



Department
for Work &
Pensions

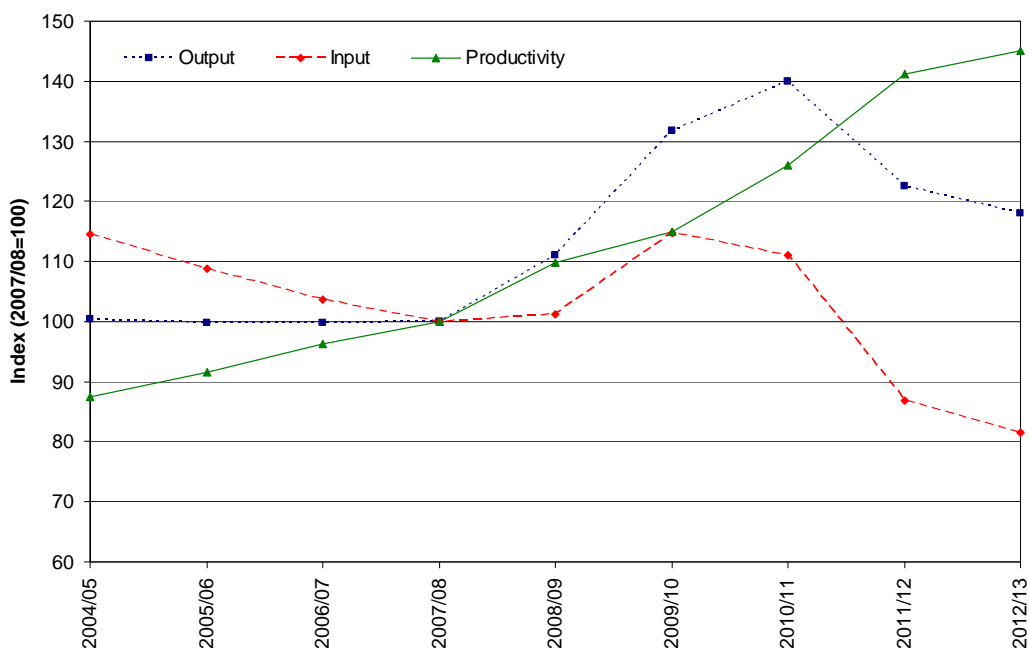
Department for Work and Pensions productivity estimates 2012/13

March 2014

Executive summary

It is four years since the Department for Work and Pensions (DWP) last published a report on productivity¹. That report described the Departmental productivity measure and presented results to 2008/09.

This article formally presents results to 2012/13, confirming productivity increases of 66% since 2004/05, and outlines how this is a result of changes in DWP inputs and outputs.



¹ <https://www.gov.uk/government/publications/dwp-productivity-report-2010>

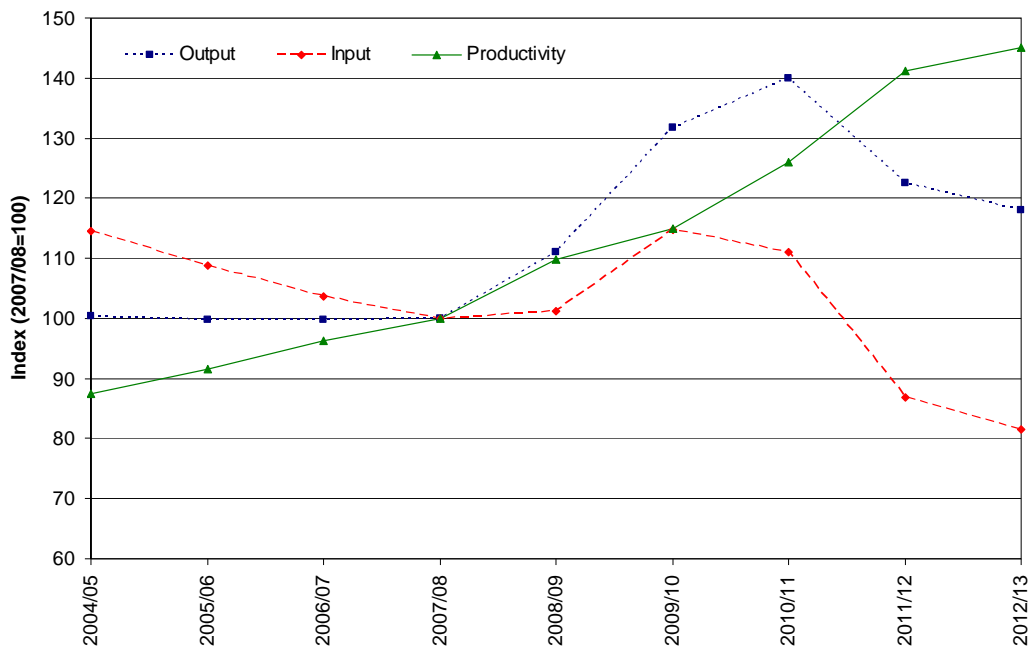
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1 Summary

