

FINANCIAL TIMES All times are London time

ft.com/dragonbeat

The problem with China's population data

July 14, 2009 6:31am by Tom Miller

By Kam Wing Chan

Kam Wing Chan, professor of geography at the University of Washington, is an expert on Chinese population statistics and is a guest contributor to the Dragonbeat blog this week.

How big are Chinese cities? That depends on how you measure them.

Back in 2005, Time magazine proclaimed that Chongqing had become “the largest city not only in China but in the world”, with a population in excess of 30m.

But any Chinese citizen will tell you that Beijing and Shanghai, both with real urban populations below 15m, are larger than their supposed competitor in China's southwest.

Common confusion over the true population size of Chongqing and other Chinese cities reflects the fact that China has highly complex and confusing urban and city statistical data.

Confusion over urban population sizes arises because the boundaries of large Chinese cities typically encompass an urbanised core surrounded by numerous scattered towns and large stretches of rural territory, usually with dense farming populations.

These cities are so large in area that they are more aptly called regions. Chongqing, which has an administrative area roughly the size of Austria, is the most extreme example.

Chongqing's official population of 32m does not represent the true metropolitan population because more than two-thirds of the employed workers in the so-called municipality are actually engaged in agriculture.

There are two main ways to define urban areas in China: by administrative boundaries or by objective criteria such as the density of population and buildings. In Chinese cities, administrative boundaries and objectively urbanised zones overlap, often confusingly.

A Chinese municipality comprises two types of administrative jurisdictions, “city districts” (*shiqu*) and counties (*xian*). Typically, most of the *shiqu* are objectively urbanised. The counties are mostly rural but may contain urbanised pockets, often referred to as “towns”.

The situation is complicated further by the important official distinction between two groups of individual Chinese citizens, those with local residence permits, or *hukou*, and those without.

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 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 and actual population in the migrant city of Shenzhen, for example, was 6.3m in 2005.

Different statistical approaches to calculating urban populations matter because they can have a huge impact on economic planning and investment decisions. 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.

Many have 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.

Despite attempts by China's National Bureau of Statistics to solve the problem, individual city population numbers remain a statistical minefield for foreign businessmen chasing the elusive Chinese consumer.

The result is that China's population statistics and per capita GDP figures both come with a severe health warning.

No TweetBacks yet. (Be the first to [Tweet this post](#))

July 14, 2009 6:31am in [Hukou System](#), [Labour](#), [Population](#), [Urbanisation](#) | [2 comments](#)

Answers may be published in the Financial Times newspaper. Please include your first name (surname is not needed), email address, gender, age and job title. Want to report an offensive or unsuitable comment? Our comment guidelines, including reporting procedures, [can be found here](#).

You need to be logged in to comment. Please [sign in](#) or [open a free account with FT.com](#) now.

Comments

 [RSS feed](#)

Sort by oldest first | [Sort by newest first](#)

1. does new york district totally urbanised?

Posted by: John | [July 17 6:24am](#) | [Report this comment](#)

2. i think the reason is chinese farmery are so scattered and anyone who has no job in factories or in stores can find something to do on soil to make living.

Posted by: John | [July 17 6:27am](#) | [Report this comment](#)

3. I do have a little experience in these matters, having done research for urban planning projects in China. It seems that ones best tools are a) aerial (or satellite) photographs, and what you can make of them, and b) the internet, not for information, but as as a tool for sampling. ;)
Also, I would really like to know more about "China's National Statistics Bureau" and their attempts to "solve the problem". As far as I can tell, at the provincial level at least, these government organs are quite passive about their methods.

Posted by: ioncount | [August 4 10:18am](#) | [Report this comment](#)

[Help](#) • [About us](#) • [Sitemap](#) • [Advertise with the FT](#) • [Terms & Conditions](#) • [Privacy Policy](#) • [Copyright](#)

© THE FINANCIAL TIMES LTD 2009 FT and 'Financial Times' are trademarks of The Financial Times Ltd.