(3) 現地ヒアリング受領資料

1) イギリス ONS

Office for National Statistics

Measuring public services

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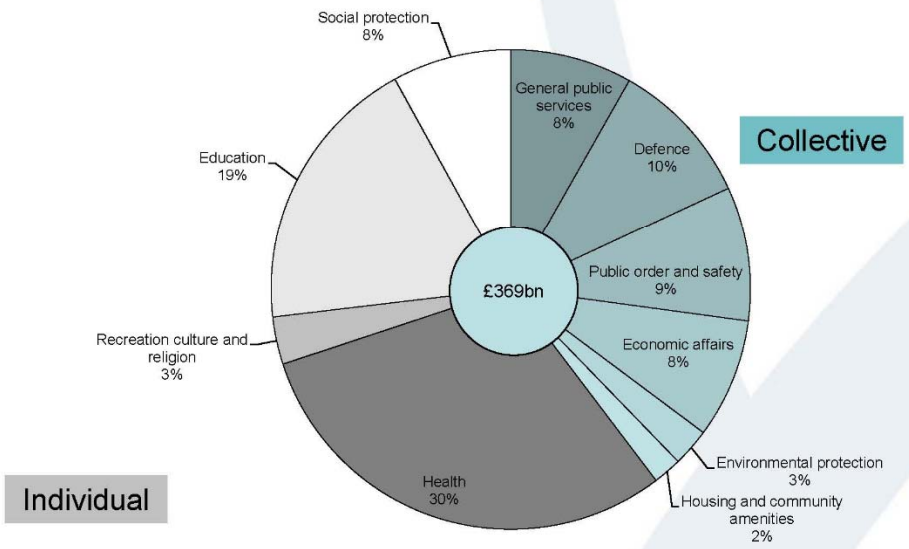
8th December 2017

Overview of UK Public Sector



Overview of UK Public Sector

The OSCAR database contains HM Treasury's detailed analysis of departmental spending under thousands of category headings. The database contains around 24 million lines of data. The database has codes for more than 1,700 public bodies in the United Kingdom including central government departments, local authorities, NHS trusts and public corporations.

Most data on OSCAR are provided by government departments.

Monthly data is provided to ONS twice every quarter and contains roughly 17,000 individual lines.

