

Development of minimum livelihood guarantee programmes in urban China: an empirical analysis based on 31 regions over 2003-2013 Wang, J.; Bai, Y.

# Citation

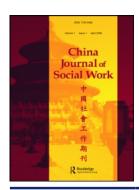
Wang, J., & Bai, Y. (2016). Development of minimum livelihood guarantee programmes in urban China: an empirical analysis based on 31 regions over 2003–2013. *China Journal Of Social Work*, 9(2), 155-177. doi:10.1080/17525098.2016.1231256

Version: Publisher's Version

License: Creative Commons CC BY-NC-ND 4.0 license

Downloaded from: <a href="https://hdl.handle.net/1887/74128">https://hdl.handle.net/1887/74128</a>

**Note:** To cite this publication please use the final published version (if applicable).



# China Journal of Social Work



ISSN: 1752-5098 (Print) 1752-5101 (Online) Journal homepage: https://www.tandfonline.com/loi/rcsw20

# Development of minimum livelihood guarantee programmes in urban China: an empirical analysis based on 31 regions over 2003–2013

Jinxian Wang & Yanfeng Bai

To cite this article: Jinxian Wang & Yanfeng Bai (2016) Development of minimum livelihood guarantee programmes in urban China: an empirical analysis based on 31 regions over 2003–2013, China Journal of Social Work, 9:2, 155-177, DOI: 10.1080/17525098.2016.1231256

To link to this article: https://doi.org/10.1080/17525098.2016.1231256

| 9         | © 2016 The Author(s). Published by Informa<br>UK Limited, trading as Taylor & Francis<br>Group |
|-----------|--|
|           | Published online: 02 Dec 2016.   |
|           | Submit your article to this journal 🗹  |
| ılıl      | Article views: 680   |
| CrossMark | View Crossmark data ☑  |
| 4         | Citing articles: 1 View citing articles 🗹  |





# Development of minimum livelihood guarantee programmes in urban China: an empirical analysis based on 31 regions over 2003-2013

Jinxian Wang<sup>a</sup> and Yanfeng Bai<sup>b</sup>

<sup>a</sup>The Department of Economics, Leiden University, The Kingdom of the Netherlands; <sup>b</sup>School of Public Finance, Central University of Finance and Economics, Beijing, China

#### **ABSTRACT**

The Minimum Livelihood Guarantee (MLG) system in urban China is functioned as the last resort safety net for poor people and plays a substantial role in poverty reduction. This paper provides new empirical insights into the MLG development across 31 regions in urban China between 2003 and 2013. In addition to widely used indicators like benefit levels and number of benefit recipients, we construct two indicators of MLG replacement rates to measure the generosity of the benefits relative to income from work. The results show that the development of the urban MLG system in China has followed different tracks before and after 2008. Since 2008, the governments have made great efforts to increase the generosity of the MLG system while put more stringent conditions on MLG beneficiaries. Moreover, since 2008, the generosity levels of the MLG programmes began to converge across regions.

最低生活保障制度(低保)在中国的城镇作为贫困人口的最后保护 网及在灭贫上起实质作用。本论文提供一个由2003年到2013年、 横跨31个中国城镇低保制度发展的经验见解。加上一些广泛使用 的指标,如福利水平、福利受惠者人数,我们建构出两个低保制 度替代率的指标,去量度相对于来自工作的收入的福利慷慨。结 果显示,在中国的城市低保制度在2008年前后,分别有着不同的 发展。自2008年,各地政府在低保制度上大力增加慷慨程度,同时在低保受益人加入更严谨的条件。再者,自2008年,各地低保 制度的慷慨水平出现跨区域的汇合。

#### **KEYWORDS**

China; Minimum Livelihood Guarantee; safety net; replacement rate; convergence

#### Introduction

The Minimum Livelihood Guarantee (MLG, or Dibao) system in urban China provides a last income safety net for poor families' sustenance. The aim of this benefit programme is to ensure minimum living standard for poor and vulnerable households (Chen and Barrientos 2006). Provision of the benefits is based on need and is means-tested. In the presence of rising unemployment and inadequate social insurance benefits in China, the MLG scheme has received increasing attention as a safeguard against low income and poverty (Shang and Wu 2004; Wu and Ramesh 2014). According to the 'Twelfth Five-year Plan on the Civil Affairs Development, the MLG standard was expected to be raised by 10% per year on average in urban areas of China and to reach 404.6 Chinese yuan (around 66.3 US dollars) per person per month at the end of the year 2015 (Ministry of Civil Affairs of the People's Republic of China 2011). This goal has been completed ahead of schedule. By the end of the year 2014, the urban MLG standard reached 411 yuan (around 72.3 US dollars) per person per month (Ministry of Civil Affairs of the People's Republic of China 2015).

A large set of literature focuses on the emergence and development of the MLG system in China (e.g. Jiang 2013; Leung 2003; Leung 2006; Leung and Wong 1999; Ngok 2010; Saunders and Shang 2001; Shang and Wu 2004). Another set of studies put more attention to the adequacy of the benefit scheme (e.g. Du and Park 2007; Gao, Garfinkel, and Zhai 2009; Ravallion, Chen, and Wang 2006; Wang 2007). One general finding is that in spite of its rapid development and expansion, the MLG system is still far from effective in alleviating poverty (Gao and Zhai 2012; Ravallion, Chen, and Wang 2006). Nevertheless, the MLG system has played a substantial role in reducing poverty over the past few years (Wu and Ramesh 2014). The ineffectiveness of the system in alleviating poverty may come from two sources. First, the urban MLG system is distinguished from the rural MLG system. In urban areas, the MLG scheme is relatively generous and has become the major tool to help the urban poor out of poverty. However, the urban MLG system is targeted only at urban residents with their household registration (hukou) in the city of residence, whereas rural residents who have migrated to cities are excluded from the urban MLG system (Gao 2010; Solinger 2005). The rural MLG system, on the other hand, is not formally established nationwide until 2007 and is not fully established in many districts (Gao and Zhai 2012). A number of eligible families in rural areas and the migrants from rural to urban areas, which are actually most vulnerable in terms of poverty, are not covered by the MLG system (Wang 2007).

Regional differences might also contribute to the ineffective MLG benefit system. In China, the administration and implementation of the MLG scheme is quite decentralised. Local governments are given the discretion to decide the MLG standards under which poor people can apply for the benefits. Meanwhile, they have considerable scope to enact their own rules of governing the finance (Chen and Barrientos 2006). Therefore, it is important to look at the regional difference to understand the development of the MLG system in urban China. However, so far empirical analyses are relatively rare that little is known about how the benefit schemes evolve across regions and how the cross regional variation has changed over time, especially in recent years. To make a contribution, this study aims to add empirical insights into the development of the urban MLG programmes across 31 municipalities, provinces and autonomous regions over the period 2003 to 2013. As such, this study covers all regions ranging from the more developed eastern part to the less developed central and western part of China. The rural MLG system is not considered as the rural MLG system was not extended to the rural poor population nationwide until 2007.

Second, we use the year 2008 as the mid-point. After 2008, a series of MLG reforms were taken to increase the generosity of the benefits while specify the conditions to become eligible for the benefits. Splitting the period using the year 2008 also helps us to understand the impact of the global financial crisis on China's MLG reforms. According to Liu (2009) and Zhang (2009), the global financial crisis caused an economic slowdown and a sharp fall in export growth in China, resulting in rising unemployment and social tensions and instability. The crisis brought needs for urgent reforms on the social safety net to maintain social stability. To the best of our understanding, there is no research exploring the different development paths before and after 2008. Moreover, we apply the relative convergence test (using the coefficient of variation) to analyse whether regional differences have been narrowed in recent years.

Third, in the comparative welfare state literature, indicators like total social expenditure or programmatic expenditure have been widely used since they offer an alternative approach to measure the relative importance of the benefit programme (Castles 2009). More recently, Wang and Van Vliet (forthcoming) construct minimum income replacement rates for comparison across 33 European Union (EU) countries and non-EU OECD countries over 1990 to 2009. With replacement rates, social assistance and minimum income benefits can be compared with other welfare programmes such as unemployment benefits. In addition, income replacement rates allow us to measure the generosity of the social benefits in relation to work income. However, regarding the MLG system in China, existing studies mainly rely on the MLG standards (e.g. Shang and Wu 2004; Wu and Ramesh 2014). Instead, indicators on MLG expenditure and MLG replacement rates are rarely applied. Therefore, in addition to MLG benefit levels and MLG recipients, this study constructs indicators on MLG expenditure and MLG replacement rate across all of the 31 urban regions in China, covering the period from 2003 to 2013. As such, this study contributes to the comparative welfare literature on social assistance and minimum income benefits. MLG replacement rates in China were quite low compared to the other developed countries in general. The highest ratio of the MLG standard to average wage was found in Tianjin for single persons, which was 11.7%. This was much lower than the more developed European countries, for instance, Luxembourg (45.1%, the highest in EU26) and a little bit higher than Estonia (11.0%, the lowest in EU26) (see Wang and Van Vliet 2014). All figures refer to the year 2009 (for comparison).

The paper is structured as follows. In section 2 we present the institutional characteristics of the Chinese urban MLG programmes. Section 3 describes the data and measures used in the study. Empirical statistics are presented in section 4. In section 5 we do some convergence and correlation tests. Section 6 concludes the paper.

# MLG system in urban China

# Welfare protection in China and the emergence of the urban MLG programme

The market-oriented economic reforms since 1978 have brought massive uncertainties and risks to urban workers. The growth number of low income families and unemployment constituted an imminent threat to social and political stability. By way of response, the Chinese government established a need-based and means-tested social assistance programme, referred to as the Minimum Livelihood Guarantee (MLG, or Dibao) programme, in cities. The objective of the MLG programme is to assist poor households in urban China, especially in the context of market-based structural reforms (Barrientos, Niño-Zarazúa, and Maitrot 2010). The programme was first launched in Shanghai in 1993 for its urban registered residents. One of the goals was to provide protection to all eligible households and to assure full delivery of the benefits (Zhang 2012). Subsequently, the Ministry of Civil Affairs, the central government department in charge of social assistance policy in China, encouraged

other cities to learn from Shanghai's practice and promoted the rapid spread of the reform. The first regulatory framework of the MLG system was issued by the State Council in 1999. The 'Regulations on Guaranteeing Urban Residents' Minimum Living Standard' regulated that 'urban residents with non-agricultural household registration status, if the average income of their family members is below the minimum living standard of local urban residents, are entitled to material assistance from the local government for their basic life' (State Council of the People's Republic of China 1999). The 1999 Regulation legislates the rights of urban residents to social assistance. After several decades of development, the MLG system was expanded to cover all cities and towns in China by the end of the year 1999.

Since 2003, the number of MLG recipients has become stable, marking that the development of the MLG system entered a stage of consolidation. The administration of the MLG system has been improved. Many local governments have classified the MLG recipients and performed different management for different types of recipients. Other social assistance programmes such as medical, employment, education and housing have been extended. Consequently, a MLG-based social assistance system has been established in urban China (Ngok 2010).

A turning point came in 2008. Since then, a series of reforms have been imposed on China's MLG system. For example, in October 2008, the Ministry of Civil Affairs released the 'Way to Identify Urban Low Income Families'. In August 2010 the 'Ministry of Civil Affairs Notification on Further Strengthening the Identification of Urban Dibao Target' was published. In 2011, the Ministry of Civil Affairs released the 'Guiding Comments on Further Specifying the Formulation and Adjustment Mechanisms of the Urban and Rural Minimum Livelihood Guarantee Standard'. These reforms aim to specify the conditions to become the MLG targets and strengthen the linkage between the MLG standard lines and people's daily necessities and living cost (Zhong 2011).

# **Administration of the MLG programmes**

The Ministry of Civil Affairs is in charge of the administration of the MLG programmes at the country level and acts as one of the key policymakers regarding the policy design and changes of the benefit policy (Zhang 2012). In practice, however, the benefits are actually given by local governments. Variations between municipalities are substantial. Each city has considerable scope to enact its own rules of governing the finance and determining the MLG standard lines (Chen and Barrientos 2006). In principle, local governments take the main responsibility for underwriting the programme. The central government takes on a share of the cost for local governments who cannot finance it (Solinger 2005). To apply for the MLG benefits, the head of the household should formally submit their application to the local street office, which is a neighbourhood-based agency of the district People's Government, or the township government. The local street offices or the township governments assess the eligibility of the claimants at the preliminary stage. The county civil affairs department makes the final decision (Ministry of Civil Affairs of the People's Republic of China 2012).

#### **Eligibility conditions and activation requirements**

The expansion of the MLG scheme in urban China since the 1990s can best be regarded as the policymaker's response to fulfil the need for income support during the transition towards a market economy. Not only working-age people but also old-age people are covered by the MLG system. In urban China, coverage of old age pensions is far from universal. The high financial burden of elderly dependents without pensions can lead households to fall into poverty (Saunders and Sun 2006). Theoretically, three types of targets are covered by the MLG programmes: the traditional 'three nos' (people who have no source of income, no working ability and no family); the unemployed on unemployment insurance or whose entitlement to unemployment insurance has expired with their average household income below the locally decided MLG standard line; or employees, lay-offs and retirees whose working income including living allowances and pensions are below the locally decided MLG standard line (Tang, Lin, and Ren 2003).

Based on the 1999 Regulation, there are two key determinants for entitlement to MLG benefits. The first eligibility concerns family formulation and residency status. Applicants of urban MLG benefits are required to be urban residents with their non-agricultural hukou in the city of residence. In this respect, the hukou system restricts welfare provision to households with urban registration status while rural residents who have migrated to cities are excluded from the MLG system. Although in some regions the *hukou* system has been reformed, the division between the rural and urban areas is still large.

Second, to be eligible for the MLG benefits, per capita family's total income and assets ought to be below the local MLG standard line. The MLG standard line is computed in accordance with the minimum living standard, which is usually based on expenditure surveys of low income families and the financial capacity of the local government. The 1999 and 2012 regulations stipulate that urban residents are eligible for the benefits when household per capita income from all sources is below the local MLG standard line (Ministry of Civil Affairs of the People's Republic of China 2012; State Council of the People's Republic of China 1999). Calculation of total household income sums up all monetary income and income in kind, including financial contributions from legally dependents and children.<sup>2</sup> Other factors, namely financial assets, employment status, health conditions and housing are also considered (Du and Park 2007).

