

# The trouble with GDP

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*The Economist*

2016.4.30

# Poor measure of prosperity

- Gross domestic product (GDP) is increasingly a poor measure of prosperity.
- It is not even a reliable gauge of production

# Three examples

- light
- financial service
- new products

# Price of light

- William Nordhaus, an economist at Yale University, looked at two ways of measuring the price of light over the past two centuries.
- Method 1: by adding up the change over time in the prices of the things people bought to make light.
- On this basis, the price of light rose by a factor of between three and five between 1800 and 1992.

# Cents per lumen-hour

- But each innovation in lighting, from candles to tungsten light bulbs, was far more efficient than the last.
- If you measured the price of light in cents per lumen-hour, it plummeted more than a hundredfold.

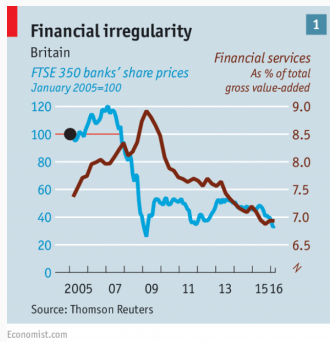
# Quality of things

- Mr Nordhaus intended this example to illuminate a general point about how flawed economists' attempts to measure changes in living standards are.
- Any true reckoning of real incomes must somehow account for the vast changes in the quality of things we consume

# Financial services

- Typically financial services are not paid for directly in fees: banks make a large part of their income from charging more interest on loans than they pay on deposits.
- Statisticians use an imputed figure, the “spread” between a risk-free interest rate and a lending rate, and multiply this by the stock of loans.
- The problem? the lending spread is [also] a measure of the risk banks take.

# Financial services



- In 2009 Britain's financial sector was close to collapse.
- Because fear of bank defaults was driving spreads up, GDP figures recorded a spike in the sector's value added, and thus its contribution to GDP.



# New products not picked up

- The upfront costs of providing services on a digital platform, such as Facebook or Twitter, are hefty.
- But the marginal cost is close to zero, and the explicit price to users is normally nothing.
- By global convention, zero-priced goods are excluded from GDP.
- So are all voluntary forms of digital production, such as Wikipedia and open-source computer programs.

# Unpaid-for activity

- Some of this unpaid-for activity can be picked up in the accounting: although there is no charge for a Google search, consumers pay a shadow price by supplying information and attention, for which advertisers pay.

# Problems and solutions

- But the advertising revenue is likely to be well below the benefits that consumers get [hence the measure of GDP is under-valued]
- These problems do not invalidate the use of GDP.
- But given the direction of technological change in an ever-more digital world they seem likely to grow more serious, and solutions to them are both hard and imperfect.