Rural Urban Income and Consumption Gaps across Provinces of China, 1978-2008

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Abstract  Huge gaps exist and are widening between the rural and urban income and consumption across 32 provinces of China despite very impressive rates of growth of GDP in the last three decades. By pursuing rapid urbanisation and export oriented strategies Chinese policy makers seem to have switched away from the equality oriented linear model of optimal consumption to urban biased inequality tolerating non-linear model of consumption since 1978. Inequality problem will worsen further unless export oriented growth strategies are accompanied by domestic consumption based growth policies.

Keywords  Rural-Urban Consumption Gap, Income Gap, China

JEL Classification: D3, E2, R1

1. Introduction

The GDP of China grew at around 9.8 percent in the last three decades. Chow (2010) attributed these growth rates to total factor productivity (TFP), capital formation and very high elasticity of output to capital input. The growth rate of TFP was 3 percent, the ratio of investment to GDP was above 30 percent and the elasticity of output to capital was 0.6. However, the fruits of growth have not been equally distributed among people living in rural and urban areas. As shown in Table 1 population, consumption and income have grown faster in urban than in rural areas. Earlier Rui and Li (2007) and Chien-Hsun (1994) had highlighted on how the higher growth rate has brought sharp rural urban differences in income and consumption among provinces and regions of China. Limitations in the scale and scope of existing redistribution schemes has created enormous gaps between the rich and poor though the government seem to have subsidies or guarantees for food, housing, health and education for rural and urban residents in place. Capital accumulation, emphasised as the major source of economic growth in China after the formation of the Chinese Communist Party in 1949, was compromised during the Cultural Revolution and the Great leap forward. It was re-emphasised by export and urban focused growth strategy since 1978. New policies have resulted in unbalanced growth of income and consumption in rural and urban areas of China as rural areas are facing permanent negative income and consumption shocks relative to urban areas (see trends in Figures 1 and 2).

Figure 1. Trends of population and consumption

Figure 2. Ratio of Urban to Rural Consumption in China
Table 1. Population, Real Per Capita Consumption and Income by Regions in China

|                          | 1978   | 1980   | 1990   | 2000   | 2008   | 2008/1995 |
|--------------------------|--------|--------|--------|--------|--------|-----------|
| Urban population (million)| 172.5  | 191.4  | 302.0  | 459.1  | 606.7  | 3.52      |
| Rural population (million)| 790.1  | 795.7  | 841.4  | 808.4  | 721.4  | 0.91      |
| Per capita urban consumption (C1) | 404    | 489    | 1596   | 6850   | 13526  | 33.48     |
| Per capita rural consumption (C2) | 138    | 178    | 560    | 1860   | 3756   | 27.22     |
| Per capita Urban income (Y1)   | 343    | 478    | 1510   | 6280   | 15781  | 46.01     |
| Per capita Rural income (Y2)   | 134    | 191    | 686    | 2253   | 4761   | 35.53     |
| Average per capita income (Y) | 477    | 669    | 2196   | 8533   | 20542  | 43.06     |
| Alpha (Y1/Y)                 | 0.719  | 0.714  | 0.688  | 0.736  | 0.768  | 1.07      |
| Beta (Y2/Y)                  | 0.281  | 0.286  | 0.312  | 0.264  | 0.232  | 0.83      |

Consumption and income are measured in Yuan. Data source: http://www.stats.gov.cn/tjsj/ndsj/2008/indexee.htm;

Some lessons could be learnt from the consumption and income inequality of advanced countries. Blundell and Preston (1988) had empirically tested consumption inequality and uncertainty hypothesis on household survey data for UK. Cutler and Katz (1992), Attanasio et al. (2002) and Krueger and Perri (2006) have studied consumption inequality issue extensively using theoretical models and empirical data. Such studies apparently seem lacking for China. Linear and non-linear models of consumption and income inequality are developed here to analyse this issue with statistical evidences for 1978 to 2008. Many papers have been published in the Journal of Comparative Economics or Journal of Chinese Economic and Business Studies on this issue in recent years.

2. Analytical Structure

We try to explain features of consumption and income equality in China before 1978 with a linear model. Then we turn to a non-linear social welfare function to explain inequality tolerating and urban biased behaviour and attitudes of policy makers in recent years.