The provision of MLG benefits is not subject to a time limit, as long as one needs them. In practice, only people who are disabled are provided with regular or long-term benefits. To maintain a work ethic, it is usually difficult for the able-bodied to receive MLG benefits, or they can receive only short-term benefits. Able-bodied recipients must register at employment agencies and participate in public community service activities (State Council of the People's Republic of China 1999). In Shanghai, for example, able-bodied beneficiaries of the MLG programme must register at employment agencies and cannot refuse job offers without proper reason. Meanwhile, they must participate in vocational training provided by employment agencies. Those who are unemployed must take part in public community service activities. In cases of violation of these requirements, MLG beneficiaries may face an elimination or termination of the benefit eligibility (Huang et al. 2005). In some other cities, recipients who refuse job offers twice may not be entitled to the benefits (Shang and Wu 2004).

#### **Determination of MLG benefit level**

The MLG standard lines are set by local governments, under which people can apply for the benefits. The MLG standard lines are expressed as monthly amount in Chinese yuan. Several factors are taken into account for determining the MLG standard line: local per capita living standard; basic necessities to maintain a minimum living standard; the level of economic development and financial capability of the local government; and the price index (State Council of the People's Republic of China 1999). The MLG standard line should be lower than the minimum wage, unemployment benefits and pensions (Leung 2006). Since 2000 cities like Xiamen and Hangzhou started to set MLG standard lines on the basis of the number of members in the family (Cao 2007). Set at a subsistence level, the MLG benefit is a benefit package covering basic food, clothing, housing and appropriate electric power, water and gas cost as well as expenses on compulsory education if applicable (State Council of the People's Republic of China 1999). In reality, it is the local government's financial capacity that often restricts the determination of the MLG standard lines. In many less developed regions, the MLG standard lines are usually lower than what is needed to meet the households' actual basic needs (Du and Park 2007). The MLG standard lines are adjusted in accordance with changes in consumer prices and the financial capability of the city government (Gao, Garfinkel, and Zhai 2009). What a family receives is the difference between the total MLG benefits eligible – local MLG standard line multiplied by the number of persons entitled within the household – and the total household income.

### **Data and method**

# Sample of regions and data years

In this paper, we track the development of urban MLG programmes across 31 municipalities, provinces and autonomous regions. As such, we cover all urban areas from the eastern, central and western regions of China. We expect variations across regions since the eastern regions are more advanced in social and economic development while western regions are lagging behind. Rural MLG programmes are not included. Compared to the urban MLG programmes, rural MLG programmes are less developed and many districts have not fully established the scheme and therefore only a small fraction of poor people are covered (Deng and Wu 2006; Gao 2006). The empirical analyses are based on the period of 2003 to 2013. Various data sources are used, including the Ministry of Civil Affairs (2004–2014), National Bureau of Population and Employment Statistics Division (2004–2013), National Bureau of Statistics of China (2004–2014), and local government websites.

# **Expenditure on MLG programmes**

To start with, we construct two indicators to measure MLG expenditure. First, we employ the indicator of social expenditure on urban MLG programmes as a share of local GDP. Second, the indicator of social expenditure on urban MLG programmes as a share of local public expenditure is used to assess the government expenditure preference for supporting the unemployed and poor. According to Castles (2009), the disaggregated programme expenditure offers an approach to measure the relative importance of the benefit programme. One-time or temporary social assistance benefits to cover unexpected and urgent needs or regular supplements to cover exceptional needs are not considered in the MLG packages.

#### **MLG** recipients

The coverage rate or take-up rate is of interest since it measures the extent to which individuals manage to receive social benefits for which they are actually eligible (Gao and Zhai 2012). Existing studies suggest that MLG eligible families often lack access to the benefits or are not willing to apply (Ravallion, Chan, and Wang 2006; Wang 2007). In this study we focus on the take-up rate since while the administrative databases may record benefit receipt accurately, they contain no information on non-recipients. Specifically, we measure the coverage of the urban MLG benefits in both absolute and relative terms: the number of urban MLG benefit recipients and the number of the recipients as a share of local non-agricultural population at the end of the year.3

#### **Real MLG levels**

The benefit level is relatively straightforward in measuring the generosity of social benefits, as it is just the amount of cash benefit (Olaskoaga, Alaez-Aller, and Diaz-De-Basurto-Uraga 2013). We use two types of MLG benefit levels. First, MLG standard reflects the income line needed to meet the basic living standards. This indicator has the advantage that it is not affected by the mis-targeting problem which occurs when eligible households do not receive the benefits or ineligible households do receive benefits (Wang 2007). Usually the standard lines are adjusted according to changes in consumer prices and financial capability of the local governments. We take the MLG standard lines at the end of the year in case there might be adjustment within the year. Second, MLG expenditure per person implies the actual benefit levels spent by local governments on each recipient. This indicator reflects the gap between the standard MLG line and per capita household income of the recipient. In order to compare the benefit levels over time, all benefits are adjusted by inflation based on local urban consumer price index (CPI 2013=100).

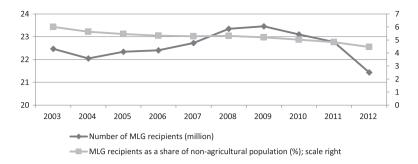
# **MLG** replacement rates

Minimum income replacement rate is a state-of-art indicator as it allows us to measure the generosity of the benefit relative to income from work. This indicator has been utilised for international comparisons across the European and non-EU OECD countries (Wang and Van Vliet forthcoming) but not for China. Following their practice, we first compute the replacement rate as a ratio of the MLG standard to average wage. The average wage is the average earnings of employment in urban work units. MLG benefit in comparison with the average wage enables us to indicate how the MLG benefits balance between need and incentive (Gustafsson and Deng 2011). In China, most MLG recipients are more likely to receive minimum wage instead of average wage since they are usually work dis-abled or low-skilled (Huang et al. 2005). Therefore, we also compute a MLG replacement rate as the ratio of MLG standard to minimum wage.

# **Development of MLG programmes in urban China over 2007 to 2013**

# Number of MLG recipients and its share in local urban non-agricultural population

Figure 1 depicts the nationwide trends in the number of MLG recipients and its percentage in non-agricultural population between 2003 and 2012. The number of the MLG recipients at the national level is the sum of the numbers of MLG recipients in all regions. Figure 1 shows that the number of the MLG recipients reached the peak in 2009 and has declined



**Figure 1.** Trends in the number of MLG recipients and its share of non-agricultural population in China, 2003–2012. Source: China Civil Affairs' Statistical Yearbook 2004–2013, China Population & Employment Statistical Yearbook 2004–2013 and own calculations.

Note: Data for non-agricultural population is not available for the year 2013.

largely since then. On the other hand, the share of MLG recipients in relation to urban non-agricultural population has been decreasing over time. In 2010, the 'Ministry of Civil Affairs Notification on Further Strengthening the Identification of Urban Dibao Target' was issued. The notification not only defines the conditions for becoming MLG target but also regulates that those who do not meet the conditions should return what they have received. Since then, the number of urban MLG recipients has decreased significantly.

Trends in the MLG recipients across regions are presented in Table 1. The number of MLG recipients at the national level is the sum of the numbers of MLG recipients in all regions. For each group, the regions are ranked in order of the number of MLG recipients as a share of local non-agricultural population in 2012 (from smallest to largest). The number of MLG recipients varied significantly across regions. In particular, in the most developed regions, which are mainly in the east, there were far fewer people supported by the MLG programmes and the ratios of the recipients in total local non-agricultural population were much lower. The central part of China had the largest number of MLG recipients although they constituted a smaller percentage in local non-agricultural population compared to the west. One reason for the large cross-regional variation might be that in the less-developed central and western regions, people often do not have sufficient resources to meet their basic needs. And also, in the less-developed regions, social protection programmes like unemployment benefits and old-age pensions are less developed.

At the national level, the number of MLG recipients increased during the period 2003 to 2008. The increase occurred mainly in the west. In fact, in the eastern and central part of China, the number of the MLG recipients decreased both before and after 2008. Even the west has observed a decrease in the number of the MLG recipients since 2008. Finally, all regions witnessed decreases in the MLG recipients in terms of total local non-agricultural population over time.

# MLG expenditure as a share of local GDP and local public expenditure

Figure 2 shows the indicators of MLG expenditure as a share of local GDP and local public expenditure across 31 regions in 2013 grouped into three regions: eastern, central and western regions. Variation in MLG expenditure was significant across regions. Low ratios are mainly found in eastern regions, including Zhejiang, Guangdong, Fujian, Beijing, and



**Table 1.** Trends in the number of MLG recipients and its share of local non-agricultural population across regions, 2003–2012.

|                | Number of | MLG recipient | s (million) | MLG recipients | s as a share of nor<br>population (%) | n-agricultural |
|----------------|-----------|---------------|-------------|----------------|---------------------------------------|----------------|
|                | 2003      | 2008          | 2012        | 2003           | 2008                                  | 2012           |
| National       | 22.47     | 23.35         | 21.44       | 6.0%           | 5.3%                                  | 4.5%           |
| East           |           |               |             |                |                                       |                |
| Zhejiang       | 0.08      | 0.09          | 0.08        | 0.7%           | 0.7%                                  | 0.5%           |
| Guangdong      | 0.35      | 0.40          | 0.37        | 1.0%           | 0.9%                                  | 0.8%           |
| Jiangsu        | 0.34      | 0.46          | 0.37        | 1.2%           | 1.3%                                  | 0.9%           |
| Beijing        | 0.16      | 0.15          | 0.11        | 1.9%           | 1.5%                                  | 1.1%           |
| Shandong       | 0.72      | 0.61          | 0.53        | 2.5%           | 1.7%                                  | 1.3%           |
| Fujian         | 0.19      | 0.20          | 0.17        | 1.9%           | 1.7%                                  | 1.4%           |
| Shanghai       | 0.45      | 0.34          | 0.22        | 4.3%           | 2.8%                                  | 1.7%           |
| Tianjin        | 0.24      | 0.16          | 0.17        | 4.4%           | 2.7%                                  | 2.7%           |
| Hebei          | 0.82      | 0.94          | 0.77        | 4.5%           | 4.2%                                  | 3.3%           |
| Hainan         | 0.13      | 0.18          | 0.16        | 6.2%           | 5.3%                                  | 4.6%           |
| Liaoning       | 1.60      | 1.37          | 1.07        | 8.1%           | 6.5%                                  | 4.9%           |
| Central        |           |               |             |                |                                       |                |
| Anhui          | 1.04      | 0.99          | 0.82        | 7.9%           | 6.6%                                  | 5.2%           |
| Hainan         | 1.26      | 1.46          | 1.33        | 6.5%           | 6.4%                                  | 5.5%           |
| Hubei          | 1.66      | 1.44          | 1.30        | 9.4%           | 6.1%                                  | 6.1%           |
| Jilin          | 1.46      | 1.28          | 0.91        | 12.2%          | 10.4%                                 | 7.1%           |
| Shanxi         | 0.84      | 0.92          | 0.89        | 8.9%           | 8.3%                                  | 7.6%           |
| Jiangxi        | 1.01      | 0.95          | 0.98        | 9.4%           | 7.6%                                  | 7.6%           |
| Heilongjiang   | 1.58      | 1.53          | 1.52        | 9.0%           | 8.3%                                  | 8.2%           |
| Hunan          | 1.43      | 1.45          | 1.46        | 10.2%          | 9.3%                                  | 9.2%           |
| West           |           |               |             |                |                                       |                |
| Chongging      | 0.70      | 0.79          | 0.52        | 9.3%           | 8.7%                                  | 3.9%           |
| Guangxi        | 0.60      | 0.57          | 0.52        | 6.7%           | 5.9%                                  | 5.0%           |
| Shaanxi        | 0.79      | 0.84          | 0.75        | 8.8%           | 7.9%                                  | 5.1%           |
| Ningxia        | 0.24      | 0.21          | 0.18        | 12.2%          | 9.0%                                  | 7.0%           |
| Sichuan        | 1.46      | 1.86          | 1.86        | 8.2%           | 8.4%                                  | 7.3%           |
| Guizhou        | 0.43      | 0.55          | 0.53        | 7.2%           | 8.4%                                  | 7.7%           |
| Inner Mongolia | 0.70      | 0.85          | 0.81        | 8.1%           | 8.6%                                  | 8.0%           |
| Yunnan         | 0.64      | 0.86          | 0.94        | 9.4%           | 11.6%                                 | 9.0%           |
| Tibet          | 0.04      | 0.04          | 0.05        | 10.1%          | 7.5%                                  | 9.1%           |
| Xinjiang       | 0.72      | 0.76          | 0.96        | 10.4%          | 8.5%                                  | 10.0%          |
| Qinghai        | 0.20      | 0.22          | 0.23        | 14.1%          | 13.7%                                 | 11.3%          |
| Gansu          | 0.57      | 0.90          | 0.88        | 10.0%          | 13.4%                                 | 11.9%          |
| Mean-East      | 0.46      | 0.44          | 0.37        | 3.3%           | 2.7%                                  | 2.1%           |
| Mean-Central   | 1.29      | 1.25          | 1.15        | 9.2%           | 7.9%                                  | 7.1%           |
| Mean-West      | 0.59      | 0.70          | 0.68        | 9.5%           | 9.3%                                  | 7.9%           |

Note: Data for non-agricultural population is not available for the year 2013.

Source: China Civil Affairs' Statistical Yearbook 2004–2013, China Population & Employment Statistical Yearbook 2004–2013 and own calculations.

Jiangsu. High ratios are found in Jilin, Heilongjiang, Xinjiang, Inner Mongolia, and Gansu. On average, the east had the lowest MLG expenditure while the central had the highest. One reason for the lower ratios in the eastern regions could be that these regions often have higher GDP and higher public expenditure than the central and the west – the denominator effect. Overall, MLG expenditure was rather low in 2013. Gansu province had the highest MLG expenditure ratio relative to local GDP, which was lower than 0.5%. Regarding MLG expenditure as a share of local public expenditure, the highest ratio appeared in Heilongjiang province, which was around 1.5%.

