent residence. Local governments were allowed to decide levels of *hukou* and non-*hukou* migration for their respective administrative jurisdictions, including the possibility of using permanent *hukou* rights as a way to raise fiscal revenues.⁴ Many cities were permitted to define their own entry criteria. The current practice is directed towards the rich and largely irrelevant for ordinary peasants. Non-*hukou* holders are tolerated as temporary migrants, although many live and work in the same city for many years. Governments have incentive to limit *hukou* access as it reduces their social security spending obligations. Hence, the success of hukou reforms might depend on prior fiscal reforms, including a redistribution of revenues between local and central governments.

Huge shifts in labour from rural to urban areas underpin the Chinese transformation. Since the onset of economic reforms in 1978, China's population has risen from about 975 million to 1.385 billion today. The urban population has increased by about 500 million, while there has been a net loss in the countryside. Currently, 51 % of Chinese live in urban municipalities, compared to 18 % at the onset of reforms. At the same time, the share of urban residents with urban *hukou* has decreased. The evidence is not homogenous across regions, however (see Figure 2). In Beijing and Shanghai, 60 % of the population possess urban *hukou* status, down from 70 % in 2005. The decline has been more pronounced in special economic zones that have been drivers of export growth. For example, the ratio fell to 20 % in Shenzhen by the end of the 1990s.⁵ In the absence of institutional change, stronger urbanization can reinforce this trend in the future, especially in large cities such as Beijing and Shanghai. Lower consumption of non-*hukou* households could impede the Chinese economy's progress towards a consumption-led growth model.

⁴ Urban *hukou* is usually provided indirectly, although specific practices vary across cities. Firms, for example, get a *hukou* quota in Beijing when their taxes exceed a certain level. People get hukou status in many cities automatically if they buy a house or apartment.

⁵ Shenzhen, which is next to Hong Kong, saw the share of residents with *hukou* status start to decline soon after reforms began. In the early decades of reform, people who visited or lived in the city needed a special document issued by the Domestic Security Bureau. As a result, rather long time series are available for this area. In more recent years, regulations on living in the city have gradually been relaxed.

Figure 2 Urban *hukou* holders as a share of urban population

Source: National Statistical Bureau of China

4 *Hukou* and consumption behaviour

Our evidence is based on the huge microeconomic dataset gathered by the Chinese Household Income Project (CHIP) in collaboration with the Chinese Academy of Social Sciences (CASS). CHIP was designed and implemented to measure the distribution of income and related economic factors in urban and rural areas (Li, 2009). Information includes economic situation such as employment status, sources of income, assets, consumption and sociodemographic characteristics such as family status, age, education and ethnicity. CHIP provides distinct samples of urban households and migrants selected from larger samples drawn by the National Statistical Bureau. Due to limitations of the data, rural households are excluded from our analysis.

Data are collected at five-year intervals through questionnaires in repeated cross-sections. As no panel structure is provided, households cannot be linked over time. In the following, the last two available waves are considered: 2002 and 2007. The 2002 survey is based on nearly 7,000 urban households, who have urban *hukou* rights, and some 2,000 migrant households, who have rural *hukou*. In the 2007 dataset, both types of households are equally represented (5,000 each). Information is also available for individual household

members. To aggregate the data to the household level, variables such as income are cumulated over household members. Sociodemographic variables are determined by the characteristics of the household head. A few variables need to be transformed to match the requirements of the study. Most important, remittances from migrants are reported as savings. As the families of migrants in the rural areas spend some of these remittances, they are essentially reallocated to increase consumption, and treated as consumption of migrants. The monetary value of gifts is treated in a similar fashion. Due to missing data, a small fraction of households (less than 3 %) is excluded from further analysis. The descriptive statistics are provided in the Table 1.

