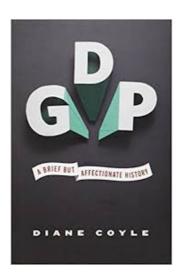
# Is the rate of change of GDP the best way to measure economic growth?

Jonathan Haskel, Imperial College

The Foundation for Science and Technology, London, 23rd May 2018

Based on work with Carol Corrado, Kevin Fox, Peter Goodridge, Cecilia Jona-Lasino, Dan Sichel: slides are my personal views.

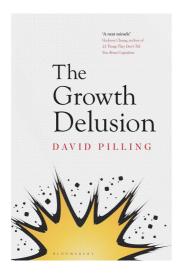
## The growth of public interest in GDP...



Independent Review of UK Economic Statistics



#### ...and doubt?



- P.12 ""We live in a society in which a priesthood of technically trained, economists, wielding impenetrable mathematical formulas, sets the framework for public debate"
- P.304 "The invention of GDP has given rise to a class of technocrats and economists who implement policy for the good of the economy, but not always for the good of the rest of us".

### My view...

- Don't throw away GDP
- Keep the desirable features of GDP, but improve it
- This presentation
  - What are those desirable features?
  - What can be done to improve it?

#MEMA 4

## What's output in this mini-economy?

The Amazon warehouse, Dunfermline, Scotland



- Sells 100 iPads, 100 biros, 100 packs of photocopy paper.
- Example: <u>Human Development Index</u>  $\cong$   $\sqrt[3]{(life expectancy \times education \times GDP per capita)}$
- Principle 1: Use meaningful weights.

5

### ..and output in this mini-economy?

The Amazon warehouse, Dunfermline



Bay Printing Copy shop, Dunfermline (3 miles away)



- Suppose Bay Printing buys biros and photocopy paper from Amazon
- Example: EU Innovation Scoreboard: (R&D + hi-tech equipment exports + ...)/N
- Principle 2: Don't double count

#MEMA

6

# Improving GDP

- Build on the strength of GDP
  - Meaningful weights = prices
  - No double counting = subtract out "intermediate" goods
- Some of the issues this raises
  - What is an intermediate good? Intangible investments
  - Do prices give the right signals?
    - No prices: the "production/non-production boundary"
    - No prices: free goods
    - · Quality-adjusted prices







## Prices of vacuum Cleaners, 1996-2014



Source: Johnson, P, (2015), <u>UK Consumer Price Statistics: A Review</u>.

# Some questions

- What to do about the production/non-production boundary?
  - Housework
  - AirBnB
- Prices
  - Free goods: implicit valuations?
- "Dashboard" approach?



Source: ONS well-being dashboard