

China stats: why the numbers add up

By Gabriel Wildau
in Shanghai

That China's official economic data cannot be trusted is now received wisdom among western economists, investors and policymakers. To treat the numbers as authoritative is to invite ridicule: believers are naive at best and, at worst, stooges for Communist propaganda.

The problem with this conventional wisdom is that, aside from the closely watched and politically sensitive real gross domestic product growth rate, other official data vividly depict the slowdown in China's economy that skeptics insist is being concealed. If there is a conspiracy to disguise the extent of harder times in China, it is an exceedingly superficial affair.

The surprise devaluation of China's currency in mid-August fuelled skepticism about official GDP data, as many interpreted the move as evidence that Beijing was taking drastic action to rescue an economy in deep trouble.

China officially posted 7 per cent real GDP growth for the first half of 2015, bang on the full-year target that Premier Li Keqiang announced in March. To the skeptics, it was both too convenient and incongruous with other data that suggested a deeper slowdown in manufacturing and residential real estate construction, the country's economic powerhouses.

Experts on China's national accounts data broadly agree that the quarterly real growth figure is subject to politically motivated "smoothing" aimed at reducing the appearance of sharp swings in the economy, especially in response to external shocks like the Asian financial crisis in 1998 and the global financial crisis in 2008.

This goal is achieved mainly by tweaking the inflation metric used to convert between nominal and real growth, known as the "GDP deflator". By understating inflation, China's statistics masters can create the impression of faster real growth.

Yet the shortcomings of this single data point do not seriously impede our understand-

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An employee puts Chinese one-hundred yuan banknotes into a money counting machine

ing of trends in the Chinese economy. One need look no further than nominal GDP figures, which express economic output in current prices, without adjusting for inflation, to observe the bleak state of the country's main industries.

"China has some of the least volatile real GDP growth of its kind in the world, but nominal GDP data look more reasonable in a number of key aspects," Wei Yao, China economist at Société

Générale, wrote last month.

Nominal GDP growth in China's industrial sector, which includes manufacturing, mining and utilities, grew at a paltry 1.2 per cent in the second quarter of 2015, down from an average of 5 per cent in 2014. For construction, second-quarter growth was 4.1 per cent compared with 9.8 per cent last year. Meanwhile, services are now the fastest-growing sector of China's economy.

“ If local governments want to fabricate or manipulate commodity production stats, they can't do it.

HARRY WU

Nominal growth is more important than its inflation-adjusted counterpart for most purposes. A company making revenue projections, for example, has little use for real growth rates.

Similarly, commodity exporters in Latin America and Africa see the slowdown in Chinese commodity imports reflected in customs data on both import volumes and product value.

Carsten Holz, an economics professor at Hong Kong University of Science & Technology who has also taught at Harvard and Stanford, is a stout defender of China's official data. He says Beijing's use of the deflator as a fudge factor is "intensely annoying to detail-oriented analysts but only marginally relevant for practical purposes".

He doubts that Mr Li or his deputies directly instruct the

National Bureau of Statistics to report a particular growth figure, but he acknowledges that the agency faces pressure to meet targets and avoid stoking economic pessimism. In theory the GDP deflator should be the broadest measure of inflation for all goods and services produced in China, including those not counted in the consumer price index. CPI covers consumables but not investment goods or services like logistics or law.

The official statistics agency provides few details on how the GDP deflator is calculated. But Mr Holz believes that only the five-person Communist party cell within the statistics bureau would be privy to final deliberations. That group includes commissioner Ma Jiantang and his three deputies, including Xu Xianchun, head of the national accounts department.

"Xu Xianchun sits at the table, and he knows, 'Well, we should push it up a bit if we can.' He looks at his documents and he says: 'We can use this deflator, or we can equally justify using that deflator. OK, we're going to use that one because it leads to a tiny bit higher growth rate,'" Mr Holz says.