Table 1 Descriptive statistics of the variables

	Migrant 2002				Urban 2002			
variable	Obs	mean	median	Std. err.	Obs	mean	median	Std.err.
Y	2001	16416.2	13200	16224.1	6833	24406.2	20932	15367.4
PC	2001	11417.9	9770	8067.3	6837	18168.7	15060.9	12836.0
EDUC	1998	8.14	8	2.74	6834	10.71	11	3.32
AGE	1998	35.80	35	9.08	6835	47.95	47	11.15
	Migrant 2007				Urban 2007			
variable	Obs	mean	median	Std. err	Qbs	mean	median	Std. err
Y	4978	26267.4	20400	23256.1	5014	57805.2	45200	50107.7
PC	4978	22157.7	16400	26743.2	4949	49931.8	33312	411520.5
EDUC	5007	9.16	9	2.60	4899	11.19	11	3.74
AGE	5007	30.50	28	10.28	5014	48.69	48	12.86

An ordinary consumption function serves as a point of departure (Deaton and Muellbauer, 1999). Income and further variables describing the framework conditions under which the household operates are used to explain private consumption behaviour. Of the characteristics available, only the age profile, years of education, and the number of persons in the household appear to be significant. Other characteristics (e.g. gender, family status, occupation, membership in the communist party and ownership of firms) can be safely ignored when explaining consumption behaviour.

$$c = \beta_0 + \beta_1 y + \beta_2 hukou + \beta_3 size + \beta_4 age + \beta_5 edu + \beta_6 edu^2 + \varepsilon_i \quad \text{eq(1)}$$

Of which c and y are the log of household consumption and income, respectively, $hukou$ is the dummy for hukou rights, $size$ is the number of household member, and age and edu are the age and education years of household head, respectively. Due to the potential presence of outliers, quantile regression techniques are used. Specifically, the sum of absolute deviations from the median is minimized. The regressions are run separately for urban (columns 1–2) and for migrant (columns 3–4) households. The results reported in Table 2 show the most important variable driving private consumption expenditures by far is income. The marginal propensity to consume (MPC) seems to be in a reasonable range. About 75 % to 85 % of additional income is spent for consumption (see Table 1). The MPC is higher for migrants, implying that the same income stimulus can generate larger expansionary effects for these households. The parameter has slightly decreased between 2002 and 2007, both for urban households and migrants. Consumption apparently adjusted gradually to high income growth.

Table 2 Determinants of private consumption in China

	Urban households		Migrant households	
	2002	2007	2002	2007
Income	0.842 (0.007)	0.766 (0.008)	0.862 (0.010)	0.828 (0.010)
Size	0.020 (0.005)	0.051 (0.006)	0.060 (0.006)	0.060 (0.008)
Age	0.015 (0.002)	0.014 (0.003)	0.008 (0.005)	0.023 (0.004)
10*Age ²	-0.001 (0.000)	-0.002 (0.000)	-0.001 (0.000)	-0.003 (0.001)
Education	0.008 (0.001)			
Constant	0.902 (0.086)	1.858 (0.114)	0.782 (0.110)	0.968 (0.108)
NOBS	6830	4823	1997	4900
Pseudo-R2	0.436	0.432	0.635	0.384

Note: Robust standard errors in parentheses. Private consumption (dependent) and income measured in logs. Empty cells represent zero coefficients where the 0.1 significance level is used.

The MPC should be lower for migrants, who typically lack urban *hukou* rights. However, migrants at lower income levels outperform the expected effect in some cases (see Table 3). According to the percentiles in the income distribution, both urban households and migrants experienced rapid income growth over the 5-year period. Median income more than

doubled for urban dwellers (from 20,900 yuan a year to 45,000 yuan). The evolution is less pronounced in the lower quantiles and more robust in the higher quantiles, indicating a concentration of urban income. For example, nominal and real income at the 0.9 quantile rose by 160 % and 141%, respectively. Shifts in the income distribution also contributed to a decline in the overall consumption ratio. Income growth was especially pronounced for richer urban households, who have a lower propensity to consume.