Figure 3 depicts the trends in MLG expenditure across the eastern, central and western regions for 2005, 2008 and 2013. The left-hand bars show changes in MLG expenditure as a share of local GDP while the right-hand bars show changes in MLG expenditure as a

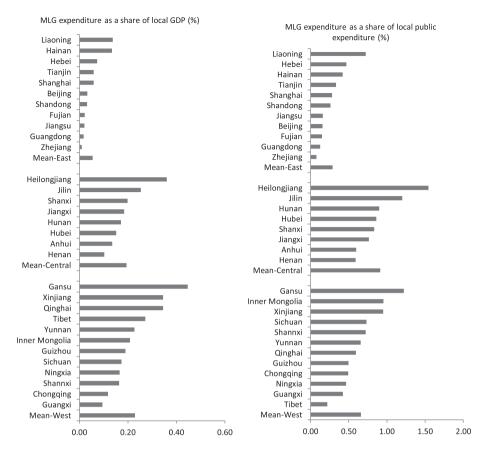


Figure 2. MLG expenditure as a share of local GDP and local public expenditure, 2013. Source: China Civil Affairs' Statistical Yearbook 2014 (Ministry of Civil Affairs of the People's Republic of China 2014), National Bureau of Statistics of China (http://data.stats.gov.cn/workspace/index?m=hgjd/) and own calculations.

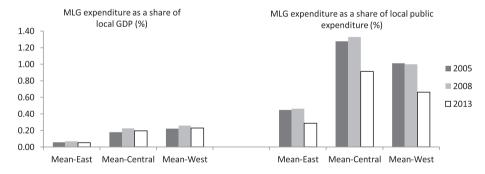


Figure 3. Trends in MLG expenditure as a share of local GDP and local public expenditure, 2005–2013. Source: China Civil Affairs' Statistical Yearbook 2006–2014, National Bureau of Statistics of China (http://data.stats.gov.cn/workspace/index?m=hgjd/) and own calculations. Note: Data of MLG expenditure are not available for the years 2003 and 2004.

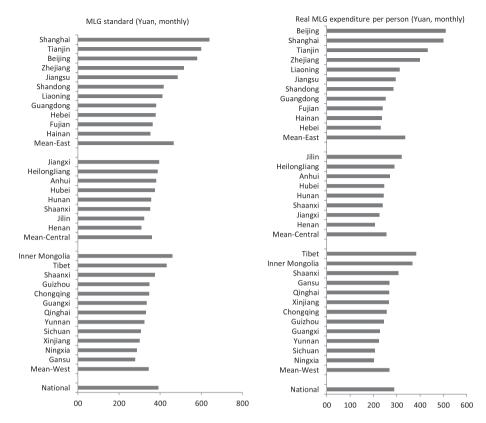
share of local public expenditure for the three regions. On average, MLG expenditure as a share of local GDP remained stable in the three regions between 2005 and 2013. However, opposite trends could be found before and after 2008. Since 2008, MLG expenditure as

a share of local GDP has decreased in all regions. With respect to MLG expenditure as a share of local public expenditure, decreases could be observed in all regions between 2005 and 2013. The decreases mainly occurred after 2008. In early November 2008, China announced a massive fiscal stimulus package of RMB 4tn (around 586 billion US dollars) to offset the sharp decline in external demand due to the global recession. As most of the funding responsibility would be covered by local governments and institutes, local public expenditure increased dramatically. However, a large part of the local public expenditure was allocated to public investment to promote economic growth, such as transportation network, rural infrastructure, and the Sichuan post-earthquake reconstruction (Liu 2009). Instead, social welfare expenditure decreased relatively in terms of local public expenditure. Detailed information for the trends in MLG expenditure as a share of local GDP and as a share of local public expenditure for the 31 regions are presented in Appendix 1.

# Real MLG standard and real MLG expenditure per person (monthly)

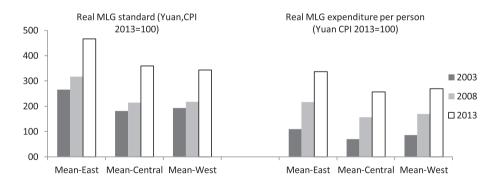
Figure 4 shows the real monthly MLG standards and real monthly MLG expenditure per person by local governments in 2013. The benefit levels are expressed in real values adjusted by local urban CPI (local urban CPI 2013 = 100). MLG expenditure per person reflects the difference between the MLG standard and per capita household income for the recipient. The real benefit levels varied substantially across regions. Regions in the east got higher MLG standards and real MLG expenditure per person than regions in the centre and west. The highest benefit levels are found in Jiangsu, Zhejiang, Beijing, Tianjin and Shanghai. There is no big difference between the centre and west. The large gap between the east and the other two groups of regions may be explained partly by the fact that in the more developed eastern regions, consumer prices and living standards to which the MLG benefits are indexed are much higher. Meanwhile, the economic situation of local governments in eastern regions is usually better than that in the centre and west, therefore they can provide more generous benefits. High MLG standards are usually associated with high MLG expenditure per person. However, there are some exceptions. For instance, Beijing had a lower real MLG standard than Tianjin in 2013 but its MLG expenditure per person was much higher than the latter. Overall, the MLG standards and MLG expenditure per person are quite low in China. In 2013, the national MLG standard was only 391.2 yuan (around 63 US dollars) and the national MLG expenditure per person was 289.8 yuan (around 46.7 US dollars) per month.

Turning to the trend, we can see that between 2003 and 2013, the MLG standards and real MLG expenditure per person increased in all regions (see Figure 5). This suggests that the benefit levels increased more than the consumer prices. Moreover, the east experienced larger increases in the two indicators than the centre and the west over the period of 2003 to 2013. Noticeably, the large increase in MLG standard took place mainly after 2008. This is conceivable since the MLG reforms after 2008 have highlighted the goal to improve the adequacy of the MLG benefits. Another reason for the increasing MLG benefit levels may be that since around 2008, the economic slowdown and the fall in export growth intensified China's unemployment problems, causing social tensions and instability. As a result, local governments began to take initiatives for more generous welfare protection programmes to maintain social stability (Liu 2009). Further information of the trends in real monthly



**Figure 4.** Real monthly MLG standard and real monthly MLG expenditure per person, 2013. Source: China Civil Affairs' Statistical Yearbook 2014, National Bureau of Statistics of China (http://data.stats.gov.cn/workspace/index?m=hqjd/) and own calculations.

Note: The national MLG standard and national real MLG expenditure are the simple averages of the 31 regions.



**Figure 5.** Trends in real monthly MLG standard and MLG expenditure per person, 2003–2013. Source: China Civil Affairs' Statistical Yearbook 2014, National Bureau of Statistics of China (http://data.stats.gov.cn/workspace/index?m=hgjd/) and own calculations.

MLG standard and real monthly MLG, expenditure per person across the 31 regions can be found in Appendix 2.

# Generosity of the MLG standard relative to poverty lines

Among the low-income countries, a commonly used poverty measure is 1.25 or 1.5 US dollars per person per day. Despite its wide use, this measure has two limitations. First, its application is limited when the price varies across different regions and over different time periods within a country. Second, this poverty measure is adjusted in accordance with the purchasing power parity (PPP), which fails to reflect the local cost of living. To overcome these limitations, Meng et al. (2005) use the 'cost-of-basic-needs' method to estimate the urban food, lower and upper poverty lines for 29 regions from 1986 to 2000 in China. The lower (upper) poverty line is defined as the food poverty line plus the necessary (plus other unnecessary) non-food consumption (Meng, Gregory, and Wang 2005). Following Wang's (2007) approach, we use the food, lower and upper poverty lines of 2000 by Meng, Gregory, and Wang (2005) and local urban CPI to estimate the poverty line for the period 2001 to 2013.4

In Table 2 we present the local MLG standards and our estimated food, lower and upper poverty lines for the 29 regions in 2013. Almost in all regions the MLG standards were higher than the three types of poverty lines. Guangdong province was the only exception which set a lower MLG standard than the upper poverty line.

**Table 2.** MLG standard and estimated food, lower and upper poverty line in 29 regions, 2013.

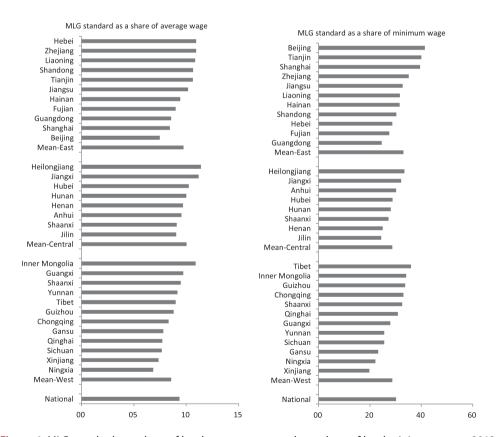
|                | MLG<br>standard | Food<br>poverty line | Lower<br>poverty line | Upper<br>poverty line | Difference | Difference | Difference |
|----------------|-----------------|----------------------|-----------------------|-----------------------|------------|------------|------------|
|                | (1)             | (2)                  | (3)                   | (4)                   | (1)/(2)-1  | (1)/(3)-1  | (1)/(4)-1  |
| Beijing        | 580.0           | 221.31               | 295.22                | 374.27                | 1.62       | 0.96       | 0.55       |
| Tianjin        | 600.0           | 180.71               | 245.31                | 309.9                 | 2.32       | 1.45       | 0.94       |
| Hebei          | 378.5           | 125.33               | 171.35                | 221.39                | 2.02       | 1.21       | 0.71       |
| Shanxi         | 351.1           | 101.11               | 143.25                | 193.19                | 2.47       | 1.45       | 0.82       |
| Inner Mongolia | 460.3           | 105.99               | 146.85                | 195.35                | 3.34       | 2.13       | 1.36       |
| Liaoning       | 411.5           | 120.57               | 168.1                 | 217.26                | 2.41       | 1.45       | 0.89       |
| Jilin          | 322.5           | 105.35               | 147.69                | 194.35                | 2.06       | 1.18       | 0.66       |
| Heilongjiang   | 387.7           | 107.13               | 148.06                | 191.82                | 2.62       | 1.62       | 1.02       |
| Shanghai       | 640.0           | 262.23               | 341.31                | 409.63                | 1.44       | 0.88       | 0.56       |
| Jiangsu        | 485.1           | 148.23               | 194.38                | 233.77                | 2.27       | 1.50       | 1.08       |
| Zhejiang       | 515.5           | 184.11               | 244.44                | 300.93                | 1.80       | 1.11       | 0.71       |
| Anhui          | 380.5           | 123.89               | 162.75                | 194.84                | 2.07       | 1.34       | 0.95       |
| Fujian         | 363.3           | 161.48               | 226.07                | 284.21                | 1.25       | 0.61       | 0.28       |
| Jiangxi        | 395.7           | 122.85               | 165.83                | 210.49                | 2.22       | 1.39       | 0.88       |
| Shandong       | 417.7           | 147.26               | 215.33                | 306.49                | 1.84       | 0.94       | 0.36       |
| Henan          | 309.2           | 113.75               | 162.04                | 219.8                 | 1.72       | 0.91       | 0.41       |
| Hubei          | 375.1           | 150.95               | 203.67                | 258.49                | 1.48       | 0.84       | 0.45       |
| Hunan          | 356.1           | 130.25               | 171.78                | 211.93                | 1.73       | 1.07       | 0.68       |
| Guangdong      | 380.4           | 240.84               | 316.07                | 383.93                | 0.58       | 0.20       | -0.01      |
| Guangxi        | 334.7           | 168.7                | 218.42                | 264.98                | 0.98       | 0.53       | 0.26       |
| Hainan         | 353.3           | 162.85               | 211.45                | 252.52                | 1.17       | 0.67       | 0.40       |
| Sichuan        | 306.4           | 137.19               | 180.88                | 219.65                | 1.23       | 0.69       | 0.39       |
| Guizhou        | 347.6           | 134.52               | 175.4                 | 212.23                | 1.58       | 0.98       | 0.64       |
| Yunnan         | 323.9           | 158.17               | 207.64                | 255.82                | 1.05       | 0.56       | 0.27       |
| Shaanxi        | 374.7           | 120.41               | 169.3                 | 226.78                | 2.11       | 1.21       | 0.65       |
| Gansu          | 279.0           | 141.24               | 191.43                | 246.04                | 0.98       | 0.46       | 0.13       |
| Qinghai        | 330.8           | 136.68               | 185.62                | 236.81                | 1.42       | 0.78       | 0.40       |
| Ningxia        | 287.6           | 127.67               | 185.94                | 261.1                 | 1.25       | 0.55       | 0.10       |
| Xinjiang       | 300.4           | 126.03               | 169.88                | 217.63                | 1.38       | 0.77       | 0.38       |

Source: Meng et al. (2005), National Bureau of Statistics of China (http://data.stats.gov.cn/workspace/index?m=hgjd/) and own calculations.

# Generosity of the MLG standard relative to labour income – measured by MLG replacement rates

Although the MLG standards are set higher than the poverty lines in China, the generosity of the benefits in relation to work income, measured by the MLG standard as a share of average wage or minimum wage (see Figure 6). At the national level, the MLG standard as a share of average wage was 9.4% while the MLG standard as a share of minimum wage reached 30.2% in 2013. The low ratio of the MLG standard to local minimum wage may reflect the relationship between the three-tier basic income support in China: minimum wage > unemployment insurance > MLG standard (Sunders and Shang 2001). Unemployment insurance is usually linked to minimum wage, which varies between 70–80% of minimum wage (Leung 2003). The share of the MLG standard in minimum wage is even lower. Moreover, the MLG benefit in China usually does not account for rental cost as the recipients usually have their own dwellings or live in subsidised public housing (Leung and Wong 1999). Minimum wage, on the other hand, is closely linked to local average wage, productivity, unemployment level, economic development and minimum living expenses, and is especially focused on rural migrants (Wang and Gunderson 2011).