This is hardly a confidence-inspiring vision of Chinese data compilation. Yet Mr Holz sees no better alternative. He has stress tested the official growth rates using several alternative deflators based on published price indices like CPI and the producer price index, which tracks wholesale goods.

He concludes that China's average annual real growth rate between 1978 and 2011 - officially 9.8 per cent - may have been as low as 9.1 per cent or as high as 11 per cent. ▶▶

China stats: why the numbers add up (continued)

That still leaves the official rate as the best guess.

"I prefer the official data. I think they are the best data out there. I agree that there's a range of final [real GDP growth] figures, all of which are equally justifiable. The 7.0 [per cent] figure for 2015 could be in an interval of 6.5 to 7.0 per cent or [even] 7.2," says Mr Holz.

For his part, Mr Xu last month used the People's Daily, the Communist party mouthpiece, to defend his agency against accusations that the GDP deflator has understated domestic inflation in recent quarters by failing to adjust for the impact of falling commodity prices.

Mr Holz's most formidable intellectual antagonist is Harry Wu, economics professor at Hitotsubashi University in Tokyo. He first offered an alternative assessment of China's GDP data in 1995 and has spent 20 years refining his methodology.

His latest research finds that China's average annual real GDP growth for 1978 to 2014 was 7.1 per cent, 2.5 percentage points below the official estimate of 9.6 per cent. That is more than double the margin for error that Mr Holz calculates. Mr Wu says growth last year was 3.9 per cent, compared with the official figure of 7 per cent.

Mr Wu initially mentored Mr Holz but their intellectual dispute later caused the two to fall out with each other. "It got to a point where Harry Wu wasn't talking to me and wasn't citing my work," says Mr Holz. "I didn't agree with his work. It just didn't convince me. I thought it was actually wrong."

As worries about China's economy have seized global headlines, analysts in London and Singapore - some new to the study of its national accounts - have weighed in on the data's reliability.

Michael Parker, economist for Bernstein Research in Hong Kong, is illustrative of that approach, but he disagrees with the sceptics. "The idea of getting tens or maybe hundreds of thousands of accountants and statisticians across China to march consistently in a crooked line - and to do that for a decade or more - sounds, to us, implausible," he says.

To follow the debate between Mr Wu and Mr Holz, by contrast, is to plunge down a rabbit hole of benchmark revisions, input-output tables and competing hypotheses about productivity growth in the services sector. Few analysts have tried to score the match punch by punch. Yet what is striking is how much the two agree on. In particular, both point to problems with how the NBS, the statis-



A man walks past the People's Bank of China (PBOC) headquarters in Beijing, China

tics agency, measures the industrial sector, the backbone of the economy.

The NBS stopped publishing raw figures for industrial output in 2008. Glaring problems had become an embarrassment to the extent that by 2007 monthly production data from large-scale enterprises showed that such output was greater than the total industrial output reflected in quarterly GDP data. Logically, that is not possible.

Such paradoxes are blamed on over-reporting of output by companies and local governments. Local GDP growth has traditionally been an important factor used by the Communist party to evaluate performance and decide who is to be promoted up the ranks, though that is slowly changing. Where Mr Holz and Mr Wu differ is largely their response to these flaws.

Mr Holz broadly trusts that Mr Xu of the NBS, acting as a gatekeeper, is able to filter out the most glaring over-re-

porting when his national accounts division receives data from colleagues in the industrial statistics division and transforms it into the industrial component of GDP. For him, nominal GDP figures are mostly accurate, leaving the deflator as the main issue. Mr Wu, by contrast, considers the industrial GDP data irredeemably flawed by the need of local officials to hit targets.

Both men see shortcomings in China's data collection, but Mr Wu's calculations diverge from the official data most acutely during crisis periods. His conclusion is that the error is "not mainly caused by methodological deficiencies, but instead by political influences".

His skepticism propelled him to create a parallel data series for industrial output built around a Soviet-style list of names and quantities of industrial products manufactured in China each year from steel pipes to toasters.