In contrast, income growth for migrants was less impressive. Annual median income rose from 14,300 yuan a year to 20,400 yuan. The 50 % increase is representative for the whole distribution.⁶ Due to lower income growth, the relative position of migrants worsened throughout the entire distribution. While the median migrant worker received 68 % of median urban income in 2002, that share fell to 45 % in 2007.

Table 3a Income distribution and consumption ratios – Urban households

Quantile range	2002		2007	
	Income	APC	Income	APC
(Q0.00–Q0.10]	(0–10.2]	0.955 (0.009)	(0–20.0]	0.977 (0.011)
(Q0.10–Q0.25]	(10.2–14.4]	0.913 (0.009)	(20.0–30.0]	0.848 (0.013)
(Q0.25–Q0.50]	(14.4–20.9]	0.886 (0.006)	(30.0–45.2]	0.802 (0.011)
(Q0.50–Q0.75]	(20.9–30.1]	0.840 (0.007)	(45.2–71.6]	0.730 (0.010)
(Q0.75–Q0.90]	(30.1–42.0]	0.799 (0.008)	(71.6–109.2]	0.687 (0.011)
(Q0.90–Q1.00]	> 42.0	0.733 (0.014)	> 109.2	0.604 (0.014)

Table 3b Income distribution and consumption ratios – Migrant households

Quantile range	2002		2007	
	Income	APC	Income	APC
(Q0.00–Q0.10]	(0–6.7]	0.898 (0.022)	(0–10.2]	0.824 (0.029)
(Q0.10–Q0.25]	(6.7–9.6]	0.864 (0.010)	(10.2–14.4]	0.801 (0.016)
(Q0.25–Q0.50]	(9.6–14.3]	0.826 (0.008)	(14.4–20.40]	0.794 (0.011)
(Q0.50–Q0.75]	(14.3–21.1]	0.772 (0.008)	(20.4–32.4)	0.775 (0.011)
(Q0.75–Q0.90]	(21.1–29.4]	0.756 (0.013)	(32.4–48.0)	0.726 (0.010)
(Q0.90–Q1.00]	> 29.4	0.697 (0.019)	> 48.0	0.663 (0.011)

Note: Standard errors in parentheses, income per annum in thousands of yuan. APC is the average propensity to consume, i.e. household consumption expenditures divided by income.

Table 3b also shows the average propensity to consume (APC), i.e. private consumption divided by income. The figure is extracted from a regression of the APC on (0, 1) dummies

⁶ The Gini coefficient of income distribution rose from 0.310 in 2002 to 0.373 in 2007 for urban residents, but was rather stable for migrants (from 0.337 to 0.356).

for different income ranges. Notably, households with lower income have a higher APC.⁷ This established pattern internationally also holds for the Chinese economy, for both urban households and migrants.

Different income levels blur comparison of the APC of urban households and migrants. To isolate the effect of *hukou* on consumption behaviour, a low and medium household income range is defined. High-income households, which typically have urban *hukou* rights, are excluded from the analysis. In our two sub-samples, the APC is explained by a number of sociodemographic characteristics.

$$ratio = \beta_0 + \beta_1 hukou + \beta_2 size + \beta_3 age + \beta_4 edu + \beta_5 edu^2 + \varepsilon_t \quad eq(2)$$

of which *ratio* is APC, other regressors have same definition as those in eq(1).

The availability of urban *hukou* rights is modelled through a (0, 1) dummy that might affect the APC. The quantile regressions are applied and the results are presented in Table 4.

