

## The Problem with China's Urban Population Data

By Kam Wing Chan

How big are Chinese cities? It is an important issue, but also a complicated one. It is not uncommon to hear that Chongqing is “the largest city not only in China but in the world”, with a population in excess of 30 million. But any Chinese citizen will tell you that Shanghai, with a real urban population of around 14 million, is larger than its supposed competitor in China's southwest. Problems with the true city population size of Chongqing and other Chinese urban centers reflect the fact that China has a highly, and probably the most, complex urban and city statistical data in the world. Confusion over urban population sizes arises because the boundaries of large Chinese cities typically encompass an urbanized core surrounded by numerous scattered towns and large stretches of rural territory, usually with relatively dense farming populations.

These administratively bounded cities (also called municipalities) are so large in area that they are more aptly called regions or prefectures, or even provinces, like Chongqing, which has an administrative area roughly the size of Austria. As the most extreme example, Chongqing's official population of 32 million does not represent the true city or metropolitan area population because more than two-thirds of the employed workers in the municipality are actually farmers. One may need to take a whole day just to travel from the urban core to the northern, more remote part of this “metropolitan area,” as it is sometimes erroneously labeled.

There are several ways to define “urban areas” in China. Two of the main ways used by researchers are: by administrative boundaries



Migrant workers in Shantou in southern China. The author lived in Shantou as a child.

based on “city districts” or by objective criteria such as the density of population and buildings (called “urban statistical areas”), as shown in Table 1. In the past, most of the city districts were largely urbanized, but they are increasingly not in the last ten years or so. Based on the urban statistical areas definition, the largest city in China is Shanghai, with a population of 13.5 million in 2000. Chongqing had a city population of only 6.2 million.

Moreover, an important official distinction between two groups of individual Chinese citizens within the same cities, those with local residence permits, or *hukou*, and those without, adds another layer of complexity (see Table 1). Although population statistics based on the number of local *hukou* holders are issued every year and are widely available, they do not show the actual population of cities. But the numbers are often mistakenly used as such. For almost all major cities, the registered (*hukou*) population is smaller than the actual population, which includes migrants whose *hukou* remains back in their original community. In some cases, the difference is huge: the gap between the registered

(1.8 million) and actual population (8.1 million) in the city district boundary of Shenzhen, for example, was 6.3 million in 2005.

Different statistical approaches to calculating urban populations matter because they can have a huge impact on economic planning and business decisions. Table 2 shows the different (some widely) per capita Gross Domestic Product (GDP) numbers for the same cities, as reported in the same official publications. Per capita GDP is the city's GDP divided by its population and is often and widely used as a metric of the living standard of a city. Numerous studies comparing the competitiveness or productivity of cities in China have used the wrong city population numbers to generate per capita GDP and other measures, resulting in misleading results and interpretations. Most commonly in the past, many applied the *hukou* population to compute per capita urban GDP, unaware that this population statistic does not encompass all city residents and, in some cases, may include only a minority of the true population. This could result in highly absurd per capita GDP numbers for certain cities such as Shenzhen (133,305 RMB, or 16,100 USD,

TABLE 1

**Population Statistics of China's Ten Largest Cities, 2000 and 2005 (in millions)<sup>a</sup>**

Rank	Cities	2000				2005	
		De facto Population <sup>b</sup> of			Population (with local hukou) of City Districts <sup>c</sup>	De facto Population of City Districts <sup>d</sup>	Population (with local hukou) of City Districts <sup>c</sup>
Region (City Districts and Counties)	City Districts	Urban Statistical Areas of City Districts					
1	Shanghai	16.41	14.35	<b>13.46</b>	11.37	17.13	12.90
2	Beijing	13.57	11.51	<b>9.88</b>	9.74	14.43	11.14
3	Guangzhou	9.94	8.52	<b>7.55</b>	5.67	8.21 <sup>e</sup>	6.17
4	Wuhan	8.31	8.31	<b>6.79</b>	7.49	8.53	8.01
5	Tianjin	9.85	7.50	<b>6.76</b>	6.82	8.57	7.73
6	Shenzhen	7.01	7.01	<b>6.48</b>	1.25	8.14	1.82
7	Chongqing	30.51	9.69	<b>6.17</b>	8.96	10.41	10.30
8	Shenyang	7.20	5.30	<b>4.60</b>	4.85	4.94	4.96
9	Chengdu	11.11	4.33	<b>3.96</b>	3.36	4.72	4.82
10	Dongguan	6.45	6.45	<b>3.87</b>	1.53	6.56	1.66

Notes and sources:

- These cities are ranked by the *de facto* population of urban statistical areas of city districts in 2000 census. Boundaries of some cities and city districts may have changed after 2000.
- Data are from the 2000 Census (November 1).
- Population with local *hukou* are year-end figures published by the Ministry of Public Security.
- Unless otherwise noted, these figures are implied mid-year population used to calculate the per capita GDP of these cities in *China City Statistical Yearbook 2006*. They are assumed to be the *de facto* population.
- This is computed directly from the 2005 1% Population Survey (November 1), Guangdong volume.

in 2000) and Dongguan (32,091 RMB, or 3,876 USD, in 2000).