Table 3 presents the trends in the two types of replacement rates across regions for 2003, 2008 and 2013. For each group regions are ranked in order of the MLG standard as



**Figure 6.** MLG standard as a share of local average wage and as a share of local minimum wage, 2013. Source: China Civil Affairs' Statistical Yearbook 2014, China Statistical Yearbook 2014 and local government websites.

Note: The national replacement rates are the simple averages of the 31 regions.

a share of minimum wage in 2013 (from smallest to largest). Except for Tibet, all regions have seen decreases in both types of replacement rates. On average, the west has seen the largest decrease in the ratio of MLG standard as a percentage of minimum wages while the east has observed the largest decrease in the share of MLG standard in average wage. The decreases were mainly seen before 2008. Unlike the east, the centre and west have actually gone through increases in MLG standard as a share of average wage after 2008. This is mainly caused by the large increases in MLG standards since 2008. Similarly, although decreases in the ratio of MLG standard relative to minimum wage could be observed in all regions both before and after 2008, the decreases were much smaller and many regions actually increased their MLG generosity in relation to minimum wage after 2008.

Table 3. Trends in MLG standard as a share of average wage and as a share of minimum wage, 2003– 2013.

|                | MLG standard | l as a share of av | erage wage (%) | MLG standard | as a share of min | imum wage (%) |
|----------------|--------------|--------------------|----------------|--------------|-------------------|---------------|
|                | 2003         | 2008               | 2013           | 2003         | 2008              | 2013          |
| East           |              |                    |                |              |                   |               |
| Guangdong      | 12.3         | 9.2                | 8.6            | 40.4         | 29.8              | 24.5          |
| Fujian         | 14.4         | 9.9                | 9.0            | 35.8         | 28.1              | 27.5          |
| Hebei          | 17.0         | 9.7                | 10.9           | 44.9         | 28.8              | 28.7          |
| Shandong       | 15.5         | 10.7               | 10.7           | 39.5         | 30.9              | 30.3          |
| Hainan         | 16.7         | 10.4               | 9.4            | 32.2         | 30.0              | 31.5          |
| Liaoning       | 16.3         | 9.9                | 10.9           | 48.6         | 32.0              | 31.7          |
| Jiangsu        | 14.4         | 10.7               | 10.2           | 34.8         | 32.7              | 32.8          |
| Zhejiang       | 12.1         | 10.6               | 10.9           | 41.0         | 30.9              | 35.1          |
| Shanghai       | 13.6         | 9.2                | 8.4            | 50.9         | 41.7              | 39.5          |
| Tianjin        | 15.6         | 12.0               | 10.6           | 50.2         | 48.8              | 40.0          |
| Beijing        | 13.9         | 8.4                | 7.5            | 58.6         | 48.8              | 41.4          |
| Central        |              |                    |                |              |                   |               |
| Jilin          | 14.1         | 8.3                | 9.0            | 36.1         | 24.9              | 24.4          |
| Henan          | 14.1         | 8.3                | 9.7            | 32.9         | 26.0              | 24.9          |
| Shanxi         | 14.0         | 9.4                | 9.1            | 36.5         | 27.8              | 27.2          |
| Hunan          | 13.8         | 9.0                | 10.0           | 34.5         | 27.1              | 28.2          |
| Hubei          | 15.5         | 10.1               | 10.3           | 34.3         | 26.8              | 28.9          |
| Anhui          | 17.9         | 9.9                | 9.6            | 41.9         | 37.9              | 30.2          |
| Jiangxi        | 12.9         | 11.3               | 11.2           | 44.8         | 33.3              | 32.2          |
| Heilongjiang   | 16.7         | 11.1               | 11.4           | 38.5         | 29.5              | 33.4          |
| West           |              |                    |                |              |                   |               |
| Xinjiang       | 11.8         | 7.0                | 7.3            | 28.3         | 17.9              | 19.8          |
| Ningxia        | 14.3         | 7.5                | 6.8            | 43.7         | 33.4              | 22.1          |
| Gansu          | 12.7         | 8.0                | 7.8            | 45.7         | 25.4              | 23.3          |
| Sichuan        | 13.1         | 9.2                | 7.7            | 39.7         | 32.8              | 25.5          |
| Yunnan         | 14.4         | 10.2               | 9.2            | 42.2         | 29.1              | 25.6          |
| Guangxi        | 14.1         | 8.6                | 9.7            | 40.0         | 26.6              | 27.9          |
| Qinghai        | 12.1         | 7.5                | 7.7            | 58.5         | 31.4              | 30.9          |
| Shaanxi        | 14.4         | 8.1                | 9.5            | 42.2         | 28.7              | 32.6          |
| Chongging      | 14.3         | 10.4               | 8.3            | 46.3         | 34.0              | 33.0          |
| Guizhou        | 12.1         | 7.9                | 8.8            | 31.1         | 24.4              | 33.7          |
| Inner Mongolia | 13.6         | 9.0                | 10.9           | 38.5         | 28.7              | 34.1          |
| Tibet          | 8.6          | 7.0                | 9.0            |              | 35.0              | 36.0          |
| Mean-National  | 14.1         | 9.3                | 9.4            | 41.1         | 31.1              | 30.2          |
| Mean-East      | 14.7         | 10.1               | 9.7            | 43.4         | 34.8              | 33.0          |
| Mean-Central   | 14.9         | 9.7                | 10.0           | 37.4         | 29.2              | 28.7          |
| Mean-West      | 13.0         | 8.4                | 8.6            | 41.5         | 28.9              | 28.7          |

Note: The national replacement rates are the simple averages of the 31 regions.

Source: China Civil Affairs' Statistical Yearbook 2004–2014; China Statistical Yearbook 2004–2014; Ministry of Human Resources and Social Security of the People's Republic of China; local Human Resources and Social Security Bureaus; Chinese Public information Online, and local government websites.



# **Convergence and correlation tests**

# Convergence test

The descriptive analyses above suggest that the development of the MLG programmes has followed different paths before and after 2008 in urban China. Since 2008, the governments have made great efforts to increase the generosity of the MLG schemes while putting more stringent conditions on MLG beneficiaries. Consequently, the MLG standards increased significantly while the number of MLG recipients decreased enormously. However, the development of MLG programmes varies considerably across regions. Thus the question rises as to how the dispersion across regions has changed over time. To answer this question, this study applies the relative convergence (divergence) test using the so-called coefficient of variation, defined as the standard deviation divided by the mean value of the corresponding data. A drop (rise) in the coefficient of variation suggest a convergence (divergence) across regions (Caminada, Goudswaard, and van Vliet 2010).

Table 4 shows the changes in the coefficient of variation for real monthly MLG standard, real monthly MLG expenditure per person, MLG standard as a share of average wage and MLG standard as a share of minimum wage between 2003 and 2013. The two sets of indicators indicate the absolute amount of the benefits and the relative generosity of the benefits to labour income. We test the convergence (divergence) by using data from all regions. Between 2003 and 2013, the coefficient of variation decreased for the indicators of real MLG standard, real MLG expenditure per person, and MLG standard as a share of minimum wage. The decrease mainly occurred after 2008. Although the coefficient of variation for the MLG standard as a share of average wage increased before 2008, it has been decreasing after that. Overall, China has observed decline in the coefficient of variation for all indicators after 2008, implying a convergence of the generosity levels of the MLG programmes across regions since 2008.

### **Correlation test**

In Table 5, we report the correlations between MLG expenditure, MLG recipients and the benefit levels. The indicator of MLG replacement rate is not included since it is intrinsically determined by the benefit level as well as work income. We use time-series-cross-sectional data analysis based on the data from all regions over the period 2003 to 2013. As expected, MLG expenditure is highly and positively associated with the number of MLG recipients. Interestingly, the relationship between MLG expenditure and MLG benefit level is strongly negative. On the one hand, the drastic reduction in MLG recipients could help to decrease the MLG expenditure. On the other hand, after 2008 local public expenditure grew significantly. However, a large part of the public expenditure increase went to areas which helped

Table 4. Convergence test for the development of MLG programmes in China using the coefficient of variation, 2003-2013.

| Coefficient of variation                | 2003  | 2008  | 2013  | Change<br>2003–2008 | Change<br>2008–2013 | Change<br>2003–2013 |
|---|-------|-------|-------|---------------------|---------------------|---------------------|
| Real monthly MLG standard               | 0.256 | 0.304 | 0.231 | 0.048               | -0.073              | -0.026              |
| Real monthly MLG expenditure per person | 0.413 | 0.315 | 0.280 | -0.098              | -0.035              | -0.132              |
| MLG standard as a share of minimum wage | 0.179 | 0.207 | 0.173 | 0.028               | -0.034              | -0.006              |
| MLG standard as a share of average wage | 0.131 | 0.140 | 0.135 | 0.009               | -0.005              | 0.004               |

 Table 5. Pearson's correlations between the four sets of indicators.

|  |                      | MLG expenditure as a  |                       | MLG recipients as a    |              | Real MLG        |
|--|----------------------|-----------------------|-----------------------|------------------------|--------------|-----------------|
|  | MLG expenditure as   | share of local public | Number of             | share of local non-ag- | Real monthly | expenditure per |
|  | a share of local GDP | expenditure           | <b>MLG</b> recipients | ricultural population  | MLG standard | person          |
| MLG expenditure as a share of local GDP                | _                    |                       |                       |                        |              |                 |
| MLG expenditure as a share of local public expenditure | 0.742***             | _                     |                       |                        |              |                 |
| Number of MLG recipients                               | 0.294***             | 0.678***              | _                     |                        |              |                 |
| MLG recipients as a share of local non-agricultural    | 0.899                | 0.741***              | 0.377***              | _                      |              |                 |
| population   |                      |                       |                       |                        |              |                 |
| Real monthly MLG standard                              | -0.374***            | -0.532***             | -0.423***             | -0.524***              | _            |                 |
| Real MLG expenditure per person                        | -0.093               | -0.338***             | -0.299***             | -0.293***              | 0.889***     | _               |
|  |                      |                       |                       |                        |              |                 |

\*significant at 0.1.; \*significant at 0.05.; \*\*significant at 0.01.



to promote the economic growth. On contrary, the relative share of MLG expenditure in local public expenditure decreased.

### **Discussion and conclusion**

Over the past few years, the MLG system in urban China has been largely reformed, especially since 2008. On the one hand, the governments performed the reforms to strengthen the role of the urban MLG system as the last resort safety net for poor people. On the other hand, MLG reforms are needed in the presence of the global financial crisis. The economic slowdown and fall in external demand due to the global recession led to increasing unemployment and social instability, in reaction to which the local governments began to take initiatives for more generous MLG benefits (Liu 2009). However, so far little is known about the impact of the reforms on the MLG development. Moreover, little attention has been paid to the regional differences. This is remarkable given that the administration of the urban MLG programmes is actually decentralised. Therefore, this paper engages on the development of the urban MLG programmes in the 31 provinces, municipalities and autonomous regions over 2003 to 2013, thus covering all regions from the eastern, central and western part of China.

The results show that the development of China's urban MLG system varies considerably across regions over 2003 to 2013. In the more developed eastern regions, the numbers of the benefit recipients are very low. The governments manage to raise the benefit levels albeit with low MLG expenditure. On the contrary, in the less developed central and western regions with limited financial resources, since the benefit recipients are in large numbers, even high MLG expenditure could only maintain low benefit levels. However, differences in the generosity of the benefits expressed by MLG standard as a ratio of average wage and as a ratio of minimum wage across regions are not significant. Nevertheless, although the dispersion of the MLG development across regions is still large, the generosity levels of the MLG programmes have been converging across regions since 2008.

The development of the urban MLG system seems to follow a different path after 2008. Since then, the number of MLG recipients has decreased significantly. Hence, the governments manage to increase the real benefit levels and increase the generosity of the benefits. The generosity of the benefit levels has been improving. In 2013 most regions actually had MLG standards higher than the poverty lines, implying that MLG benefits were adequate for poor people's survival. However, the generosity of the benefits relative to work income is quite low. In an era when economic development has increased the income of most labour, it would be demanding to construct an income redistribution mechanism to assist those who are underprivileged. Overall, China's MLG policy is still in its early stages. The curtained social expenditure on MLG programmes may hamper its role in promoting social development. To improve the adequacy and efficiency of the MLG programmes, one urgent problem is to specify the division of the tasks between the central and local governments. Local governments with a better situation in fiscal resources may increase their MLG standards in the presence of declining MLG recipients. For the local governments who cannot afford it, the role of the central government in MLG financing could be reinforced.

Moreover, the urban MLG is based on household registration status (*hukou*). Currently, there are a huge number of rural migrants entering the cities. Due to the lack of local *hukou*, they are blocked from the protection of local MLG programmes. The social rights of the floating migrants for basic needs are usually neglected by hosting governments. Further reforms may be of importance to eliminate the segregation between urban and rural areas and between the public and non-public sectors. After all, the MLG system has become an important supplement to China's employment-based social insurance system and essential to maintain social stability. Finally, this paper focuses on the MLG programmes in urban China. It might be interesting for future research to explore the development of rural MLG programmes and its impact on poverty alleviation in China.

#### **Notes**

- 1. We follow Solinger and Hu (2012) to name the Dibao system as the 'Minimum Livelihood Guarantee' system. Different authors use different names (see Gao 2006; Leung and Wong 1999).
- 2. According to the Chinese Marriage Law, relatives are responsible to support other members in the household, including husband and wife, parents and children under 18 or still in education, grandparents and grandchildren if the parents of the children have passed away, adult children and their parents or grandparents, adult brothers or sisters to their siblings who are disabled or below 18 years old or in school, if their parents have passed away or cannot support their siblings.
- 3. In China, applicants of urban MLG benefits need to have urban hukou with local nonagricultural household registration status.
- 4. Many scholars use the 'cost-of-basic-needs' method to estimate the poverty line for each region using cross section data for one year, and then use CPI to adjust the poverty line through time: see e.g. Ravallion and Chen 2007.

#### Disclosure statement

No potential conflict of interest was reported by the authors.