Table 4a Impact of *hukou* system on average propensity to consume
Household income $\leq 15,000$ yuan in 2002; $\leq 20,000$ yuan in 2007

	2002 (2963 obs.)	2007 (2907 obs.)
Size	0.031 (0.005)	0.061 (0.009)
Age	0.008 (0.002)	0.011 (0.003)
10*Age ²	-0.001 (0.000)	-0.001 (0.000)
Education	0.004 (0.002)	
Constant	0.541 (0.057)	0.520 (0.046)
Hukou	0.051 (0.011)	0.146 (0.023)

Table 4b Impact of *hukou* system on average propensity to consume
Household income 15,000–30,000 yuan in 2002; 20,000–50,000 yuan in 2007

	2002 (3,955 obs.)	2007 (4,330 obs.)
Size	0.025 (0.005)	0.028 (0.006)
Age	0.012 (0.003)	0.009 (0.002)
10*Age ²	-0.001 (0.000)	-0.001 (0.000)
Education	0.005 (0.001)	
Constant	0.390 (0.063)	0.523 (0.038)
Hukou	0.058 (0.011)	0.067 (0.013)

Note: Robust standard errors in parentheses. Empty cells represent zero coefficients where the 0.1 significance level is used.

⁷ Regression results are omitted to save space, but are available from the authors upon request. Note that this type of regression solves potential endogeneity problems. Income is not considered exogenous in the consumption regression.

Even after sociodemographic characteristics are taken into account, the presence of urban *hukou* rights affects the APC. In our 2002 sample, households with urban *hukou* had an APC 5.1 and 5.8 percentage points higher than those without hukou for lower and higher income groups, respectively.⁸ A similar magnitude difference can be also detected in the 2007 survey for medium incomes. At the lower end of the distribution, the *hukou* coefficient increases by 15 percentage points due to stronger migration in later years. Eventually, this pattern can be traced to the duration of the stay in urban areas. Newcomer migrants can be expected to earn less than those who have lived in the city for many years. The latter have had opportunities to become part of social networks that might assist them in identifying and taking advantage of better income opportunities. Overall, the results suggest that a lifting of *hukou* restrictions would boost private consumption substantially. The abolition of *hukou* restrictions that affect 260 million migrants today could increase their APC by 14.6 and 6.7 percentage points for lower and higher income groups, respectively (on average is about 10.7 percentage points). Looking at 2007 consumption, such a change would have translated into a boost in consumption of 2,500 yuan per household, or an addition 650 billion yuan for the overall economy. The lack of *hukou* rights explains about half of the decline of the consumption ratio in the sample period. The other half could be attributed to a slight decrease of the propensity to consume and shifts in the income distribution in favour of high-income households in urban areas.

5 Conclusions

China's phenomenal economic growth in recent decades was driven largely by exports and capital investment. While government stimulus policies during the recent global financial crisis succeeded in maintaining output growth at high levels, internal imbalances were exacerbated by the stimulus policies and creation of a debt overhang, especially at the local level.

To return to a sustainable path of development, China's leaders now champion policies geared to raising the role of private consumption as a driver of economic growth. Unfortunately, the institutional framework is an impediment to the transformation as it weakens incentives of households to consume. China's high savings rates and modest con-

⁸ The mean of the APC cannot be inferred from the constant in the regressions due to the inclusion of socio-demographic variables.

sumption are not only the product of insecurities from a poor social security safety net and lack of investment opportunities due to highly regulated financial markets. The *hukou* household registration system also hurts consumption demand. After controlling for income levels, the average propensity to consume is found to be substantially lower for migrants, who lack access to many public services. This difference is quite pronounced in the low-income range.

The lifting of *hukou* restrictions that now affect some 260 million migrants would increase their APC by 10 percentage points on average. Had such a change been effected in 2007, it would have boosted consumption 7 % that year, i.e. 2,500 yuan per household or an additional 650 billion yuan for the overall economy. The lack of *hukou* rights explains about half of the decline of the consumption ratio in our sample period. The other half could be attributed to a slight decrease of the propensity to consume and shifts in the income distribution in favour of high-income households in urban areas.

Hukou restrictions in the future can be expected to further depress private consumption demand if the government moves ahead with its current urbanization strategy that will likely increase the number of migrants in cities with restricted *hukou* rights. Failure to fix the current *hukou* system threatens to derail government reforms aimed at shifting China towards a more consumption-driven growth model.

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