At the national level, similar confusion exists. A recent report by a fund management firm claims that China already has over 60% of the population living in urban areas and urbanization has basically finished in the country. Consequently, capital investment in China is heading to a slowdown (don't expect China to lead the world economy out of the slump...). To this author, this is a rather misconstrued proposition. There may be other reasons for China's capital investment to slow down, but it is not because China has already urbanized. Far from it, urbanites today remain a minority at 46% (see Table 3). There is still quite a bit of room for more urban expansion in that vast country!

*Kam Wing Chan is a Professor of Geography at the University of Washington. For a full treatment of this issue, see: Kam Wing Chan, "Misconceptions and Complexities in the Study of China's Cities: Definitions, Statistics, and Implications," Eurasian Geography and Economics, 48(4), pp.383-412, 2007, at <http://courses.washington.edu/chinageo/ChanCityDefinitionsEGE2007.pdf>.*

TABLE 2

**Per Capita GDP of Ten Largest Cities in 2000, 2005 and 2006 (in RMB¥, Current Prices)**

Cities	2000		2005	2006
	Per capita GDP (based on <i>hukou</i> population)	Per capita GDP (based on <i>de facto</i> population)	Per capita GDP	Per capita GDP
Shanghai	36,054	28,565	52,889	59,306
Beijing	23,942	20,264	46,878	52,042
Guangzhou	38,207	25,398	78,428	67,407
Wuhan	16,109	14,518	26,238	45,541
Tianjin	20,422	18,574	39,695	52,017
Shenzhen	133,305	23,759	60,801	69,450
Chongqing	8,770	8,112	16,712	17,080
Shenyang	19,336	17,686	36,779	45,827
Chengdu	19,944	15,457	32,131	39,286
Dongguan	32,091	7,598	33,263	39,468

Notes: Figures for 2000 are computed based on official GDP data (from *China City Statistical Yearbook 2001*) and city population figures in Table 1. Figures for 2005 and 2006 are directly from *China City Statistical Yearbooks 2006* and *2007*; they are supposedly based on *de facto* population. As of November 2009, the exchange rate is 1 USD = 6.84 RMB¥. In 2000 the average exchange rate was 1 USD = 8.28 RMB¥; in 2005, the average exchange rate was 1 USD = 8.20 RMB¥; and in 2006, the average exchange rate was 1 USD = 7.98 RMB¥.

TABLE 3

**Total and Urban Population in China 2000-2008 (in millions)**

Year	Total population	Urban population	% Urban
2000	1,267	459	36.2
2005	1,308	562	43.0
2006	1,314	577	43.9
2007	1,321	594	44.9
2008	1,328	607	45.7

Note: 2000 and 2005 urban population figures are based on 2000 urban definition; 2006-2008 figures are based on 2006 urban definition. Source: National Bureau of Statistics, China.

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## Asian Languages and Literature: Achievements and Challenges

By Michael Shapiro

The past year has been an exciting one for the University of Washington's Department of Asian Languages and Literature. The year has marked the centennial of the establishment in 1908 by the University's Board of Regents of a Department of Oriental History, Literature, and Institutions, headed by the Reverend Herbert H. Gowen. That Department is the forebear not only of our own department, but also of the Jackson School of International Studies and the Department of Slavic Languages and Literatures. The year has also marked the 40th anniversary of the existence of our department in its current form, namely as an autonomous department in the Humanities division of the College of Arts and Sciences. In its present form, the Department has been the unit on campus most centrally involved with teaching and service with regard to representative languages and literatures of East, South, and Southeast Asia. It has been a fundamental aspect of the Department's mission that it not only teach a broad range of courses to enable students to develop practical skills in particular languages, but also to treat Asian languages and literatures in a broad humanistic context, taking care to examine them with reference to the cultures and cultural traditions within which they exist and have developed. During this past year, there has been a wide-spread celebration on campus of the significance of the University of Washington's accomplishments in Asian studies during the past century. The organization of the well-attended Centennial Lecture Series, sponsored by the UW's Alumni Association, and the awarding of the Japanese Foreign Minister's Award to the UW's Japan Studies Program in recognition of the UW's long-standing contribution to Japanese studies, both bear witness to the important place that the study of



*Kaoru Ohta presents a lecture to first-year Japanese language students.*

Asian language, culture, and civilization has had on the UW campus over the past century.

It should be no surprise that virtually everything about the study of Asian languages and cultures has changed since the Reverend Gowen's time. In the first year for which we have catalogue records (1909-10) after the founding of the new department, the Reverend Gowen was listed as teaching two courses in each of the two semesters of the academic year. The four courses were (1) China, Japan and Korea, their history, literature and religious systems; (2) European conquests in Asia; (3) the literature of Persia; and (4) the primitive civilization of the Euphrates and Nile valleys, their history, religions, literatures, and monuments. By the next year, 1910-11, a totally different roster of courses was offered. Expanded now to three courses per semester, the Reverend Gowen's teaching load comprised the classical literature of Japan, Buddhism as a philosophy and a religion, the classical literature of India, a history of Semitic archaeology, elementary Sanskrit, and elementary Hebrew. Clearly, the Reverend Gowen's purview was broad and extraordinary. But within a few decades after the establishment of the Department, such a one-man operation charged with providing instruction with regard to the languages, history,

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