"If local governments want to fabricate or manipulate

commodity production stats, they can't do it. There are too many, and it's too complicated. You would need to be professional," he says.

To Mr Holz, Mr Wu's alternative series, which contributes to a much larger downward revision of China's real

newly developed goods. The quality question is crucial for whether price increases are interpreted as additional real output or simply inflation.

Mr Wu says his methodology incorporates reasonable assumptions about product quality and new develop-

growth rate.

The likelihood that the growth rate is subject to manipulation reflects institutional weakness, notably the lack of independence of the NBS. But it also results from an analytical failing by those who assess China and other economies. If the emphasis on this single number were not so excessive, the incentive to massage it would be less.

The sooner real GDP growth loses its totemic significance, the sooner we are likely to receive more accurate data. For China and other governments for whom economic growth is the main guarantee of political legitimacy, the temptation to fudge will always exist. But in a scenario where China's economy is in such dire straits, that stability is threatened, relying on a single figure to persuade that things are great is unlikely to prove an effective political strategy.

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growth rates over decades, does not offer any improvement over the official data that both agree are flawed.

He argues that it is impossible to reliably derive industrial output in value terms because of difficulties in measuring improvements in product quality and assigning inflation-adjusted prices to

ment. Yet this is an awkward moment for his radical rejection of China's industrial production data. The monthly industrial output series, long viewed as suspect, shows a sharper decline than is reflected in the overall GDP growth rate. Indeed, this incongruity is the biggest source of scepticism about China's true GDP

THE LI KEQIANG INDEX

Services growth adds doubt on alternative measure

The surest way to sound smart and hard-headed on the issue of Chinese growth in recent months is to cite the so-called Li Keqiang index.

This alternative growth metric is based on comments reportedly made by Mr Li, now premier, to then-US ambassador Clark Randt in 2007, and revealed by WikiLeaks. Mr Li, then party secretary in the north-eastern province of Liaoning, reportedly said data on gross domestic product were 'man-made' and therefore unreliable. Instead, he preferred to use three direct indi-

cators of economic activity supposedly less subject to exaggeration: electricity consumption, rail freight volume and bank lending.

Today, the Li Keqiang index is exhibit 1 for the case that quarterly GDP data are soft-pedaling the extent of the economic slowdown. Other monthly indicators like fixed-asset investment, industrial production and retail sales - which have all slowed more sharply than real GDP over the past year - are similarly offered as evidence for the prosecution.

Yet these metrics fail to capture activity in the services sector, now the fastest growing area of the economy. "Steel production, for example, is significantly more energy intensive than entertainment, so the demand for electricity has fallen sharply as the structure of the economy has evolved," Nicholas Lardy, senior fellow at the Peterson Institute for International Economics and an observer of the Chinese economy, wrote last month.

"Assuming that electric power growth is a good proxy for China's

overall economic expansion is like trying to drive a car by looking in the rear-view mirror," he added. Apart from the long-term evolution of the economy, one-off factors early in 2015 also enabled other sectors of the economy to make up for the decline in smokestack industries.

The stock market boom helped output from financial services increase 27 per cent annually in the second quarter. Yet such growth is certain to have slowed since the stock market rout that began in late June.

By Edith M. Lederer and Cara Anna

RUSSIAN airstrikes launched in Syria during the U.N.'s 70th anniversary gathering of more than 150 world leaders stole the spotlight and highlighted deep divisions on how to end that conflict and manage the many thousands of people fleeing to Europe in search of safety.

There were also some bright spots during the U.N. General Assembly's nine-day gathering that ended Saturday. The 193 member states adopted a sweeping new agenda for the next 15 years to eradicate extreme poverty and preserve the planet. President Barack Obama met Cuban President Raul Castro, another sign of warming relations after decades of hostilities, and Obama shook hands with Iranian Foreign Minister Mohammad Javad Zarif, a first following the recent nuclear deal.

Pope Francis tried to set a compassionate tone in the first major address, challenging world leaders to remember the people behind the crises "who live, struggle and suffer."