#### References

Barrientos, A., M. Niño-Zarazúa, and M. Maitrot. 2010. "Social Assistance in Developing Countries Database Version 5.0." Chronic Poverty Research Centre. http://www.chronicpoverty.org/uploads/ publication\_files/social-assistance-database-version-5.pdf

Cao, Y. 2007. "Woguo chengshi jumin zuidi shenghuo baozhang biaozhun de yingxiang yinsu yu xiaoying yanjiu [Analysis of the Determinants and Effects of the Chinese Minimum Livelihood Guarantee Standard]." Dangdai jingji kexue [Modern Economic Science] 29 (2): 15–20.

Caminada, K., K. Goudswaard, and O. van Vliet. 2010. "Patterns of Welfare State Indicators in the EU: Is There Convergence?" Journal of Common Market Studies 48 (3): 529-556. doi:10.1111/j.1468-5965.2010.02063.x.

Castles, F. G. 2009. "What Welfare States Do: A Disaggregated Expenditure Approach." Journal of Social Policy 38 (1): 45-62. doi:10.1017/S0047279408002547.

Chen, J., and A. Barrientos. 2006. "Extending Social Assistance in China: Lessons from the Minimum Living Standard Scheme." Chronic Poverty Research Centre Working Paper 67. http://www. chronicpoverty.org/uploads/publication\_files/WP67\_Chen\_Barrientos.pdf

Deng, D., and X. Wu. 2006. "Wanshan nongcun jumin zuidi shenghuo baozhang zhidu de ruogan sikao [Improving the Security System of Minimum Living Cost for Rural Residents]." Wuhan daxue xubao (Zhexue shehuikexue ban) Wuhan University Journal (Philosophy & Social Sciences) 5(5): 644–648.



- Du, Y., and A. Park. 2007. "The Effects of Social Assistance on Poverty Reduction: Evidence from Household Surveys in Urban China." Paper presented at The International Conference on Policy Perspectives on Growth, Economic Structures and Poverty Reduction, Beijing, China.
- Gao, Q. 2006. "The Social Benefit System in Urban China: Reforms and Trends from 1988 to 2002." *Journal of East Asian Studies* 6 (1): 31–67. doi:10.1017/s1598240800000035.
- Gao, Q. 2010. "Redistributive Nature of the Chinese Social Benefit System: Progressive or Regressive?" The China Quarterly 201: 1-19. doi:10.1017/S0305741009991044.
- Gao, O., and F. Zhai. 2012. "Anti-Poverty Family Policies in China: A Critical Evaluation." Asian Social Work and Policy Review 6 (2): 122-135. doi:10.1111/j.1753-1411.2012.00067.x.
- Gao, Q., I. Garfinkel, and F. Zhai. 2009. "Anti-Poverty Effectiveness of the Minimum Living Standard Assistance Policy in Urban China." Review of Income and Wealth 55 (s1): 630-655. doi:10.1111/ j.1475-4991.2009.00334.x.
- Gustafsson, B. A., and Q. Deng. 2011. "Di Bao Receipt and Its Importance for Combating Poverty in Urban China." *Poverty & Public Policy* 3 (1): 1–32. doi:10.2202/1944-2858.1127.
- Huang, C., D. Wang, S. Qiu, and M. Cai. 2005. "Rang jiuye youliketu wanshan Shanghai chengshi zuidi shenghuo baozhang zhidu yanjiu [Make Work Pay: A Case Study of Minimum Livelihood Guarantee System for Urban Residents in Shanghai]." Shichang yu renkou fenxi [Market and Demographic Analysis 11 (3): 1–9.
- Jiang, S. 2013. "Zhongguo dibao zhidu de bianqian fazhan he moshi suzao: 21shiji yilai zhongguo chengxiang dibao zhidu de shehui bianqian [The Social Change and the Shaping of Developmental Mode for the Minimum Living Security System in China]." Shehui baozhang yanjiu [Social Security Studies 6: 71–79.
- Leung, J. C. B. 2003. "Social Security Reforms in China: Issues and Prospects." International Journal of Social Welfare 12 (2): 73-85. doi:10.1111/1468-2397.t01-1-00246.
- Leung, J. C. B. 2006. "The Emergence of Social Assistance in China." International Journal of Social Welfare 15 (3): 188-198. doi:10.1111/j.1468-2397.2006.00434.x.
- Leung, J. C. B., and H. S. W. Wong. 1999. "The Emergence of a Community-Based Social Assistance Programme in Urban China." Social Policy & Administration 33 (1): 39-54. doi:10.1111/1467-9515.00130.
- Liu, L. 2009. "Impact of the Global Financial Crisis on China: Empirical Evidence and Policy Implications." China & World Economy 17 (6): 1–23. doi:10.1111/j.1749-124X.2009.01171.x.
- Meng, X., R. Gregory, and Y. Wang. 2005. "Poverty, Inequality, and Growth in Urban China, 1996-2000." Journal of Comparative Economics 33 (4): 710–729. doi:10.1016/j.jce.2005.08.006.
- Ministry of Civil Affairs of the People's Republic of China. 2014. Zhongguo minzheng tongji nianjian 2014 [China Civil Affairs' Statistical Yearbook 2014]. Beijing: China Statistics Press.
- Ministry of Civil Affairs of the People's Republic of China. 2011. "Minzhengbu, guojia fazhan he gaige weiyuanhui guanyu yinfa 'minzheng shiye fazhan di 12ge wunian guihua' de tongzhi [Ministry of Civil Affairs, the National Development and Reform Commission on the Issurance of the 'Twelfth Five-Year Plan on the Civil Affairs Development']." Ministry of Civil Affairs of the People's Republic of China. http://www.mca.gov.cn/article/zwgk/jhgh/201112/20111200248418.shtml
- Ministry of Civil Affairs of the People's Republic of China. 2012. "Minzhengbu guanyu yinfa 'Zuidi shenghuo baozhang shenhe shenpi banfa (shixing)' de tongzhi [Ministry of Civil Affairs Notification on Issuing the 'Way for Check and Approval of the Minimum Living Guarantee Programs (Trial)']." Ministry of Civil Affairs of the People's Republic of China. http://www.mca.gov.cn/article/zwgk/ fvfg/zdshbz/201212/20121200394637.shtml
- Ministry of Civil Affairs of the People's Republic of China. 2015. "2014nian shehui fuwu fazhan tongji gongbao [2014 Social Service Development Statistical Communique]." http://www.mca.gov.cn/ article/sj/tjgb/201506/201506008324399.shtml
- National Bureau of Population and Employment Statistics Division. 2004-2013. Zhongguo renkou he jiuye tongji nianjian [China Population & Employment Statistics Yearbook]. Beijing: China Statistics Press.
- National Bureau of Statistics of China. 2004-2013. Zhongguo renkou he jiuye tongji nianjian [China Statistical Yearbook]. Beijing: China Statistics Press.



- Ngok, Ki. 2010. "Social Assistance Policy and Its Impact on Social Development in China: The Case of the Minimum Living Standard Scheme (MLSS)." China Journal of Social Work 3 (1): 35-52. doi:10.1080/17525090903560606.
- Olaskoaga, J., R. Alaez-Aller, and P. Diaz-De-Basurto-Uraga. 2013. "Beyond Welfare Effort in the Measuring of Welfare States." *Journal of Comparative Policy Analysis: Research and Practice* 15 (3): 274-287. doi:10.1080/13876988.2013.785148.
- Ravallion, M., S. Chen, and Y. Wang. 2006. "Does the Di Bao Program Guarantee a Minimum Income in China's Cities?" Chap.16 in Public Finance in China: Reform and Growth for a Harmonious Society, edited by J. Lou, and S. Wang, 317–334. Washington, DC: The World Bank.
- Ravallion, M., and S. Chen. 2007. "China's (Uneven) Progress against Poverty." Journal of Development Economics 82 (1): 1–42. doi:10.1016/j.jdeveco.2005.07.003.
- Saunders, P., and L. Sun. 2006. "Poverty and Hardship among the Aged in Urban China." Social Policy & Administration 40 (2): 138–157. doi:10.1111/j.1467-9515.2006.00481.x.
- Saunders, P., and X. Shang. 2001. "Social Security Reform in China's Transition to a Market Economy." Social Policy & Administration 35 (3): 274–289. doi:10.1111/1467-9515.00233.
- Shang, X., and X. Wu. 2004. "Changing Approaches of Social Protection: Social Assistance Reform in Urban China." Social Policy and Society 3 (3): 259-271. doi:10.1017/S1474746404001770.
- Solinger, D. J. 2005. "Path Dependency Reexamined: Chinese Welfare Policy in the Transition to Unemployment." Comparative Politics 38 (1): 83–101. doi:10.2307/20072914.
- Solinger, D. J., and Y. Hu. 2012. "Welfare, Wealth and Poverty in Urban China: The Dibao and its Differential Disbursement." *The China Quarterly* 211: 714–764. doi:10.1017/S0305741012000835.
- State Council of the People's Republic of China. 1999. "Chengshi jumin zuidi shenghuo baozhang tiaoli [Regulations on Guaranteeing Urban Residents' Minimum Living Standard]." State Council of the People's Republic of China. http://www.mca.gov.cn/article/gk/fg/shjz/201507/20150700848484. shtml
- Tang, Jun, S. Lin, and Z. Ren. 2003. Zhonguo chengshi pinkun yu fanpinkun baogao [Report on Poverty and Anti-Poverty in Urban China]. Beijing: Huaxia Publishing House.
- Wang, M. 2007. "Emerging Urban Poverty and Effects of the Dibao Program on Alleviating Poverty in China." China & World Economy 15 (2): 74-88. doi:10.1111/j.1749-124X.2007.00062.x.
- Wang, J., and M. Gunderson. 2011. "Minimum Wage Impacts in China: Estimates from a Prespecified Research Design, 2000-2007." Contemporary Economic Policy 29 (3): 392-406. doi:10.1111/j.1465-7287.2010.00239.x.
- Wang, J, and O. van Vliet. 2014. "Social Assistance and Minimum Income Benefits: Benefit Levels, Replacement Rates and Policies across 33 Countries, 1990-2009." Department of Economics Research Memorandum 4. Leiden: Leiden University.
- Wang, J, and O. van Vliet. forthcoming. "Social Assistance and Minimum Income Benefits: Benefit Levels, Replacement Rates and Policies across 26 Countries, 1990-2009." European Journal of Social Security 3.
- Wu, A. M., and M. Ramesh. 2014. "Poverty Reduction in Urban China: The Impact of Cash Transfers." Social Policy and Society 13 (2): 285–299. doi:10.1017/S1474746413000626.
- Zhang, H. 2012. "Discourse Change and Policy Development in Social Assistance in China." International Journal of Social Welfare 21 (4): 433-442. doi:10.1111/j.1468-2397.2011.00845.x.
- Zhang, M. 2009. "The Impact of the Global Crisis on China and Its Reaction." Análisis del Real Instituto Elcano (ARI) 62: 1. http://www.realinstitutoelcano.org/wps/wcm/ connect/7f3587804f018af4aad8ee3170baead1/ARI62-2009 Ming Global Crisis China Reaction. pdf?MOD=AJPERES&CACHEID=7f3587804f018af4aad8ee3170baead1
- Zhong, Y. 2011. "Dangdai zhongguo chengshi dibao zhidu de yanjin yu fansi [The Evolution and Reflection of Contemporary Chinese Urban Subsistence Security System]." Dangdai zhongguo lishi yanjiu [Contemporary China History Studies] 18 (6): 54–62.

Appendix 1. Trends in MLG expenditure as a percentage of local GDP and local public expenditure across regions, 2005–2013.