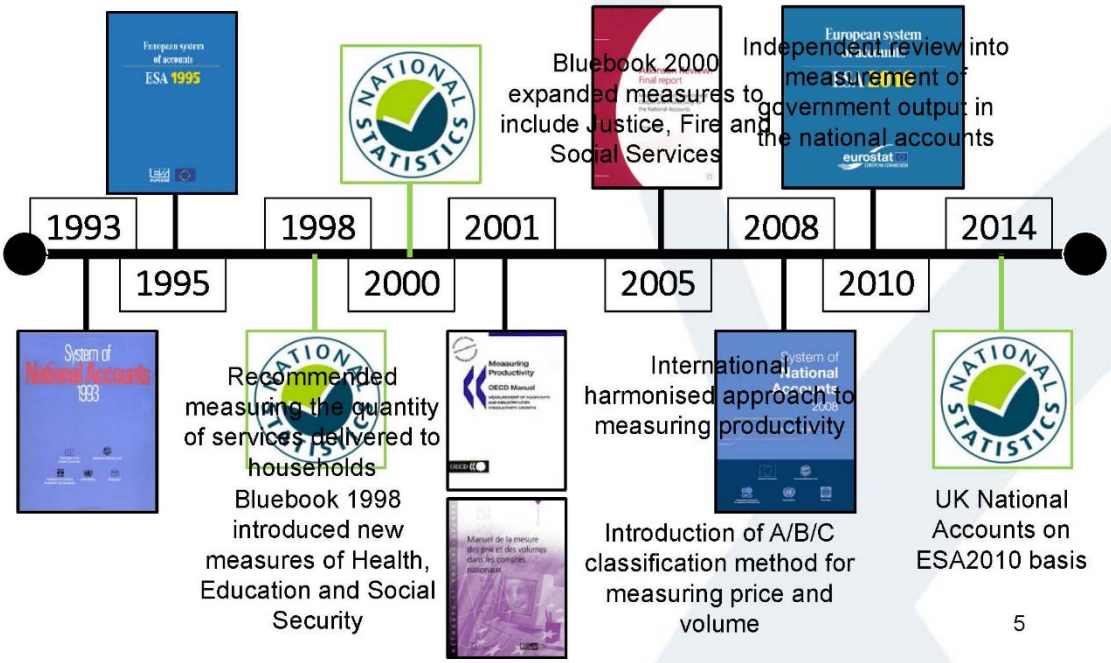
Overview of UK Public Sector

Local Government data sources

- Statistical returns completed by Local Authorities in England to the Department for Communities and Local Government (DCLG). These include the Quarterly Revenue Outturn and Capital Payments Outturn.

- Similar statistical returns for local government bodies in Scotland, Wales and Northern Ireland.

History



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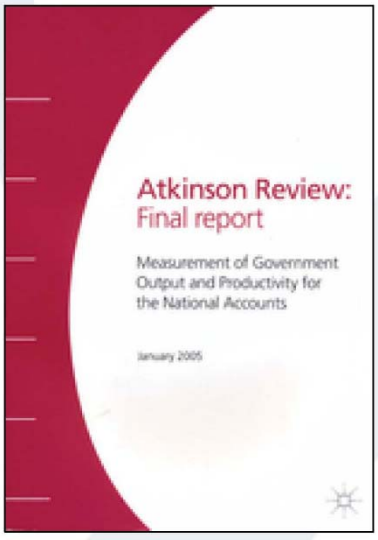
Atkinson Review

To advance methodologies for the measurement of government output, productivity and associated price indices in the context of the National Accounts



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The non-market problem…

No transaction between producer and consumer - Valued at the total costs of production

Provided for free or not economically significant prices – no price !

Two options;

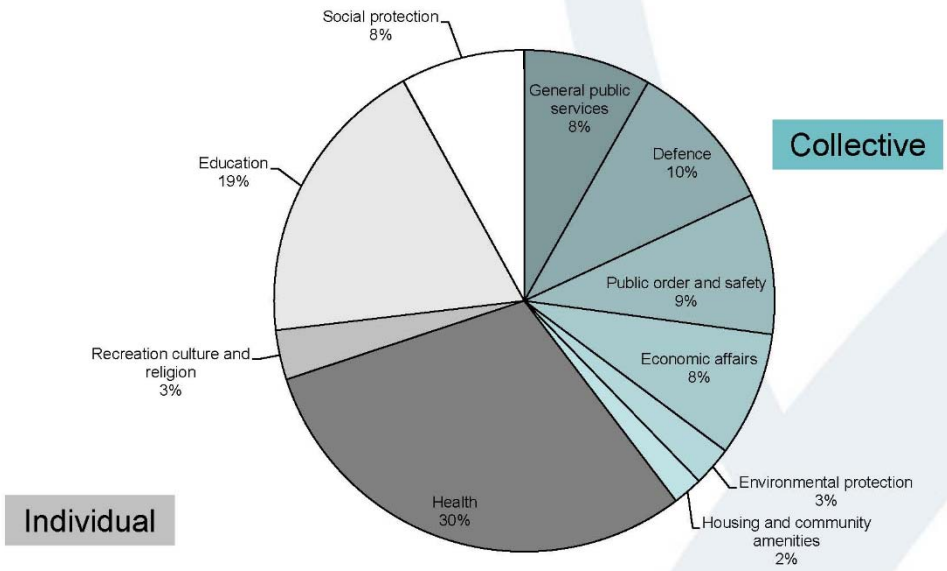
- Indirectly calculate volume by deflating production costs or input
- Direct volume measurement