Then, Syria's crisis became even more complicated. Russian airstrikes began. Civilian deaths were reported. Reports emerged that mainstream opposition forces had been targeted.

Russian President Vladimir Putin announced that not cooperating with Syrian President Bashar Assad was "a huge mistake." Obama warned of a "darker, more disordered world." Each displayed strikingly different views on how to defeat extremist groups like the Islamic State, which Russia says are its airstrikes' intended target.

And an icy glare from Obama to Putin, even as they clinked glasses of wine at a high-level lunch, was captured in a photograph that quickly went viral.

U.N. Secretary-General Ban Ki-moon painted a grim picture of the wider world, one that is grappling with the worst refugee crisis since World War II as millions of Syrians have fled.

"Suffering today is at heights not seen in a generation," Ban said. One hundred million people need immediate humanitarian help. At least 60 million people have been forced to flee their homes. The U.N. has asked for nearly \$20 billion to meet this year's needs, six times the amount of a decade ago.

The world's humanitarian system isn't broken, Ban said. "It's broke."

And he asked, "Why is it easier to find the money to destroy people and the planet than it is to protect them?"

The pope led a major push against global warming, announcing a "right of the environment." Speaker after speaker



U.S. President Barack Obama, right, and Russia's President Vladimir Putin pose for members of the media before a bilateral meeting at the United Nations headquarters

A glare, a handshake, a pope: Busy UN summit makes history

■ An icy glare from Obama to Putin was captured in a photograph that quickly went viral

expressed hope that the world's nations will reach a new agreement in Paris in December to tackle climate change.

Small island states, threatened by rising sea levels, raised the greatest cry. "When we feel the cool breeze of the ocean caressing us, we cannot imagine that those same waters will become our watery grave," the foreign minister of the Maldives, Dunya Maumoon, said Saturday.

More than 70 countries submitted their climate pledges during the summit, making a total of 146 states so far, General Assembly President Mogens Lykkesoft announced Saturday. That included long-awaited pledges from India and Brazil.

In addition to speeches from almost all 193 member states, hundreds of side events tried

to address crises that showed little improvement (Libya, Yemen, South Sudan) and those erupting again (Central African Republic).

Obama chaired a side event on strengthening U.N. peacekeeping, and the United States announced that more than 50 countries had pledged to contribute more than 40,000 new troops and police to serve in some of the world's most volatile areas.

Chinese President Xi Jinping received a long handshake from Obama after making major peacekeeping commitments, and he opened China's checkbook during his first U.N. visit, pledging billions of dollars including \$1.1 billion for peace efforts and \$2 billion for meeting the global development goals.

But Xi was criticized for hosting a meeting on women's rights while cracking down on female activists at home, with presidential candidate Hillary Clinton tweeting that it was "shameless."

Meanwhile, Israeli-Palestinian tensions flared once more. Palestinian President Mahmoud Abbas raised the Palestinian flag at the United Nations for the first time, with a promise that it will be raised soon in Jerusalem, "the capital of our

Palestinian state." He declared that he is no longer bound by agreements signed with Israel — the most serious warning yet that he might walk away from engagement.

Israel Prime Minister Benjamin Netanyahu startled everyone by denouncing countries for their "deafening silence" in response to Iran's threats against his country and then glowering at hushed delegates for 47 silent seconds before resuming his speech.

It was a crush of events. Norway's U.N. mission tweeted Friday that it got 500 invitations to different events and attended more than 250.

U.N. spokesman Stephane Dujarric called this year's sum-

mit "the most intense G.A. I've seen in the last 15 years."

What was achieved? Lykkesoft said that will be judged by the world's progress in implementing the new development agenda "and stopping all the catastrophes we are dealing with today."

But after nine days of discussions, the deep divide on the Security Council, the U.N.'s most powerful body, seems to be as wide as ever.