2.1. Linear Model of Equality

Linear model contains $N_1$ urban and $N_2$ rural households with $C_1$ and $C_2$ levels of consumptions related to corresponding income with share parameters as:

$$C_i = \alpha Y_i ; \ 0 < \alpha < 1 \ \text{and} \ C_i = \beta Y_i ; \ 0 < \beta < 1$$  (1)

Value of consumption is assumed to be the same for both types of households. National income ($Y$) and consumption ($C$) are aggregate of these two:

$$Y = N_1 Y_1 + N_2 Y_2 \ \text{and} \ C = N_1 C_1 + N_2 C_2$$  (2)

In this scenario the central communist party believed in perfect equality among people, therefore the objective of the national government was to maximise the aggregate consumption

$$C = N_1 C_1 + N_2 C_2 \ \text{subject to above constraints.}$$

$$L = N_1 C_1 + N_2 C_2 + \lambda \left[ Y - \frac{N_1 C_1}{\alpha} - \frac{N_2 C_2}{\beta} \right]$$  (3)

When consumption levels are proportionate to population between rural and urban areas the optimisation results in equality as (see derivation in the appendix):

$$\alpha = \beta$$  (4)

This implies perfect equality between rural and urban households. Since this objective did not produce enough growth it was abandoned after 1978. Provinces were allowed to grow at different speeds resulting in different levels of income to rural and urban residents. Social welfare function seems to have become non-linear since then.

2.2. Non-Linear Social Welfare Function with Inequality

Chinese government adopted export oriented growth strategy and abandoned its policies of equality under the cultural-revolution in 1978. Weights assigned to rural and urban economic activities changed; more preference was given to the urban sector that could promote exports. This change in attitudes of policy makers can be summarised using a nonlinear objective function subject to the resource balance condition of the economy as following:

$$L = C_1^\alpha C_2^\beta + \lambda \left[ Y - C_1 - C_2 \right]$$  (5)

Optimal shares or the rural and urban consumption from this non-linear model are (see derivations in the appendix):

$$C_1 = \frac{\alpha}{\alpha + \beta} Y \ \text{and} \ C_2 = \frac{\beta}{\alpha + \beta} Y$$  (6)

Three different policy conditions could be analysed from these results.

Communism: when $\alpha = \beta$. This is ideal situation, both rural and urban consumption receive equal weight in policy maker’s objective function.
Export oriented urban biased regime:  $\alpha > \beta$
Rural development oriented regime:  $\alpha < \beta$

3. Empirical Evidence

We find empirical evidence on above theoretical propositions $\alpha$ and $\beta$ from the time series data for the 30 different provinces of China for 1978 to 2008 available from the Chinese Statistical year book (www.stats.gov.cn) as summarised in Tables 2 and 3 in the Appendix II. Total, rural and urban population, GDP per capita, earnings for urban workers, number of employed persons in urban and rural areas, gap between per capita GDP and average earnings are used to calculate gaps in ratios of urban and rural population, income and earnings for 1995, 2000, 2005 and 2008. The structural change in the economy is estimated using ratios of 2008 to 1995. Special features of structural changes that occurred during 1995 to 2000 period can be enumerated as:

1) Total population of most provinces increased but the rate of growth of population was very fast in big cities like Beijing, Shanghai, Tianjing and Guangdong. These big cities attracted millions of people from other provinces and rural areas. Economic expansion in Guangdong, a coastal province, was very fast. The total population of Hubei, Hunan and Sichuan decreased because millions migrated out of these provinces for employment in more prosperous areas that were outside these provinces. Chongqing was separated from Sichuan in 1997.

2) Urban population increased very fast in big cities including Beijing, Shanghai and Tianjing and some provinces located in coastal regions including Hebei, Jiangsu, Zhejiang, Fujian, Guangdong, Guangxi and Hainan. The fast change in the size of urban population of Sichuan, Guizhou, Yunan, Shaanxi and Ningxia is related to the policy of development of Western China.

3) The ratio of rural to urban population decreased in each province because of rapid urbanization although the natural growth rate of every province is positive. Xinjiang was the only province where the ratio of rural to total population increased in 2008 compared to 1995. Xinjiang is home of many ethnic group such as Uighur with very different policy of family planning and has a lower rate of urbanization.