The non-market problem

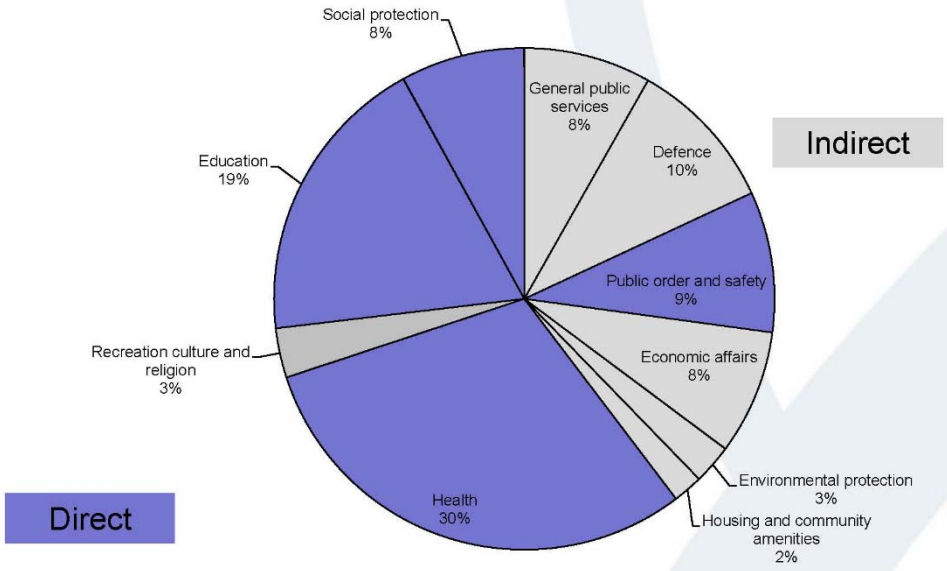
Valuation – sum of costs approach

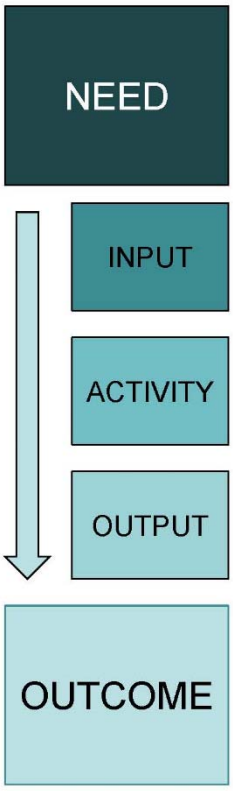
+ Compensation of employees
+ intermediate consumption
+ Consumption of fixed capital
- *Market output*
- *output produced for own final use*

The non-market problem…



The non-market problem…





Why intervention is necessary, for example, **high levels of obesity**

Inputs into the production of a good or service, for example, **labour**

The unit of service provided, for example, **number of operations performed**

The amount of good or service consumed, for example, **hours of education received**

The expected result of the intervention, for example, **increased life expectancy or lower rates of crime**

The non-market problem…

System of National Accounts 2008

"The "output volume method" is the recommended method for compiling indicators of volume change of non-market services. The method is based on quantity indicators, adequately quality adjusted, weighted together using average cost weights".

Atkinson principles

The measurement of government non-market output should;

- follow a procedure parallel to that adopted in the national accounts for market output
- make appropriate allowance for quality change
- complementarity between public and private output
- covers adequately the full range of services for that functional area
- covers the whole of the economic territory

Price & Volume handbook A/B/C

The following criteria can be formulated for the appropriate use of output indicators:

- they should cover services produced by the producer that are provided to external users;

- they should be weighted by the costs of each type of output in the previous year;

- they should be defined at as detailed a level as possible.

Price & Volume handbook A/B/C

Individual services

A - An output indicator method if the indicators satisfy all the criteria

B - If the criteria are not fully satisfied

C - If a volume indicator method measures inputs rather than outputs

Weighting

Atkinson Recommendation 6.5:

The ideal approach to developing a single aggregate output measure for a function is to weight together different elements by weights based on their **marginal valuation**. This requires indicators of output values that are comparable for different components. If that is not possible, it may be necessary to use **marginal costs**. **In practice, average costs may be the only information available**. Cost weights may be most appropriate where an outcome is affected by several government services and it is not possible to calculate the value of relative contributions.