On Friday, Britain's U.N. Ambassador, Matthew Rycroft, told reporters that a draft resolution by Russia that seeks to unite the world in fighting groups like the Islamic State has no future. The draft urges countries to cooperate with the governments where counterterrorism efforts occur — a clear reference to Assad.

In response, Russia's U.N. ambassador, Vitaly Churkin, said that if proposals are rejected simply because they come from his country, the work of the Security Council "will come to a standstill."

It was a long way from the encouraging address of Francis, who closed his speech with a little advice.

"If you fight among yourselves," he said, "you'll be devoured by those outside." AP

Why is it easier to find the money to destroy people and the planet than it is to protect them?

BAN KI-MOON

VOLKSWAGEN'S pollution-control chicanery has not just been victimless tinkering, killing between five and 20 people in the United States annually in recent years, according to an Associated Press statistical and computer analysis.

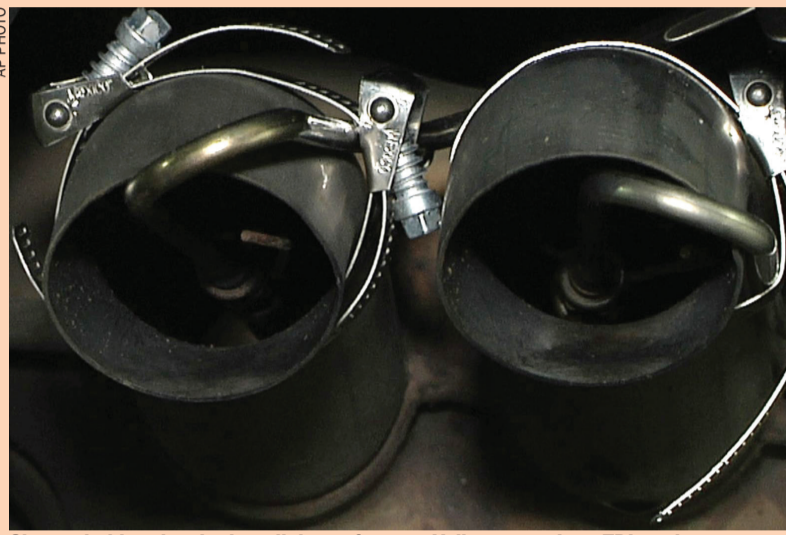
The software that the company admitted using to get around government emissions limits allowed VWs to spew enough pollution to cause somewhere between 16 and 94 deaths over seven years, with the annual count increasing more recently as more of the diesels were on the road. The total cost has been well over USD100 million.

That's just in the United States. It's likely far deadlier and costlier in Europe, where more VW diesels were sold, engineers said. Scientists and experts said the death toll in Europe could be as high as hundreds each year, though they caution that it is hard to take American health and air quality computer models and translate them to a more densely populated Europe.

"Statistically, we can't point out who died because of this policy, but some people have died or likely died as a result of this," said Carnegie Mellon environmental engineer professor Peter Adams. He calculates the cost of air pollution with a sophisticated computer model that he and the AP used in its

AP ANALYSIS

Dozens of deaths likely from VW pollution dodge



Clamps hold probes in the tailpipes of a 2010 Volkswagen Jetta TDI on the campus of North Carolina State University

analysis.

Computer software allowed VW diesel cars to spew between 10 to 40 times more nitrogen oxides (NOx) than allowed by regulation, making this "clearly a concern for air quality and public health," said Janet McCabe, acting air quality chief for the U.S. Environmental Protection Agency.

Nitrogen oxides mostly form smog — that murky, dirty air that makes it hard to see and for some people to breathe — but also amplify a deadlier, larger problem: tiny particles of soot. Numerous medical studies show those tiny particles cause about 50,000 deaths a year in the United States, mostly from heart problems.

Nitrogen oxides can travel hundreds of miles, so pollution spewed in Pittsburgh can be felt on the East Coast, Adams said.