4) The growth rate of GDP was fast in big cities including Beijing, Shanghai and Tianjing and some provinces located in coastal region including Hebei, Jiangsu, Zhejiang, Shandong, Guangdong and some provinces located in Western China including Shaanxi, Gansu, Qinghai, Ningxia and Inner Mongolia and some provinces located in Middle China such as Shanxi (it’s coal is very abundant) and Henan. The higher growth rate of GDP of Shaanxi, Gansu, Qinghai, Ningxia and Inner Mongolia is related to the policy of development of Western China.

5) Factors such as the growth of GDP and the differences in policy of redistribution of income among provinces affected the changes in earnings. There are many other factors that affect the ratio of Gap2008/Gap1995 and political, social and economic reasons behind them are very complicated.

6) The change of number of employed persons (total) is related to the change of total population and the growth rate of regional economy. Beijing, Zhejiang and Guangdong are good examples.

7) The change in the number of employed persons (urban and rural) is related to the development of regional economy and the change of population. Provinces such as Beijing, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong and Guangdong, located in coastal region, experienced very fast development of urban economy and attracted migration of millions from labour force of other provinces. In contrast there was heavy emigration of labour from Sichuan where the number of total, urban and rural employed persons decreased significantly.

8) The change of total earnings of urban employed persons equals the change of urban employed persons times the change in earning. Because of the fast growth in the number of urban employed persons in Beijing, Jiangsu, Zhejiang and Guangdong, their earnings increased fast.

9) The change of ratio of Total Earnings of Urban Employed Persons (TEOUEP) to GDP is related to the change of total earnings of urban employed persons and the change of GDP. Because of the change of urban employed persons, the change of the earning and the change of GDP, the change of Ratios of TEOUEP to GDP of Beijing, Jiangsu and Zhejiang are bigger.

Analysis of above trends provides enough empirical evidence that current economic policies have generated higher share of urban consumption than to the rural consumption. This is consistent with $\alpha > \beta$ in the nonlinear optimisation model. While the original objective of perfect equality $\alpha = \beta$ is almost forgotten, the rural oriented growth strategy $\alpha < \beta$ seems applicable only to a very few areas which have experienced very little urbanisation.

4. Conclusion

There are huge and widening gaps between the rural and urban income and consumption across 32 provinces of China. Chinese policy makers switched to a non-linear optimisation model of consumption pursuing rapid urbanisation and export oriented growth strategy since 1978. Rural areas are becoming poorer relative to urban ones and likely to be so in coming years unless export oriented growth strategies are accompanied by domestic consumption based growth strategies as proposed in the linear optimisation model of...
consumption.

Appendix I

A. The first order conditions for optimisation for linear model:

\[ \frac{\partial L_i}{\partial C_i} = N_i - \frac{N}{\alpha} = 0 \]  \hspace{1cm} (A1)

\[ \frac{\partial L_i}{\partial C_i} = N_i - \frac{N}{\beta} = 0 \]  \hspace{1cm} (A2)

\[ \frac{\partial L_i}{\partial \lambda} = Y - \frac{N C_i}{\alpha} - \frac{N C_i}{\beta} = 0 \]  \hspace{1cm} (A3)

\[ \frac{N}{N_i} = \frac{N_i}{N, \alpha} \]  \hspace{1cm} (A4)

B. The first order conditions of optimisation for non-linear model:

\[ \frac{\partial L_i}{\partial C_i} = \lambda C_i^{\rho} C_i^{\rho} - \lambda = 0 \]  \hspace{1cm} (B5)

\[ \frac{\partial L_i}{\partial \lambda} = \beta C_i^{\rho} C_i^{\rho} - \lambda = 0 \]  \hspace{1cm} (B6)

\[ \frac{\partial L_i}{\partial \lambda} = Y - C_i - C_i = 0 \]  \hspace{1cm} (B7)

Above conditions can be used to show how the weights have changed in the new regime giving rural urban differences.