|                             |       |       | MLG exp | penditure as a share of local GDP | of local GDP        |                     |       | MLG   | expenditu | MLG expenditure as a share of local public expenditure | al public expendit  | ıre                 |
|-----------------------------|-------|-------|---------|-----------------------------------|---------------------|---------------------|-------|-------|-----------|--|---------------------|---------------------|
|                             | 2005  | 2008  | 2013    | Change<br>2005-2008               | Change<br>2008-2013 | Change<br>2005-2013 | 2005  | 2008  | 2013      | Change<br>2005-2008                                    | Change<br>2008-2013 | Change<br>2005-2013 |
| <b>East</b><br>7heijang     | 0.01% | 0.01% | 0.01%   | %00 0                             | %00 0               | %000                | 0.13% | 0.12% | %800      | %00 0  | —0.05%              | —0.05%              |
| Guanadona                   | 0.02% | 0.02% | 0.02%   | 0.00%                             | 00:0                | 00:0                | 0.17% | 0.18% | 0.13%     | 0.01%  | ~90:0 <del>-</del>  | -0.04%              |
| Jiangsu                     | 0.05% | 0.03% | 0.02%   | 0.00%                             | -0.01%              | %00.0               | 0.27% | 0.27% | 0.16%     | 0.01%  | -0.11%              | -0.10%              |
| Fujian                      | 0.05% | 0.03% | 0.02%   | 0.01%                             | -0.01%              | %00.0               | 0.23% | 0.28% | 0.15%     | 0.05%  | -0.12%              | -0.07%              |
| Shandong                    | 0.03% | 0.03% | 0.03%   | 0.00%                             | 0.00%               | %00.0               | 0.36% | 0.37% | 0.26%     | 0.01%  | -0.11%              | -0.10%              |
| Beijing                     | %90.0 | 0.05% | 0.03%   | -0.02%                            | -0.01%              | -0.03%              | 0.42% | 0.27% | 0.16%     | -0.15%   | -0.11%              | -0.26%              |
| Shanghai                    | 0.08% | 0.07% | %90.0   | 0.00%                             | -0.01%              | -0.02%              | 0.43% | 0.39% | 0.28%     | -0.04%   | -0.11%              | -0.15%              |
| Tianjin                     | 0.07% | %60.0 | %90.0   | 0.02%                             | -0.03%              | -0.01%              | %09.0 | %29.0 | 0.33%     | %90.0  | -0.33%              | -0.27%              |
| Hebei                       | %90.0 | %60.0 | 0.07%   | 0.03%                             | -0.02%              | 0.01%               | 0.63% | 0.80% | 0.47%     | 0.16%  | -0.33%              | -0.16%              |
| Hainan                      | 0.09% | 0.16% | 0.13%   | 0.07%                             | -0.03%              | 0.05%               | 0.54% | %89.0 | 0.42%     | 0.14%  | -0.25%              | -0.11%              |
| Liaoning<br><i>Gentral</i>  | 0.17% | 0.17% | 0.14%   | -0.01%                            | -0.03%              | -0.04%              | 1.16% | 1.06% | 0.72%     | -0.11%   | -0.33%              | -0.44%              |
| Henan                       | 0.09% | 0.12% | 0.10%   | 0.03%                             | -0.01%              | 0.01%               | 0.85% | 0.91% | 0.59%     | 0.06%  | -0.32%              | -0.26%              |
| Anhui                       | 0.14% | 0.18% | 0.14%   | 0.04%                             | -0.05%              | -0.01%              | 1.07% | 0.97% | %09.0     | -0.09%   | -0.38%              | -0.47%              |
| Hubei                       | 0.19% | 0.22% | 0.15%   | 0.03%                             | %90·0 <del>-</del>  | -0.03%              | 1.58% | 1.49% | %98.0     | ~60.0—   | -0.62%              | -0.72%              |
| Hunan                       | 0.16% | 0.20% | 0.17%   | 0.03%                             | -0.02%              | 0.01%               | 1.23% | 1.28% | %06.0     | 0.05%  | -0.38%              | -0.33%              |
| Jiangxi                     | 0.18% | 0.24% | 0.18%   | %90.0                             | -0.05%              | 0.01%               | 1.28% | 1.37% | 0.77%     | 0.09%  | ~09.0-              | -0.51%              |
| Shanxi                      | 0.16% | 0.22% | 0.20%   | 0.05%                             | -0.02%              | 0.04%               | 1.04% | 1.20% | 0.83%     | 0.16%  | -0.37%              | -0.20%              |
| Jilin                       | 0.30% | 0.33% | 0.25%   | 0.04%                             | ~80.0-              | -0.04%              | 1.69% | 1.81% | 1.20%     | 0.12%  | -0.61%              | -0.49%              |
| Heilongjiang<br><i>West</i> | 0.21% | 0.30% | 0.36%   | 0.08%                             | %90.0               | 0.15%               | 1.48% | 1.60% | 1.54%     | 0.12%  | -0.05%              | 0.06%               |
| Guangxi                     | 0.10% | 0.12% | %60.0   | 0.02%                             | -0.02%              | -0.01%              | %99.0 | 0.64% | 0.43%     | -0.02%   | -0.22%              | -0.24%              |
| Chongqing                   | 0.22% | 0.25% | 0.12%   | 0.03%                             | -0.13%              | -0.10%              | 1.55% | 1.43% | 0.49%     | -0.12%   | -0.93%              | -1.06%              |
| Shaanxi                     | 0.17% | 0.21% | 0.16%   | 0.03%                             | -0.04%              | -0.01%              | 1.07% | 1.05% | 0.72%     | -0.02%   | -0.33%              | -0.35%              |
| Ningxia                     | 0.26% | 0.28% | 0.17%   | 0.02%                             | -0.12%              | <b>%60.0</b> —      | 1.00% | 1.05% | 0.46%     | 0.05%  | -0.58%              | -0.53%              |
| Sichuan                     | 0.15% | 0.21% | 0.17%   | %90.0                             | -0.04%              | 0.02%               | 1.04% | %06:0 | 0.73%     | -0.14%   | -0.16%              | -0.30%              |
| Guizhou                     | 0.22% | 0.25% | 0.19%   | 0.03%                             | %90·0 <del>-</del>  | -0.03%              | 0.84% | 0.84% | 0.50%     | %00.0  | -0.34%              | -0.34%              |
| Inner Mongolia              | 0.17% | 0.20% | 0.21%   | 0.03%                             | 0.01%               | 0.03%               | 0.99% | 1.16% | 0.95%     | 0.17%  | -0.20%              | -0.04%              |
| Yunnan                      | 0.18% | 0.23% | 0.23%   | 0.05%                             | %00:0               | 0.05%               | 0.81% | %06:0 | %99.0     | %60.0  | -0.24%              | -0.15%              |
| Tibet                       | 0.21% | 0.16% | 0.27%   | -0.05%                            | 0.11%               | 0.07%               | 0.28% | 0.17% | 0.22%     | -0.11%   | 0.05%               | ~90.0-              |
| Qinghai                     | 0.43% | 0.46% | 0.34%   | 0.04%                             | -0.12%              | ~80.0—              | 1.36% | 1.29% | %09.0     | -0.07%   | -0.70%              | -0.77%              |
| Xinjiang                    | 0.26% | 0.31% | 0.35%   | 0.05%                             | 0.04%               | %60.0               | 1.29% | 1.20% | 0.95%     | ~0.08%   | -0.25%              | -0.34%              |
| Gansu                       | 0.28% | 0.45% | 0.45%   | 0.14%                             | 0.02%               | 0.17%               | 1.26% | 1.39% | 1.22%     | 0.13%  | -0.16%              | -0.04%              |
| Mean-National               | 0.15% | 0.18% | 0.16%   | 0.03%                             | -0.02%              | 0.01%               | 0.88% | %68.0 | 0.59%     | 0.01%  | -0.30%              | -0.29%              |
| Mean-East                   | %90.0 | 0.07% | 0.05%   | 0.01%                             | -0.01%              | %00.0               | 0.45% | 0.46% | 0.29%     | 0.01%  | -0.17%              | -0.16%              |
| Mean-Central                | 0.18% | 0.22% | 0.19%   | 0.05%                             | -0.03%              | 0.02%               | 1.28% | 1.33% | 0.91%     | 0.05%  | -0.42%              | -0.37%              |
| Mean-West                   | 0.22% | 0.26% | 0.23%   | 0.04%                             | -0.03%              | 0.01%               | 1.01% | 1.00% | %99.0     | -0.01%   | -0.34%              | -0.35%              |

Note: Data of MLG expenditure are not available for the years 2003 and 2004. The national MLG expenditure is the simple average of the MLG expenditure across the 31 regions. Source: China Civil Affairs' Statistical Yearbook 2006–2014, National Bureau of Statistics of China (http://data.stats.gov.cn/workspace/index?m=hgjd/) and own calculations.

Appendix 2. Trends in real monthly MLG standard and MLG expenditure per person across regions, 2003–2013.