Stratification

- A homogeneous product can be defined as a product of which all units would be sold at the same price and consists of units of the same quality, price and quantity

Laspeyres volume

$$Vol = \left(\frac{C_0 \times Q_1}{C_0 \times Q_0} \right)$$

Laspeyres volume

$$\text{Vol} = \left(\frac{\text{Average cost}_0 \times \text{quantity}_1}{\text{Average cost}_0 \times \text{quantity}_0} \right)$$

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What is the output of the public education sector ?

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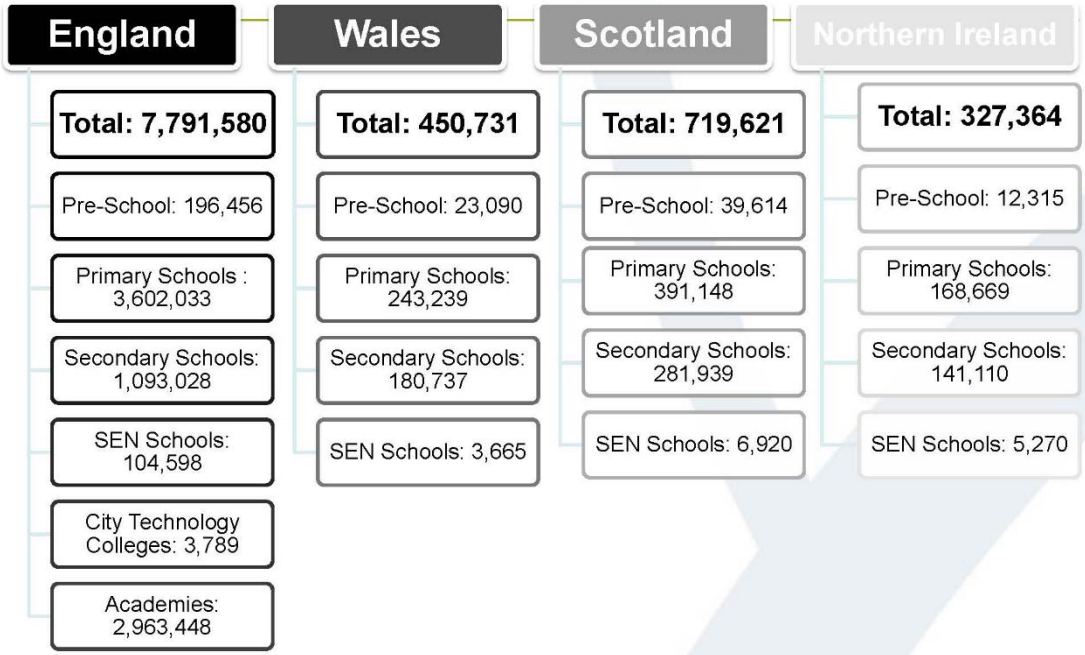
“Education output is the amount of teaching received by students for each type of education.”



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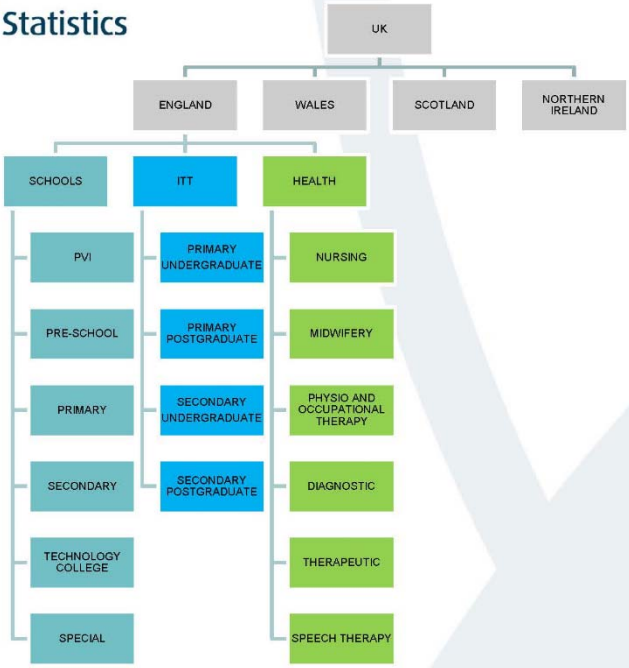