\[ \frac{\alpha C_i^{\rho} C_i^{\rho}}{\beta C_i^{\rho} C_i^{\rho}} = \frac{\lambda}{\lambda} = 1 \]  \hspace{1cm} (B8)

\[ \frac{C_i - \beta}{C_i - \alpha} \]  \hspace{1cm} (B9)

\[ \frac{C_i - \beta}{C_i - \alpha} \]  \hspace{1cm} (B10)

\[ Y = C_i + C_i = C_i + \frac{\beta}{\alpha} C_i \]  \hspace{1cm} (B11)
### Table 2. Difference in urban and rural per capita consumption by provinces in China, 1995/2008

| Province       | Rural 1995 | Urban 1995 | U/R ratio | Rural 2008 | Urban 2008 | U/R ratio | 2008-1995 |
|----------------|------------|------------|-----------|------------|------------|-----------|-----------|
| National Average | 1310.36    | 3537.57    | 2.6996932 | 3660.68    | 11242.85   | 3.07125   | 0.37155   |
| Beijing        | 2335.62    | 5019.77    | 2.1492238 | 7284.65    | 16460.26   | 2.25958   | 0.11036   |
| Tianjin        | 1548.4     | 4064.1     | 2.6247094 | 3825.43    | 13422.47   | 3.50875   | 0.88404   |
| Hebei          | 1104.3     | 3161.99    | 2.8633433 | 3125.55    | 9086.73    | 2.90724   | 0.04390   |
| Shanxi         | 927.99     | 2640.73    | 2.8456449 | 3097.54    | 8806.55    | 2.84308   | -0.00257  |
| Inner Mongolia | 1180.46    | 2482.15    | 2.1026973 | 3618.11    | 10828.62   | 2.99289   | 0.89020   |
| Liaoning       | 1471.93    | 3113.39    | 2.1151753 | 3814.03    | 11231.48   | 2.94478   | 0.82960   |
| Jilin          | 1494.62    | 2597.96    | 1.7382077 | 3344.24    | 9729.05    | 2.82555   | 1.08734   |
| Heilongjiang   | 1479.84    | 2776.49    | 1.8762096 | 3844.73    | 8622.97    | 2.24280   | 0.36659   |
| Shanghai       | 3387.04    | 5856.11    | 1.7289757 | 9119.67    | 19397.89   | 2.17204   | 0.3906    |
| Jiangsu        | 1938.01    | 3772.28    | 1.9464709 | 5328.37    | 11977.55   | 2.24788   | 0.30141   |
| Zhejiang       | 2378.38    | 5263.41    | 2.2130232 | 7534.09    | 15158.3    | 2.01196   | -0.20106  |
| Anhui          | 1070.64    | 3161.41    | 2.9528226 | 3284.11    | 9524.04    | 2.90004   | -0.05279  |
| Fujian         | 1793.68    | 3848.11    | 2.1453715 | 4661.94    | 12501.12   | 2.68153   | 0.53616   |
| Jiangxi        | 1256.08    | 2712.44    | 2.1594484 | 3309.21    | 8717.37    | 2.63428   | 0.47483   |
| Shandong       | 1338.46    | 3285.5     | 2.4546867 | 4077.05    | 11006.61   | 2.69965   | 0.24496   |
| Henan          | 929.39     | 2673.95    | 2.8771022 | 3044.21    | 8837.46    | 2.90304   | 0.02594   |
| Hubei          | 1245.1     | 3433.79    | 2.7578427 | 3652.57    | 9477.51    | 2.59475   | -0.16309  |
| Hunan          | 1367.3     | 3885.64    | 2.8418343 | 3804.97    | 9945.52    | 2.61382   | -0.22801  |
| Guangdong      | 2255.01    | 6253.68    | 2.7732383 | 4872.46    | 15527.97   | 3.18689   | 0.41365   |
| Guangxi        | 1202.91    | 4045.83    | 3.6363888 | 2985.03    | 9627.4     | 3.22523   | -0.13814  |
| Hainan         | 1080.46    | 3760.29    | 3.4802677 | 2883.1     | 9408.48    | 3.26332   | -0.21695  |
| Chongqing      | 1245.1     | 3433.79    | 2.7578427 | 3652.57    | 9477.51    | 2.59475   | -0.16309  |
| Sichuan        | 1092.91    | 3429       | 3.1374953 | 3127.94    | 9679.14    | 3.09441   | -0.04308  |
| Guizhou        | 930.59     | 3250.55    | 3.4929991 | 2165.7     | 8349.21    | 3.85520   | 0.36220   |
| Yunnan         | 981.1      | 3448.27    | 3.5146978 | 2990.61    | 9076.61    | 3.03504   | -0.47966  |
| Tibet          | 896.8      | 0          | 2199.59   | 8323.54    | 3.78413    | 3.78413   | 0.39308   |
| Shaanxi        | 913.73     | 2837.69    | 3.1056111 | 2979.37    | 9772.07    | 3.27991   | 0.17430   |
| Gansu          | 915.25     | 2617.74    | 2.8601366 | 2400.95    | 8308.62    | 3.46056   | 0.60042   |
| Qinghai        | 913.84     | 2870.07    | 3.1406701 | 2896.62    | 8192.56    | 2.82832   | -0.31235  |
| Ningxia        | 1063.2     | 2865.71    | 2.6953631 | 3094.86    | 9558.29    | 3.08844   | 0.39308   |
| Xinjiang       | 941.58     | 3186.76    | 3.3844814 | 2691.79    | 8669.36    | 3.22067   | -0.16381  |
Table 3. Rural Urban Differences in population, Earnings and Income in China (2008)