Experts calculate how much pollution costs society by looking at the value of lost lives. In this case, Adams and other said the lost lives — valued at \$8.6 million apiece — overwhelm other costs such as lost work days or hospital costs. The overall annual cost of the extra pollutants from the

VW diesels ranged from \$40 million to \$170 million, environmental engineering professors calculated.

"Even the small increase in NOx from VW diesel emissions is likely to have worsened pollution along the roadways where they have traveled, and affected the lives of hundreds of thousands of people," said Dan Greenbaum, president of the Health Effects Institute in Boston.

"To say millions of people are breathing poor air as the result of that is not off the mark," said Greenbaum, who runs the institute that is funded by both the EPA and the auto industry to serve as an independent arbiter of the science.

The computer simulation that made the death calculations use conservative medical studies as their baseline. Other epidemiological studies would more than double the deaths and health costs, said Adams and model co-creator Jinhyok Heo of Cornell University.

To say millions of people are breathing poor air as the result of that is not off the mark.

DAN GREENBAUM

ASK THE VET

by Dr Ruan Du Toit Bester



8 CAUSES OF SUDDEN WEIGHT LOSS IN DOGS

SUDDEN weight loss in dogs may signal serious medical conditions and should be reported to the vet. This weight loss in dogs may be caused by:

- Diabetes
- Tapeworm
- Liver Disease
- Addison's Disease
- Thyroid Problems
- Mouth Lesions
- Dental Problems
- Pregnancy

When a dog is losing weight, he burns more calories than he consumes. If your dog loses more than 10% of his total weight, this should be a reason for worry.

1. DIABETES

Diabetes is caused by insulin deficit or the incapacity of the body to absorb the sugar from the blood.

Diabetes will cause the dog to have increased appetite, but despite this, he will still lose a lot of weight.

Senior and obese dogs are more prone to developing diabetes; however diabetes may be a genetic disease.

2. TAPEWORM

A dog with parasites may lose weight. Dogs with tapeworms are particularly exposed to weight loss. The tapeworm resides in the dog's intestine and feeds

on the food consumed by the dog; consequently, the dog is deprived by essential nutrients and will get thinner.

3. LIVER DISEASE

The liver processes sugars and carbs needed by the body; if the dog has liver disease, the liver will not be able to provide these essential nutrients. The body will consume the fat deposits or muscle tissues.

The dog will also display symptoms such as frequent urination, abdominal pain, jaundice, pale feces and orange urine.

A change in diet is important in managing liver disease. If the disease is caused by toxins, these must be removed from the dog's environment. The vet may also prescribe additional medication.

4. ADDISON'S DISEASE

Addison's disease is an adrenal insufficiency. The dog has a steroid hormone deficit and will be signaled by vomiting, diarrhea, fatigue, low blood pressure or fever.

The pet will also lose weight.

5. THYROID PROBLEMS

Thyroid problems may lead to hormonal imbalance and to a speeding up of the metabolism. In this case, the dog will lose weight. Thyroid problems may be managed, but need to be detected first.

6. MOUTH LESIONS

If a dog has mouth lesions, eating will be



painful, so he will refrain from eating. Go to the vet to detect any injuries or lesions that are present in the mouth of the throat of the dog.

7. DENTAL PROBLEMS

If your pet has a dental abscess he will avoid eating. The vet will administer antibiotics and will determine if the tooth should be removed.

8. PREGNANCY

A pregnant dog may lose weight in the first stage of the pregnancy as she lacks appetite due to nausea. This is not a cause for worry, as the dog will soon gain back the weight.

Sudden weight loss is often accompanied by other symptoms such as poor muscle function, dull coat, dry skin, diarrhea, vomiting, lethargy or depression.

Weight loss may be due to a lack of appetite which may be caused by anxiety.

Other causes of weight loss may include neuromuscular diseases, poor digestion, cancer or heart disease.

The treatment depends on the cause of the weight loss. In some cases, prescription diet will be recommended.

Hope this helps
Till next week
Dr Ruan

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