

# Measuring public sector output and productivity: retrospect and prospect

Joe Grice

Executive Director and Chief Economist, UK Office for  
National Statistics

International Workshop on Public Administration and  
Productivity Measurement  
Rome 23-24<sup>th</sup> April 2009

# The Motivations

- Serious attempts at measuring public output/productivity date back to 1990s and earlier
- Reasons include:
  - Measuring overall economic activity/GDP
  - Assessing public sector performance
  - Determining sustainability of public finances

# Measuring overall economic activity/GDP

- Public sector major part of most of our economies
- *Eg in UK 22 per cent – nearly twice as large as manufacturing*
- Many public sector activities/services condition performance of rest of economy
- Governments have direct managerial role in public sector
- Traditional  $\langle \text{output} = \text{inputs} \rangle$  clearly inadequate for (most) public services

# Public sector performance

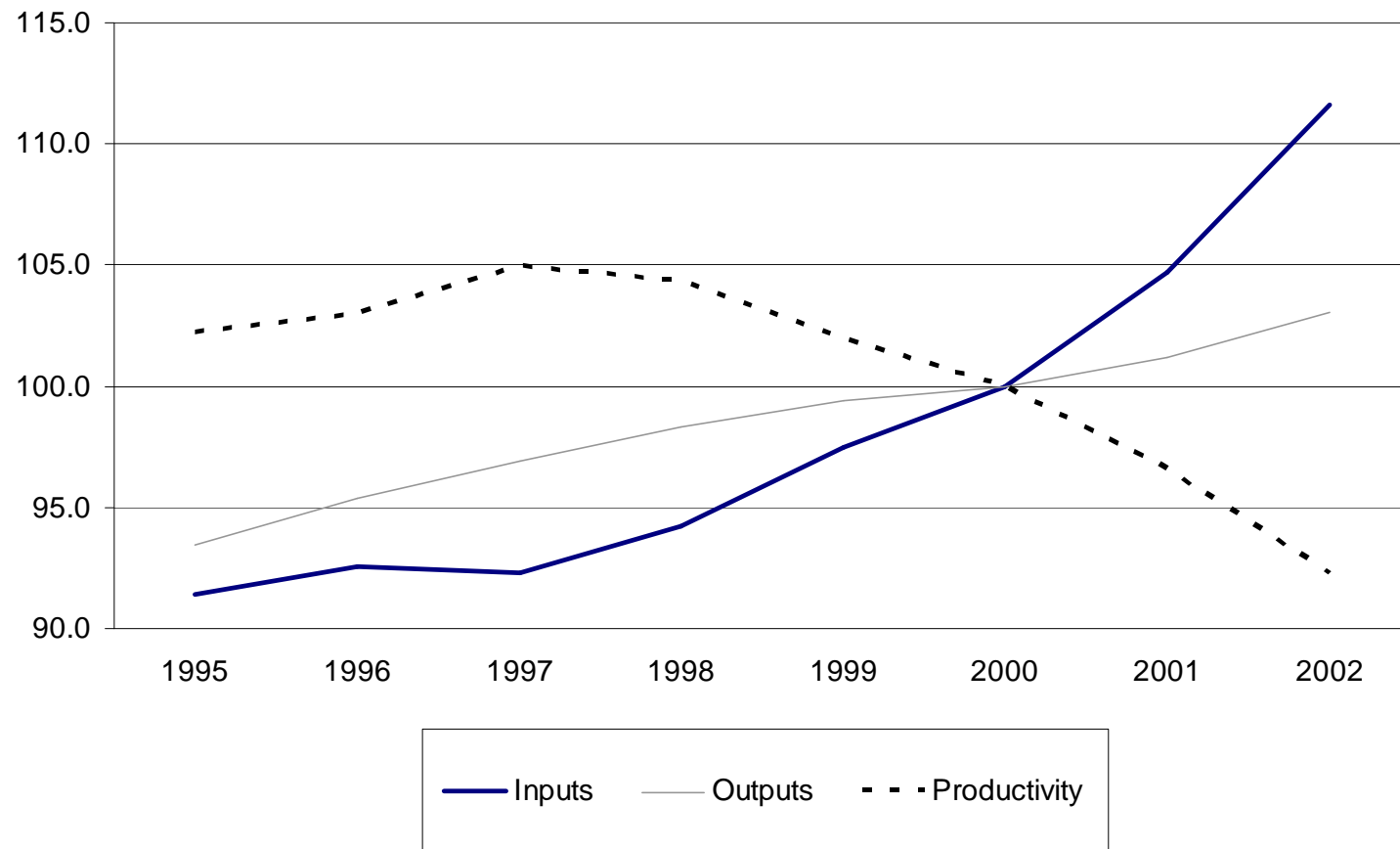
- Accountability to (a) users; and (b) taxpayers
- The political economy paradox: citizens like public services but they don't like taxes
- “More for less” ie increasing public sector efficiency/productivity as the way to square the circle

# Sustainability of public finances

- Ageing population increases pressure on many public services eg health/social care
- Also reduces tax base as dependency ratio rises
- So again more for less only way to resolve tension
- But is public productivity rising fast enough? – key issue for intergenerational analysis

# So measurement important ... but what went wrong?

{UK National Accounts as of mid 2003}



# Factors undermining good measurement

- Questionable methodologies with weak theoretical basis
- Ad hoc approach often determined by coincidental data availability
- Poor resourcing given size of task
- Lack of corroboration for estimates...

...all threatened credibility of the exercise, and of the National Accounts themselves

# The Atkinson Review

Commissioned by UK National Statistician, December 2003. Final Report published January 2005

## Key Findings

1. Basic endeavour absolutely right.
2. Need for principled approach within international guidelines
3. Need for improved measures of inputs as well as outputs
4. Need for adequate resources.

# Atkinson principles: output

(1) Output should be measured as far as possible in the same way as for the market sector ie the added value of the service concerned

(2) Value should be seen as adjusted for quality

(1) and (2) imply *isolating and measuring the incremental contribution of the public service concerned to individual or collective welfare*

# Atkinson principles: Inputs and Productivity

- \* Measures of inputs should be as comprehensive as possible, including capital services
- Consideration should be given to the split between current and capital spending
- Criteria should be established for the properties appropriate to deflators for inputs
- Corroborative evidence should be sought as to plausibility of outputs, inputs and productivity estimates – “triangulation”

# Subsequent progress: turning the principles into practice

- Development:
  - measuring output as attributable incremental value – see following slide
  - the “mundane side”: inputs, deflators, etc
- Useful outputs:
  - “Productivity articles”
  - Significant changes to GDP level and growth rates

# Measuring 'attributable incremental value'

- Good use of administrative data can help on quantity side eg comprehensive measures of patients treated or pupils taught
- Main difficulties with quality. But encouraging how productive linkages with eg health, education experts, practitioners have proven. Help define what 'value' is in specific services, as stepping stone to how then to measure it.

# Future agendas (1)

Different countries at different stages in measuring public sector output in GDP.

- Need to level up
- Role of OECD and other supranationals crucial to this
- Health/Education handbook invaluable in helping define and spread best practice

# Future Agendas (2)

## Broadening to measure public sector performance more generally:

- Public sector output/ productivity only one element of performance
- Range of other dimensions of public service provision of interest to users and taxpayers
- Include distribution and equality of access
- What is the overall model/framework for doing this?

# Future Agendas (3)

## Linkage to wider measurement of social wellbeing:

- for most people, public services crucial part of their overall wellbeing
- so same issues arise as to how to measure the contribution in a wide and comprehensive, but disciplined, way