| Region        | Tpop | Upop | u_ratio | RPop | GDP  | YCapita | Earning | Gap    | Employed | UrbShare | Employed | TUE | TEU/GDP |
|---------------|------|------|---------|------|------|---------|---------|--------|----------|----------|----------|-----|---------|
| National Total| 126583 | 45844 | 36.22   | 80739 | 89403.6 | 7062.844 | 9371 | 2308.156 | 71150   | 21274    | 29.90021 | 49876 | 19935.87 |
| Beijing       | 1382  | 1071.603 | 77.54   | 310.3972 | 2478.76 | 17936.03 | 16350 | -1586.03 | 622.1453 | 456.3453 | 73.35028 | 165.8 | 746.1246 |
| Tianjin       | 1001  | 720.6199 | 71.99   | 280.3801 | 1639.36 | 16377.22 | 12480 | -3897.22 | 406.6878 | 238.5878 | 58.66608 | 168.1 | 297.7576 |
| Hebei         | 6744  | 1758.835 | 26.08   | 4985.165 | 5088.96 | 7545.907 | 7781 | 235.0925 | 3441.244 | 734.1439 | 21.33368 | 2707.1 | 571.2374 |
| Shanxi        | 3297  | 1150.983 | 34.91   | 2146.017 | 1643.81 | 4985.775 | 6918 | 1932.225 | 1419.056 | 430.4564 | 30.33399 | 988.6 | 297.7897 |
| Inner Mongolia| 2376  | 1014.077 | 42.68   | 1361.923 | 1401.01 | 5896.507 | 6974 | 1077.493 | 1016.599 | 385.0991 | 37.88112 | 631.5 | 268.5681 |
| Liaoning      | 4238  | 2298.79 | 54.24234 | 1939.21 | 4669.06 | 11017.13 | 8811 | -2206.13 | 1812.566 | 846.5657 | 46.70538 | 966  | 745.909 |
| Jilin         | 2728  | 1355.27 | 49.68   | 1372.73 | 1821.19 | 6675.916 | 7924 | 1248.084 | 1078.866 | 437.8663 | 40.58758 | 641  | 346.9653 |
| Heilongjiang  | 3689  | 1901.311 | 51.54   | 1787.689 | 3253 | 8818.108 | 7835 | -983.108 | 1634.958 | 721.758 | 44.14535 | 913.2 | 565.4974 |
| Shanghai      | 1674  | 1478.309 | 88.31   | 195.6906 | 4551.15 | 27187.28 | 18531 | -8656.28 | 673.1088 | 417.5088 | 62.0269 | 255.6 | 773.6856 |
| Jiangsu       | 7438  | 3086   | 41.49   | 4352 | 8582.728 | 11539.03 | 10299 | -1240.03 | 3558.84 | 870.8395 | 24.46976 | 2688 | 896.8776 |
| Zhejiang      | 4677  | 2277   | 48.67   | 2400 | 6036.34 | 12906.44 | 13076 | 169.5643 | 2700.471 | 592.0706 | 21.92472 | 2108.4 | 774.1915 |
| Anhui         | 5986  | 1664.707 | 27.81   | 4321.293 | 3038.236 | 5075.569 | 6989 | 1913.431 | 3372.921 | 575.1205 | 17.05112 | 2797.8 | 401.9517 |
| Fujian        | 3471  | 1442.895 | 41.57   | 2028.105 | 3920.07 | 11293.78 | 10584 | -709.777 | 1660.17 | 416.0698 | 25.06188 | 1244.1 | 440.3683 |
| Jiangxi       | 4140  | 1146   | 27.67   | 2994 | 4838.333 | 7014 | 2175.667 | 1935.282 | 388.0815 | 20.05297 | 1547.2 | 272.2004 |
| Shandong      | 9079  | 3450.02 | 38     | 5628.98 | 8542.44 | 9409.01 | 8772 | -637.01 | 4661.816 | 1022.216 | 21.92743 | 3639.6 | 896.6882 |
| Henan         | 9256  | 2147.392 | 23.2   | 7108.608 | 5137.66 | 5550.627 | 6930 | 1379.373 | 5571.669 | 859.2689 | 15.42211 | 4712.4 | 595.4733 |
| Hubei         | 6028  | 2424.462 | 40.22   | 3603.538 | 4276.32 | 7094.094 | 7565 | 470.9058 | 2507.819 | 726.1186 | 28.95419 | 1781.7 | 549.3087 |
| Hunan         | 6440  | 1915.9 | 29.75   | 4524.1 | 3691.88 | 5732.733 | 8128 | 2395.267 | 3462.144 | 606.0438 | 17.50487 | 2856.1 | 492.5924 |
| Guangdong     | 8642  | 4753.1 | 55 | 3888.9 | 9662.23 | 11180.55 | 13823 | 2642.452 | 3860.982 | 1075.882 | 27.8655 | 2785.1 | 1487.192 |
| Guangxi       | 4489  | 1263.654 | 28.15   | 3225.347 | 2050.14 | 4567.031 | 7651 | 3083.969 | 2530.431 | 385.0307 | 15.21601 | 2145.4 | 294.587 |
| Hainan        | 787   | 315.6657 | 40.11   | 471.3343 | 518.48 | 6588.056 | 7408 | 819.9441 | 333.6763 | 109.6763 | 32.86907 | 224 | 81.2482 |
| Chongqing     | 3090  | 1023   | 33.09   | 2067 | 1589.34 | 5143.495 | 8020 | 2876.505 | 1636.504 | 283.9037 | 17.34819 | 1352.6 | 227.6908 |