| House   1881   2003   2003   2004     |                                |                  | 9           |                    | -                     | ī                    | į                    |             |             |              |                     | ī                   |                     |
|--|--------------------------------|------------------|-------------|--------------------|-----------------------|----------------------|----------------------|-------------|-------------|--------------|---------------------|---------------------|---------------------|
| 155.2 82.0 137.6 237.1 55.6 99.5 137.0 62.2 157.6 231.9 95.4 77.7 91.6 170.7 62.2 157.6 231.9 95.4 77.7 91.6 170.6 62.2 157.6 231.9 95.4 74.3 171.6 94.9 166.5 253.6 71.6 87.1 171.6 62.5 157.2 312.7 75.7 157.5 171.1 26.5 15.2 312.7 75.7 157.5 171.1 26.2 16.5 26.5 84.3 110.4 87.1 172.1 242.9 345.0 510.9 102.0 165.9 173.1 242.9 345.0 510.9 102.0 165.9 173.2 36.5 433.4 280.8 66.9 173.2 177.7 500.9 104.0 223.2 173.8 24.4 88.5 162.3 24.4 88.5 172.8 68.3 149.3 277.5 88.5 162.3 84.5 172.8 68.3 149.3 277.5 89.9 86.5 90.7 172.9 99.9 158.9 202.5 59.0 43.6 172.1 80.6 177.1 268.9 96.5 91.8 172.1 80.6 177.1 268.9 96.5 91.8 172.1 88.6 163.9 224.2 75.3 60.3 172.1 88.6 163.9 224.2 75.3 60.3 94.0 172.1 88.6 163.9 224.2 75.3 60.3 100.4 172.1 88.6 163.9 257.9 65.3 114.2 47.2 172.1 88.7 166.3 26.5 92.1 114.2 47.2 172.1 10.1 16.6 28.8 36.7 107.1 100.4 172.2 99.9 188.4 36.5 10.4 106.3 113.5 100.2 172.3 90.2 182.4 289.8 92.2 107.4 168.7 107.4 100.1 100 |                                |                  | 800         | 2013               | Cnange<br>2003-2008   | Change<br>2008-2013  | Change<br>2003-2013  | 2003        | 2008        | 2013         | Change<br>2003-2008 | Change<br>2008-2013 | Change<br>2003-2013 |
| 1955.2 820 1376 237.1 55.6 995. 1970. 120. 1376 237.1 55.6 995. 1126 949 1665 253.6 77.7 91.6 1126 949 1665 253.6 77.7 91.6 1127 949 1665 253.6 77.6 87.1 183.6 794 155.2 312.7 75.7 157.5 233.3 101.8 186.1 296.5 84.3 110.4 239.0 144.1 282.7 400.4 138.7 117.7 233.3 101.8 186.1 296.5 84.3 110.4 239.0 144.1 282.7 400.4 138.7 117.7 231.1 242.9 345.0 510.9 102.0 165.9 242.1 173.6 277.7 500.9 104.0 223.2 242.1 173.6 277.7 500.9 104.0 223.2 243.1 242.9 345.0 102.0 165.9 244.7 70.9 158.4 207.2 65.5 70.8 185.5 64.2 153.7 244.4 88.5 162.3 148.5 64.7 159.6 290.3 94.8 130.7 247.7 165.6 226.5 92.9 94.8 130.7 247.7 165.6 226.5 92.9 94.8 130.7 247.7 165.6 226.5 92.9 94.8 130.7 247.7 165.6 226.7 73.4 98.8 106.7 106.7 165.9 224.2 75.3 66.3 106.7 106.5 220.7 267.9 114.2 94.0 106.7 106.5 220.7 267.9 114.2 94.0 106.7 106.8 163.9 224.2 75.3 60.3 133.5 133. | _                              |                  |             |                    |                       |                      |                      |             | ,           |              |                     | :                   |                     |
| 137.0         71.0         148.8         240.4         77.7         91.6           130.7         62.2         157.6         231.9         95.4         74.3           170.7         94.2         165.2         231.9         95.4         74.3           183.6         79.4         155.2         312.7         75.7         157.5           211.0         62.5         154.7         286.4         92.2         131.7           233.3         101.8         186.1         296.5         184.3         110.4           233.3         101.8         186.1         296.5         165.9         187.1         167.7           213.1         242.9         345.0         510.9         102.0         165.9         167.9           282.5         366.5         433.4         280.8         66.9         167.9           282.5         366.5         433.4         280.8         165.9         167.9           284.2         177.7         500.9         104.0         223.2         162.3           284.5         187.4         207.2         65.5         70.8           185.5         40.9         104.0         223.2         104.0 <th< td=""><td></td><td></td><td>0.3</td><td>353.3</td><td>7.77</td><td>133.0</td><td>155.2</td><td>82.0</td><td>137.6</td><td>737.1</td><td>55.6</td><td>99.5</td><td>155.1</td></th<>   |                                |                  | 0.3         | 353.3              | 7.77                  | 133.0                | 155.2                | 82.0        | 137.6       | 737.1        | 55.6                | 99.5                | 155.1               |
| 112.6 949 1665 2319 954 743 112.6 7949 1665 233.6 71.6 87.1 112.6 7949 1665 233.6 71.6 87.1 112.1 62.2 1547 286.4 92.2 131.7 1333.3 1018 186.1 296.5 84.3 110.4 1239.0 144.1 282.7 400.4 138.7 111.7 1239.0 144.1 282.7 400.4 138.7 111.7 1239.0 144.1 282.7 400.4 138.7 110.7 1239.0 144.1 282.7 500.9 102.0 165.9 124.2 173.6 366.5 433.4 280.8 66.9 124.2 173.6 277.7 500.9 104.0 223.2 148.5 70.9 136.4 207.2 65.5 70.8 185.3 75.8 162.8 240.7 88.5 162.3 187.9 64.2 153.7 244.4 88.5 162.3 187.9 64.2 153.7 244.4 88.5 60.9 167.5 64.2 153.7 244.4 88.5 60.9 167.5 64.7 159.6 290.3 94.8 130.7 172. 999 158.9 202.5 59.0 94.8 118.0 698 142.8 206.9 75.3 66.3 106.7 88.6 142.8 206.9 75.3 66.3 106.7 88.6 142.8 206.9 65.3 94.0 106.7 88.6 142.8 206.9 65.3 94.0 145.8 76.4 138.3 228.3 62.0 92.0 145.8 76.4 138.3 228.3 62.0 92.0 145.8 76.4 138.3 228.3 106.3 133.5 148.5 68.5 174.4 198.8 367.5 127.4 168.7 175.3 90.2 182.4 289.8 92.2 107.4 100.0 150.4 110.1 166.2 384.4 56.1 107.1 120.5 178.6 88.3 168.9 26.1 107.1 120.5 178.6 88.3 168.9 26.1 107.1 120.5 178.6 70.2 156.1 256.1 86.0 100.0 150.4 86.3 168.9 269.1 82.0 100.0 150.4 86.3 168.9 269.1 82.0 100.0   |                                |                  |             | 363.3              | 10.2                  | 126.8                | 137.0                | 71.0        | 148.8       | 240.4        | 7.77                | 91.6                | 169.4               |
| 112.6 949 1665 253.6 71.6 87.1 183.6 6.2 153.5 71.6 87.1 183.6 6.2 153.5 71.6 87.1 183.6 6.2 153.2 312.7 75.7 157.5 10.8 186.1 286.2 490.4 138.7 110.4 117.7 136.2 242.9 345.0 510.9 104.0 223.2 110.4 282.5 433.4 280.8 66.9 66.9 136.4 207.2 66.5 104.0 223.2 162.3 136.4 207.2 66.5 88.3 162.3 240.7 87.9 167.5 64.2 153.7 244.4 895.5 92.9 60.9 167.5 64.7 153.7 244.4 895.5 92.9 60.9 167.5 167.5 64.7 156.6 226.5 92.9 66.9 130.7 247.7 165.6 226.5 92.9 66.1 167.2 99.9 158.9 202.5 59.0 43.6 163.9 224.2 55.0 10.2 167.5 64.7 153.8 224.2 55.0 114.2 47.2 165.8 226.5 92.9 66.3 100.7 49.5 163.9 224.2 55.0 10.3 133.5 224.2 56.7 17.4 198.8 30.8 3 10.6 3 133.5 224.1 10.1 10.1 166.2 384.4 56.1 107.1 100.1 166.2 384.4 56.1 107.1 100.2 169.8 30.7 107.1 10.1 168.2 384.4 56.1 107.1 10.1 166.2 384.4 56.1 107.1 10.1 166.2 384.4 56.1 107.1 10.1 166.2 384.4 56.1 107.1 10.1 168.7 10.0 10 |                                |                  |             | 378.5              | 13.3                  | 157.4                | 170.7                | 62.2        | 157.6       | 231.9        | 95.4                | 74.3                | 169.7               |
| 183.6         794         155.2         312.7         75.7         157.5           211.0         62.5         144.7         286.4         92.2         131.7           213.3         101.8         186.1         296.5         84.3         110.4           239.3         101.8         186.1         296.5         84.3         110.4           239.3         101.8         186.1         296.5         192.0         131.7           213.1         242.9         345.0         510.9         102.0         165.9           282.5         366.5         433.4         280.8         66.9           282.5         366.5         433.4         280.8         66.9           284.2         177.5         500.9         104.0         223.2           284.2         177.7         500.9         104.0         223.2           185.5         70.9         154.4         207.2         65.5         70.8           185.6         43.7         50.9         104.0         223.2         70.8           187.5         162.8         43.6         102.0         165.9         223.2           188.3         162.8         43.4         89.5  |                                | . ,              |             | 380.4              | 17.8                  | 94.7                 | 112.6                | 94.9        | 166.5       | 253.6        | 71.6                | 87.1                | 158.7               |
| 211.0         62.5         154.7         286.4         92.2         131.7           233.3         101.8         186.1         296.5         84.3         110.4           233.3         101.8         186.1         296.5         84.3         110.4           233.1         144.1         282.7         400.4         138.7         117.7           282.5         36.5         433.4         280.8         66.9         66.9           282.5         36.5         433.4         280.8         66.9         66.9           284.2         17.7         500.9         104.0         223.2         70.8           148.5         70.9         136.4         207.2         65.5         70.8           148.5         70.9         136.4         207.2         65.5         70.8           148.5         70.9         158.4         207.2         65.5         70.8           167.5         64.2         152.8         240.7         88.5         162.3           167.5         64.7         159.6         290.3         94.8         130.7           167.5         64.7         159.6         290.3         94.8         130.7           167.1 <td></td> <td>. ,</td> <td></td> <td>411.5</td> <td>27.1</td> <td>156.5</td> <td>183.6</td> <td>79.4</td> <td>155.2</td> <td>312.7</td> <td>75.7</td> <td>157.5</td> <td>233.3</td>   |                                | . ,              |             | 411.5              | 27.1                  | 156.5                | 183.6                | 79.4        | 155.2       | 312.7        | 75.7                | 157.5               | 233.3               |
| 233.3         101.8         186.1         296.5         84.3         110.4           239.0         144.1         282.7         400.4         138.7         117.7           239.0         144.1         282.7         400.4         138.7         117.7           282.5         85.6         433.4         280.8         66.9           282.5         85.6         433.4         280.8         66.9           284.2         177.6         500.9         104.0         223.2           284.5         70.9         136.4         207.2         65.5         70.8           148.5         70.9         159.4         321.7         88.5         162.3           183.3         75.8         162.1         246.6         88.3         162.3           187.9         64.2         153.7         244.4         89.5         90.7           187.9         73.8         162.1         246.6         88.3         84.5           187.9         78.3         244.4         89.5         90.7           187.9         78.3         246.6         88.3         84.5           187.9         72.7         165.6         226.5         92.9         90.8 <td></td> <td></td> <td></td> <td>417.7</td> <td>55.7</td> <td>155.3</td> <td>211.0</td> <td>62.5</td> <td>154.7</td> <td>286.4</td> <td>92.2</td> <td>131.7</td> <td>223.9</td>  |                                |                  |             | 417.7              | 55.7                  | 155.3                | 211.0                | 62.5        | 154.7       | 286.4        | 92.2                | 131.7               | 223.9               |
| 239.0         144.1         282.7         400.4         138.7         117.7           213.1         242.9         345.0         510.9         102.0         165.9           282.5         85.6         433.4         280.8         66.9           284.2         173.6         277.7         500.9         102.0         165.9           135.5         70.9         136.4         207.2         65.5         70.8           183.3         75.8         162.8         240.7         88.5         162.3           183.3         75.8         162.1         240.7         89.5         90.7           187.5         64.2         153.7         244.4         89.5         90.7           187.5         64.2         153.7         244.4         89.5         90.7           187.5         64.3         162.1         246.6         88.3         84.5           172.8         68.3         149.3         271.5         81.0         17.2           187.5         165.0         226.5         92.9         60.9           101.1         80.6         177.1         268.9         96.5         91.8           101.1         80.6         177.1  | ,                              |                  |             | 485.1              | 64.8                  | 168.4                | 233.3                | 101.8       | 186.1       | 296.5        | 84.3                | 110.4               | 194.7               |
| 213.1         242.9         345.0         510.9         102.0         165.9           282.5         856         433.4         280.8         66.9         66.9           284.2         173.6         277.7         500.9         104.0         223.2           284.5         177.7         500.9         104.0         223.2           148.5         70.9         159.4         321.7         88.5         162.3           183.3         75.8         162.8         240.7         87.0         77.9           187.5         64.2         153.7         244.4         89.5         90.7           187.5         64.2         153.7         244.4         89.5         90.7           187.5         64.7         159.6         290.3         94.8         130.7           187.5         64.7         159.6         290.3         94.8         130.7           247.7         165.6         226.5         92.9         60.9         91.8           101.1         80.6         177.1         268.9         96.5         91.8           106.0         165.0         202.5         59.0         43.6         91.8           118.0         165.0  |                                |                  |             | 515.5              | 58.7                  | 180.3                | 239.0                | 144.1       | 282.7       | 400.4        | 138.7               | 117.7               | 256.3               |
| 282.5         85.6         366.5         433.4         280.8         66.9           264.2         173.6         277.7         500.9         104.0         223.2           264.2         177.7         500.9         104.0         223.2           48.5         70.9         156.4         207.2         65.5         70.8           48.5         75.8         162.8         240.7         87.0         77.9           167.5         64.2         153.7         244.4         89.5         90.7           167.5         64.2         153.7         244.4         89.5         90.7           167.5         64.2         153.7         244.4         89.5         90.7           167.5         244.4         89.5         90.7         77.9           167.5         244.4         89.5         90.7         77.9           167.5         244.4         89.5         90.7         77.9           247.7         165.6         226.5         92.9         91.8           101.1         80.6         177.1         268.9         96.5         91.8           118.0         92.9         162.9         73.0         64.1         91.8 <td></td> <td></td> <td></td> <td>580.0</td> <td>76.3</td> <td>136.7</td> <td>213.1</td> <td>242.9</td> <td>345.0</td> <td>510.9</td> <td>102.0</td> <td>165.9</td> <td>268.0</td>  |                                |                  |             | 580.0              | 76.3                  | 136.7                | 213.1                | 242.9       | 345.0       | 510.9        | 102.0               | 165.9               | 268.0               |
| 264.2         173.6         277.7         500.9         104.0         223.2           135.5         70.9         136.4         207.2         65.5         70.8           48.5         70.9         159.4         207.2         65.5         70.8           183.3         75.8         162.4         207.7         88.5         162.3           187.9         77.8         162.1         246.6         88.3         84.5           187.9         73.8         162.1         246.6         88.3         84.5           187.9         64.2         153.7         244.4         89.5         90.7           187.9         64.2         153.7         244.4         89.5         90.7           187.9         64.3         271.5         81.0         122.2           185.5         290.3         244.8         81.0         122.2           247.7         72.7         165.6         220.3         92.9         91.8           101.1         80.6         177.1         268.9         92.9         91.8           112.5         94.4         167.9         267.9         114.2         47.2           106.7         163.9         224.2  |                                |                  |             | 0.009              | 137.8                 | 144.8                | 282.5                | 85.6        | 366.5       | 433.4        | 280.8               | 699                 | 347.8               |
| 135.5         70.9         136.4         207.2         65.5         70.8           148.5         70.9         159.4         321.7         88.5         162.3           148.5         70.9         159.4         321.7         88.5         162.3           167.5         64.2         153.7         244.4         89.5         90.7           187.9         73.8         162.1         246.6         88.3         84.5           187.5         64.2         153.7         244.4         89.5         90.7           187.5         64.7         159.6         290.3         94.8         130.7           185.5         64.7         159.6         290.3         94.8         130.7           247.7         72.7         165.6         226.5         92.9         60.9           101.1         80.6         177.1         268.9         96.5         91.8           112.5         94.4         167.9         266.7         73.4         98.8           106.7         165.9         224.2         75.3         60.3           106.7         165.9         224.2         75.3         64.1           106.7         165.9         224.2   | ai                             | •                |             | 640.0              | 78.7                  | 185.6                | 264.2                | 173.6       | 277.7       | 500.9        | 104.0               | 223.2               | 327.3               |
| 135.5         70.9         136.4         207.2         65.5         70.8           148.5         70.9         159.4         321.7         88.5         162.3           183.3         75.8         162.4         321.7         88.5         162.3           187.5         64.2         153.7         244.4         89.5         90.7           187.9         73.8         162.1         246.6         88.3         84.5           172.8         68.3         149.3         271.5         81.0         122.2           185.5         64.7         159.6         290.3         94.8         130.7           247.7         72.7         165.6         226.5         92.9         60.9           101.1         80.6         177.1         268.9         96.5         91.8           112.5         94.4         167.9         266.7         73.4         98.8           112.5         94.4         167.9         266.7         73.4         98.8           106.7         188.6         163.9         224.2         75.3         60.3           106.7         165.9         224.2         75.3         62.0         90.0           144.5  |                                |                  |             |                    |                       |                      |                      |             |             |              |                     |                     |                     |
| 148.5         70.9         159.4         321.7         88.5         162.3           183.3         75.8         162.8         240.7         87.0         77.9           183.3         75.8         162.1         244.4         89.5         90.7           187.9         73.8         162.1         246.6         88.3         84.5           172.8         68.3         149.3         271.5         81.0         122.2           185.5         64.7         159.6         290.3         94.8         130.7           247.7         72.7         165.6         226.5         92.9         60.9           101.1         80.6         177.1         268.9         96.5         91.8           101.1         80.6         177.1         268.9         96.5         91.8           101.1         80.6         177.1         268.9         96.5         91.8           118.0         98.6         142.8         206.9         73.0         64.1           106.7         166.7         266.7         73.0         64.1         47.2           106.7         166.7         266.7         73.0         64.1         47.2           106.7  |                                |                  |             | 309.2              | 18.4                  | 117.1                | 135.5                | 70.9        | 136.4       | 207.2        | 65.5                | 70.8                | 136.3               |
