

**Best guesses**

# How to measure North Korea's economy

*In the absence of reliable numbers, scholars try new forms of guesswork*



---

Print edition | Finance and economics

Feb 9th 2017

---

FACTS about the North Korean economy are not so much alternative as non-existent. The country has never published a statistical yearbook. If it did, no one would believe it. Nicholas Eberstadt of the American Enterprise Institute, a think-tank, calls analysis of its economy “essentially pre-quantitative”.

The most-cited estimate of the size of the economy comes from South Korea's central bank. Its methodology is opaque but is based, at least in part, on the South Korean intelligence agency's estimates of the North's physical output, which is then translated to South Korean prices. But it is hard to estimate market valuations

for goods that are not traded on the market, and physical goods make up only a fraction of overall economic output. Another technique is to “mirror” statistics from the country’s trading partners. But most North Korean trade is with China, where statistics are unreliable.

**Latest updates**

Triumph for Angela Merkel in Germany's most populous state  
KAFFEEKLATSCH

---

Eastern Europe's patriotic faith  
ERASMUS

---

A large-scale cyber attack highlights the structural dilemma of the NSA  
SCIENCE AND TECHNOLOGY

---

[See all updates](#)

The advent of satellite imaging has helped, providing researchers with better estimates of manufacturing output, coal production and urbanisation. Yet another strategy is to work out national income from non-economic data. The Hyundai Research Institute, a consultancy, publishes another widely cited estimate of the North Korean economy based on a model that incorporates both infant-mortality rates

and crop yields, two variables for which the numbers are at least plausible.

A recent paper by Suk Lee of the Korea Development Institute, a South Korean government think-tank, puts a new spin on this approach. It estimates North Korea’s national income by comparing the share of its households that use solid fuels for cooking with that in other lower-income countries. The data, as reported by the North Korean census of 2008, show that nearly 93% of households lack access to gas or electricity and rely on firewood or coal. Assuming the numbers bear some relation to reality, they put North Korea in line with countries such as Uganda and Haiti, and suggest that North Korea’s purchasing-power-adjusted income per person was somewhere between \$948 and \$1,361 in 2008.

North Korea’s economy has made great strides since the country’s famine in the 1990s. The government has tacitly allowed the market economy to grow. Although the rest of the country is still indisputably poor, visitors to Pyongyang, at least, cannot help but note the rise of shops and taxis. The paradox is that as the North Korean economy modernises, the data may actually be deteriorating. The size of the country’s apparently burgeoning service sector is a complete mystery. Many scholars believe that the South Korean numbers are too low. Welcome though it is for poor North Koreans, growth may be bad for statisticians.

*This article appeared in the Finance and economics section of the print edition under the headline "Best guesses"*