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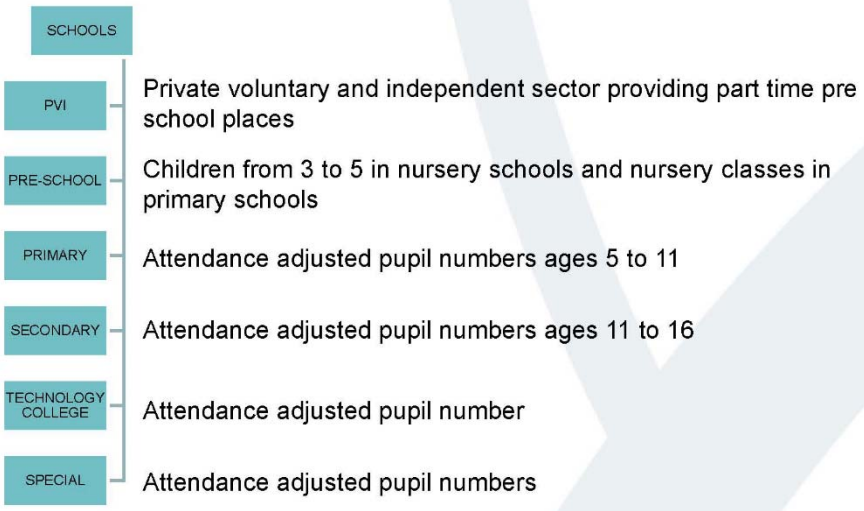

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	Census taken	Results published	Frequency
England	October, January and May	July	Annually
Wales	January	July	Annually
Scotland	September	December	Annually
Northern Ireland	October	Prelim- Dec and Final- Feb	Annually

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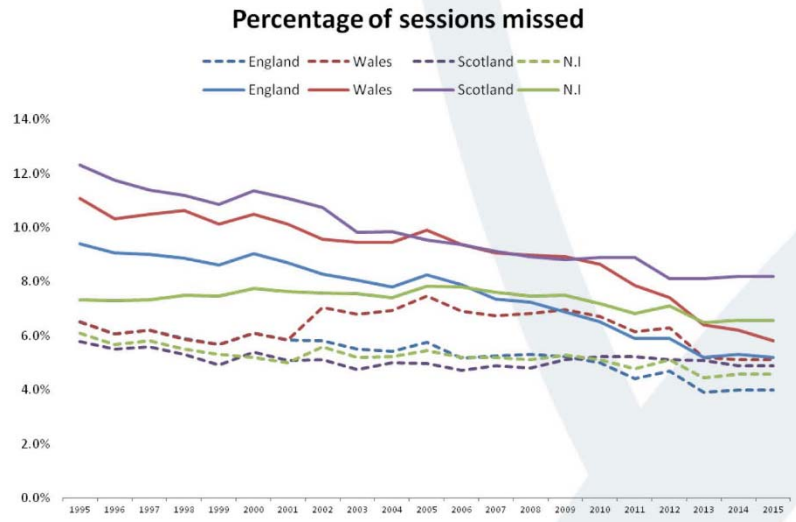

Absence rates are collected by each administration as part of the school census on a term by term basis

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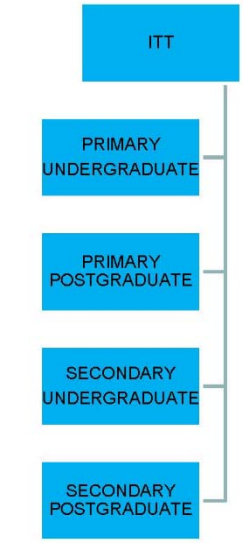

Enrolments on teacher training university courses 1st, 2nd and 3rd years separated by primary and secondary training

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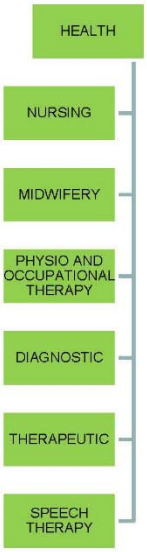

England - New entrants onto health training

Wales – Total students in health training

Scotland – Total students in health training

Northern Ireland - New entrants onto health training