| 183.3         75.8         162.8         240.7         87.0         77.9           167.5         64.2         153.7         244.4         89.5         90.7           167.5         64.2         153.7         244.4         89.5         90.7           172.8         68.3         149.3         271.5         81.0         122.2           185.5         64.7         159.6         290.3         94.8         130.7           247.7         72.7         165.6         226.5         92.9         60.9           101.1         80.6         177.1         268.9         96.5         91.8           101.1         80.6         177.1         268.9         96.5         91.8           101.1         80.6         177.1         268.9         96.5         91.8           118.0         69.8         142.8         206.9         73.0         64.1           106.0         166.7         267.9         73.0         64.1           106.0         166.7         267.9         73.0         64.1           106.0         166.3         267.9         73.0         64.1           106.1         166.5         267.9         75.3   |                                |                  |             | 322.5              | 11.6                  | 136.9                | 148.5                | 70.9        | 159.4       | 321.7        | 88.5                | 162.3               | 250.8               |
| 167.5         64.2         153.7         244.4         89.5         90.7           187.9         73.8         162.1         246.6         88.3         84.5           187.5         68.3         149.3         271.5         81.0         122.2           185.5         64.7         159.6         290.3         94.8         130.7           247.7         72.7         165.6         226.5         92.9         60.9           101.1         80.6         177.1         268.9         96.5         91.8           102.5         94.4         167.9         266.7         73.4         98.8           118.0         69.8         142.8         206.5         73.0         64.1           106.7         166.7         224.2         75.3         60.3           106.7         166.7         224.2         75.3         60.3           106.7         166.7         224.2         75.3         60.3           106.7         166.7         224.2         75.3         60.3           106.7         166.8         142.8         92.5         94.0           106.7         167.9         267.9         147.2         92.5   |                                |                  |             | 351.1              | 58.7                  | 124.6                | 183.3                | 75.8        | 162.8       | 240.7        | 87.0                | 77.9                | 164.9               |
| 187.9         73.8         162.1         246.6         88.3         84.5           172.8         68.3         149.3         271.5         81.0         122.2           185.5         64.7         159.6         290.3         94.8         130.7           247.7         72.7         165.6         226.5         92.9         60.9           101.1         80.6         177.1         268.9         96.5         91.8           102.5         99.9         158.9         202.5         59.0         43.6           122.5         94.4         167.9         266.7         73.4         98.8           106.7         88.6         163.9         224.2         75.3         60.3           106.7         88.6         163.9         224.2         75.3         60.3           106.7         106.3         224.2         75.3         60.3           106.0         106.5         220.7         267.9         114.2         47.2           145.8         70.4         188.3         224.2         75.3         60.3           106.0         106.5         220.7         267.9         114.2         47.2           106.1         116.5  |                                |                  |             | 356.1              | 16.5                  | 151.0                | 167.5                | 64.2        | 153.7       | 244.4        | 89.5                | 200                 | 180.2               |
| 172.8         68.3         149.3         271.5         81.0         122.2           185.5         64.7         159.6         290.3         94.8         130.7           247.7         72.7         165.6         226.5         92.9         60.9           101.1         80.6         177.1         268.9         96.5         91.8           72.2         99.9         158.9         202.5         59.0         43.6           122.5         94.4         167.9         266.7         73.4         98.8           118.0         69.8         142.8         206.9         73.0         64.1           118.0         69.8         142.8         206.9         73.0         64.1           106.7         88.6         163.9         224.2         73.3         64.1           106.0         106.5         220.7         267.9         74.2         47.2           106.0         166.5         220.7         267.9         65.3         94.0           199.8         163.9         257.9         65.3         94.0           199.8         166.3         106.3         106.3         107.4           106.1         110.1         166.2  |                                |                  |             | 375.1              | 26.2                  | 161.7                | 187.9                | 73.8        | 162.1       | 246.6        | 88.3                | 84.5                | 172.8               |
| 185.5         64.7         159.6         290.3         94.8         130.7           247.7         72.7         165.6         226.5         92.9         60.9           101.1         80.6         177.1         268.9         96.5         91.8           102.5         99.9         158.9         202.5         59.0         43.6           122.5         94.4         167.9         266.7         73.4         98.8           118.0         69.8         142.8         206.9         73.0         64.1           106.7         166.7         266.7         73.0         64.1         98.8           118.0         69.8         142.8         206.9         73.0         64.1           106.7         166.7         247.2         74.2         98.8         66.3           106.7         166.7         247.2         114.2         47.2         47.2           149.5         98.7         163.9         25.9         92.9         92.5         82.9         92.5           189.8         166.9         367.5         167.4         168.7         188.7         107.4         168.7           289.7         169.1         166.2         38.7   |                                |                  |             | 380.5              | 31.0                  | 141.8                | 172.8                | 68.3        | 149.3       | 271.5        | 81.0                | 122.2               | 203.2               |
| 247.7         72.7         165.6         226.5         92.9         60.9           101.1         80.6         177.1         268.9         96.5         91.8           101.2         99.9         158.9         202.5         59.0         43.6           122.5         94.4         167.9         266.7         73.4         98.8           118.0         69.8         142.8         266.7         73.0         64.1           106.7         188.6         163.9         224.2         75.3         64.1           106.0         106.5         220.7         267.9         114.2         98.8           106.1         106.5         220.7         267.9         114.2         47.2           105.1         165.2         220.7         62.0         90.0           145.8         70.5         153.4         245.9         62.0         90.0           199.8         70.5         153.4         245.9         82.9         92.5           189.7         166.2         38.4         56.1         218.2           204.1         106.3         127.4         168.7           205.2         109.1         166.3         100.0   |                                |                  |             | 387.7              | 28.4                  | 157.0                | 185.5                | 64.7        | 159.6       | 290.3        | 94.8                | 130.7               | 225.6               |
| 101.1         80.6         177.1         268.9         96.5         91.8           72.2         99.9         158.9         202.5         59.0         43.6           122.5         94.4         167.9         266.7         73.4         98.8           118.0         69.8         142.8         206.9         73.0         64.1           106.7         88.6         163.9         224.2         75.3         60.3           106.0         106.5         220.7         267.9         144.2         47.2           145.8         764         138.3         228.3         62.0         90.0           149.5         98.7         163.9         257.9         65.3         94.0           199.8         70.5         153.4         245.9         82.9         92.5           189.7         164.9         38.4         56.1         218.2           289.7         71.4         198.8         36.5         127.4         168.7           289.2         109.1         216.2         336.7         107.1         120.5           280.2         169.1         256.1         86.0         100.0           150.4         86.3         169.0   | n                              |                  |             | 395.7              | 70.4                  | 177.4                | 247.7                | 72.7        | 165.6       | 226.5        | 92.9                | 6.09                | 153.8               |
| 72.2 999 1589 202.5 59.0 43.6 122.5 994 1679 266.7 73.4 98.8 142.8 202.5 73.4 98.8 142.8 206.9 73.0 64.1 18.0 698 142.8 206.9 73.0 64.1 18.0 69.8 142.8 206.9 73.0 64.1 18.0 69.8 142.8 206.9 73.0 64.1 18.2 220.7 267.9 114.2 47.2 47.2 145.8 76.4 138.3 228.3 62.0 90.0 149.5 98.7 163.9 25.7 9 65.3 94.0 92.5 153.4 245.9 82.9 92.5 153.4 245.9 82.9 92.5 174.8 308.3 106.3 133.5 204.1 110.1 166.2 384.4 56.1 127.4 168.7 200.2 182.4 289.8 92.2 107.1 120.5 177.5 90.2 156.1 256.1 86.0 100.0 150.4 86.3 168.9 26.9 1 82.6 100.0 150.4 100.2  |                                |                  |             | 279.0              | 7.3                   | 93.9                 | 101.1                | 80.6        | 177.1       | 268.9        | 96.5                | 91.8                | 188.3               |
| 125. 944 1679 266.7 73.4 98.8<br>118.0 69.8 142.8 206.9 73.0 64.1<br>106.7 88.6 163.9 224.2 75.3 64.1<br>106.0 106.5 220.7 267.9 114.2 47.2<br>145.8 76.4 138.3 228.3 62.0 90.0<br>149.8 76.4 138.3 228.3 62.0 90.0<br>199.8 70.5 153.4 245.9 82.9 92.5<br>189.7 68.5 174.8 308.3 106.3 133.5<br>204.1 110.1 166.2 384.4 56.1 218.2<br>204.2 110.1 166.2 384.4 56.1 127.4 168.7<br>200.2 109.1 216.2 336.7 107.1 120.5<br>175.3 90.2 156.1 256.1 86.0 100.0  | •                              |                  |             | 287.6              | 2.0                   | 70.7                 | 7.7.7                | 666         | 1589        | 202 5        | 29.0                | 43.6                | 102 6               |
| 118.0 69.8 142.8 206.9 73.0 64.1 106.7 88.6 163.9 224.2 75.3 60.3 106.0 106.5 220.7 267.9 114.2 60.3 60.3 106.0 106.5 220.7 267.9 114.2 60.3 60.3 144.5 98.7 163.9 257.9 65.3 94.0 199.8 70.5 153.4 245.9 82.9 92.5 153.4 245.9 82.9 92.5 199.7 110.1 166.2 384.4 56.1 27.4 168.7 175.3 90.2 182.4 289.8 92.2 107.4 168.7 175.3 90.2 182.4 289.8 92.2 107.4 168.7 175.3 90.2 182.4 289.8 92.2 107.4 168.7 175.3 90.2 182.4 289.8 92.2 107.4 168.7 175.6 156.1 256.1 86.0 100.0 150.4 168.7 | •                              |                  |             | 300.4              | -9.8                  | 132.3                | 122.5                | 94.4        | 167.9       | 266.7        | 73.4                | 8.86                | 172.3               |
| 106.7 88.6 1639 224.2 75.3 60.3 106.0 106.5 220.7 267.9 114.2 47.2 106.0 106.5 220.7 267.9 114.2 47.2 106.0 106.5 220.7 267.9 114.2 47.2 1445.8 76.4 138.3 228.3 62.0 90.0 199.8 70.5 153.4 245.9 82.9 92.5 189.7 68.5 174.8 308.3 106.3 133.5 204.1 110.1 166.2 384.4 56.1 218.2 204.2 118.4 289.8 92.2 107.4 200.2 109.1 216.2 289.8 92.2 107.4 200.2 109.1 216.2 336.7 107.1 120.5 178.6 70.2 156.1 256.1 86.0 100.0  |                                |                  |             | 306.4              | 31.1                  | 86.9                 | 118.0                | 869         | 142.8       | 206.9        | 73.0                | 64.1                | 137.1               |
| 106.0         106.5         220.7         267.9         114.2         47.2           145.8         76.4         138.3         228.3         62.0         90.0           149.5         98.7         163.9         257.9         62.0         90.0           199.8         70.5         153.4         245.9         82.9         94.0           199.8         70.5         173.4         308.3         106.3         133.5           204.1         110.1         166.2         384.4         56.1         218.2           204.1         110.1         166.2         384.4         56.1         218.2           175.3         90.2         127.4         168.7         107.4           200.2         199.1         216.2         336.7         107.1         120.5           178.6         70.2         156.1         256.1         86.0         100.0           150.4         86.3         168.9         269.1         82.6         100.2  |                                |                  |             | 323.9              | 13.0                  | 93.7                 | 106.7                | 988.6       | 163.9       | 224.2        | 75.3                | 60.3                | 135.6               |
| 145.8         76.4         138.3         228.3         62.0         90.0           149.5         98.7         163.9         257.9         65.3         94.0           149.8         70.5         153.4         245.9         82.9         94.0           189.7         68.5         174.8         308.3         106.3         133.5           204.1         110.1         166.2         384.4         56.1         218.2           289.2         71.4         198.8         367.5         127.4         168.7           200.2         182.4         289.8         92.2         107.4           200.2         160.1         216.2         336.7         107.1         120.5           178.6         70.2         156.1         256.1         86.0         100.0           150.4         86.3         168.9         269.1         82.6         100.2   |                                |                  |             | 330.8              | 7.2                   | 98.8                 | 106.0                | 106.5       | 220.7       | 267.9        | 114.2               | 47.2                | 161.4               |
| 149.5         98.7         163.9         257.9         65.3         94.0           199.8         70.5         153.4         245.9         82.9         92.5           189.7         68.5         174.8         308.3         106.3         133.5           204.1         110.1         166.2         384.4         56.1         218.2           289.2         71.4         198.8         367.5         127.4         168.7           200.2         190.1         216.2         289.8         92.2         107.4           200.2         109.1         216.2         336.7         107.1         120.5           178.6         70.2         156.1         256.1         86.0         100.0           150.4         86.3         168.9         269.1         82.6         100.2  |                                |                  |             | 334.7              | 11.2                  | 134.7                | 145.8                | 76.4        | 138.3       | 228.3        | 62.0                | 0.06                | 151.9               |
| 199.8         70.5         153.4         245.9         82.9         92.5           189.7         68.5         174.8         308.3         106.3         133.5           204.1         110.1         166.2         384.4         56.1         218.2           289.2         71.4         198.8         367.5         127.4         168.7           280.2         70.2         182.4         289.8         92.2         107.4           200.2         109.1         216.2         336.7         107.1         120.5           178.6         70.2         156.1         256.1         86.0         100.0           150.4         86.3         168.9         269.1         82.6         100.2  |                                |                  |             | 346.8              | 63.2                  | 86.3                 | 149.5                | 98.7        | 163.9       | 257.9        | 65.3                | 94.0                | 159.2               |
| 189.7 68.5 174.8 308.3 106.3 133.5 204.1 110.1 166.2 384.4 56.1 218.2 289.2 71.4 198.8 367.5 127.4 168.7 775.3 90.2 182.4 289.8 92.2 107.4 200.2 109.1 216.2 336.7 107.1 120.5 178.6 70.2 156.1 256.1 86.0 100.0 150.4 86.3 168.9 269.1 82.6 100.2   |                                |                  |             | 347.6              | 31.3                  | 168.5                | 199.8                | 70.5        | 153.4       | 245.9        | 82.9                | 92.5                | 175.4               |
| 204.1 110.1 166.2 384.4 56.1 218.2  2889.2 71.4 198.8 367.5 127.4 168.7  175.3 90.2 182.4 289.8 92.2 107.4  200.2 109.1 216.2 336.7 107.1 120.5  178.6 70.2 156.1 256.1 86.0 100.0  150.4 86.3 168.9 269.1 82.6 100.2  |                                |                  |             | 374.7              | 14.2                  | 175.5                | 189.7                | 68.5        | 174.8       | 308.3        | 106.3               | 133.5               | 239.8               |
| 289.2 71.4 198.8 367.5 127.4 168.7 175.3 90.2 182.4 289.8 92.2 107.4 107.4 100.2 100.2 109.1 216.2 336.7 107.1 120.5 178.6 70.2 156.1 256.1 86.0 100.0 150.4 86.3 168.9 269.1 82.6 100.2   |                                |                  |             | 432.4              | 71.1                  | 133.1                | 204.1                | 110.1       | 166.2       | 384.4        | 56.1                | 218.2               | 274.3               |
| 175.3 90.2 182.4 289.8 92.2 107.4 280.2 200.2 109.1 216.2 336.7 107.1 120.5 178.6 70.2 156.1 256.1 86.0 100.0 150.4 86.3 168.9 269.1 82.6 100.2  |                                |                  |             | 460.3              | 54.5                  | 234.6                | 289.2                | 71.4        | 198.8       | 367.5        | 127.4               | 168.7               | 296.1               |
| 200.2 109.1 216.2 336.7 107.1 120.5<br>178.6 70.2 156.1 256.1 86.0 100.0<br>150.4 86.3 168.9 269.1 82.6 100.2  | _                              |                  |             | 391.2              | 36.1                  | 139.2                | 175.3                | 90.2        | 182.4       | 289.8        | 92.2                | 107.4               | 199.5               |
| 178.6 70.2 156.1 256.1 86.0 100.0<br>150.4 86.3 168.9 269.1 82.6 100.2   |                                |                  |             | 465.9              | 51.1                  | 149.1                | 200.2                | 109.1       | 216.2       | 336.7        | 107.1               | 120.5               | 227.6               |
| 150.4 86.3 168.9 269.1 82.6 100.2  |                                |                  |             | 359.7              | 32.7                  | 145.9                | 178.6                | 70.2        | 156.1       | 256.1        | 86.0                | 100.0               | 185.9               |
| Note: The national MLG standard and national real MLG expenditure are the simple averages of the 31 regions.   |                                |                  |             | 343.7              | 24.7                  | 125.7                | 150.4                | 86.3        | 168.9       | 269.1        | 82.6                | 100.2               | 182.8               |
| ď  | Note: The national MLG star    | dard and natic   | onal real N | <b>ALG</b> expendi | iture are the simple  | averages of the 31   | regions.             |             |             |              |                     |                     |                     |
| 5  | Source: China Civil Affairs' S | atistical Yearbo | ook 2014,   | National Bu        | reau of Statistics of | China (http://data.s | stats.gov.cn/workspa | ce/index?m= | =hqid/) and | own calculat | ions.               |                     |                     |