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| Province | Population (10,000 persons) | GDP (100 million yuan) | Tpop | Upop | RPop | Earning (yuan) | Number of Employed Persons (10,000 persons) | TUE | TEU/GDP |
|----------|----------------------------|------------------------|------|------|------|---------------|---------------------------------------------|-----|---------|
| Sichuan  | 8329                       | 2223.01                | 26.69| 6105.99| 4010.25| 14.58066      | 3789                                       | 538.3013 | 13.42313 |
| Guizhou  | 3525                       | 841.3457               | 23.8796| 2683.654| 993.53| 2818.525      | 4649.475                                   | 243.3051 | 11.8923 |
| Yunnan   | 4288                       | 1001.8                 | 23.36288| 3286.2| 1955.09| 4559.445      | 4717.555                                   | 346.549 | 15.09722 |
| Tibet    | 262                        | 49.5966                | 18.93| 212.4034| 117.464| 4483.359      | 10492.64                                  | 22.5625 | 18.2859 |
| Shaanxi  | 3605                       | 162.973                | 32.26| 2442.027| 1660.92| 4607.268      | 3196.732                                   | 1812.808 | 25.90502 |
| Gansu    | 2562                       | 615.1362               | 24.01| 1946.864| 983.36| 3838.251      | 4721.749                                   | 247.5807 | 20.94448 |
| Qinghai  | 518                        | 180.0568               | 34.76| 337.9432| 263.59| 5088.61      | 4961.39                                   | 238.565 | 66.565   |
| Ningxia  | 562                        | 182.2566               | 32.43| 379.7434| 265.57| 4725.445      | 3864.555                                   | 274.4287 | 76.5287 |
| Xinjiang | 1925                       | 651.035                | 33.82| 1273.965| 1364.36| 7087.584      | 1629.416                                   | 672.4834 | 318.3834 |

Notes: Population (10,000 persons); GDP (100 million yuan); Tpop = total population; Upop = urban population; RPop = rural population; Earning (yuan); Number of Employed Persons (10,000 persons); Total Earnings of Urban Employed Persons (100 million yuan); Gap = Earning - GPC (yuan); Number of Employed Persons (10,000 persons); TUE = Total Urban Earnings; TEU/GDP = Ratio of TEOUEP to GDP.
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