- 1.1 The Department for Work and Pensions (DWP) is responsible for welfare and pension policy and is a key player in tackling child poverty. It is the biggest public service delivery department in the UK and serves over 20 million customers.
- 1.2 In 2012/13 DWP saw an aggregate productivity growth of 3% across the Department. As a result, the total productivity growth so far across the 2010 spending review period (SR10) is 15%. This builds on the increases of 14% and 26% observed across the 2004 spending review period (SR04) and the 2007 spending review period (SR07) respectively².
- 1.3 Figure 1 shows the time series for the latest estimates of DWP output, input and productivity since 2004/05 in index form, with 2007/08, the baseline year for the 2007 spending review, as the reference year.
- 1.4 Following little change across SR04 and 40% recession based growth across SR07, in SR10 outputs fell by 12% in 2011/12 and by a further 4% in 2012/13; a total fall of 16% so far in SR10.

Figure 1: DWP output, input and productivity, 2004/05-2012/13



- 1.5 As Figure 1 shows, inputs fell by 6% in 2012/13. This follows a 13% reduction across SR04, as headcount reduced by over 30,000 full-time equivalent staff, an 11% recession-based growth in inputs across SR07 and a 22% drop in 2011/12, the first year of SR10. There has been a total fall of 27% so far in SR10.

² SR04 covered 2005/06, 2006/07 and 2007/08; SR07 covered 2008/09, 2009/10 and 2010/11. Two years of SR10 are complete at the time of publishing: 2011/12 and 2012/13.

1.6 The fall in output and input in 2011/12 can largely be attributed to a fall in employment programmes expenditure (treated on an output=inputs basis). This is related to the introduction of the Work Programme, which not only supports people into employment but also aims to keep them there, with payment by results deferring elements of expenditure to the point at which job outcomes are sustained³.

³ In this article, the term employment programmes is used to cover the Work Programme introduced in June 2011, and also the previous Employment Programmes it replaced.

2 Background

- 2.1 The Department for Work and Pensions (DWP) is responsible for welfare and pension policy and is a key player in tackling child poverty in the UK. It delivers services to over 20 million customers through its operational organisations.
- 2.2 At a time of increased interest in value for money across Government, it is important to understand whether the Department is delivering, relatively, more for less. One way to measure this is through productivity, by relating outputs to inputs.
- 2.3 Prior to 1998 all public sector outputs were measured using the input method in National Accounts, implying that the growth in output was always equal to the growth in inputs⁴. In 2005 the Atkinson Review⁵ reported on the progress in developing direct output measures for public sector services, and provided a framework for the broader development of such measures.
- 2.4 The measures of DWP output presented in this article have been developed in accordance with the recommendations of the Atkinson Review and in line with the relevant international guidelines. The resulting aggregate DWP productivity measure provides a consistent approach to understanding the link between resources (inputs) and outputs. It gives a robust analytical basis from which to understand changes in total DWP productivity over time.

⁴ Referred to as *output=inputs*

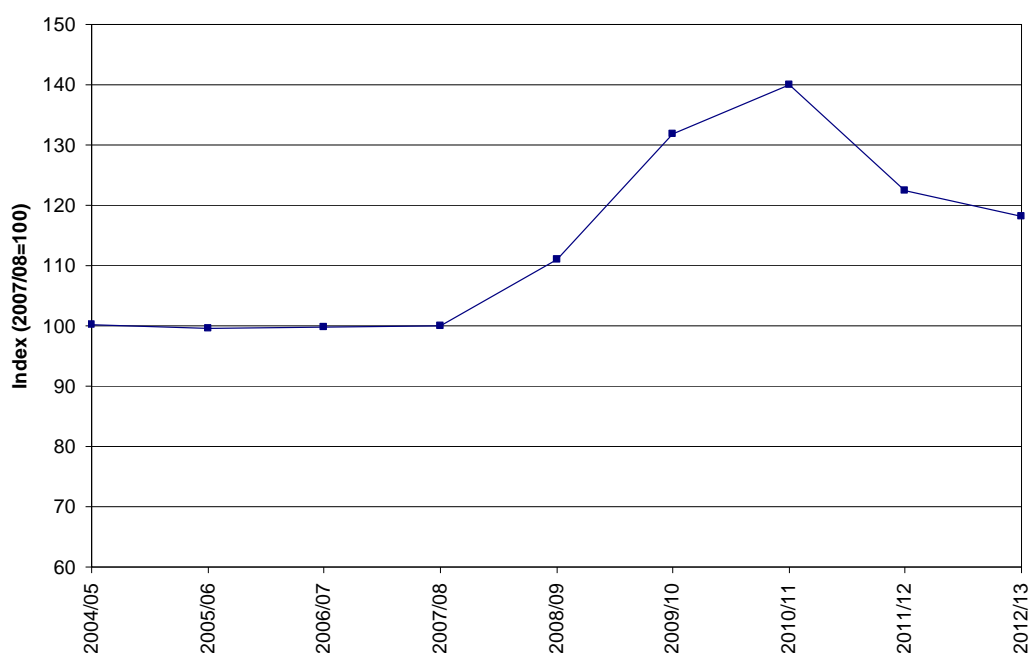
⁵ <http://www.ons.gov.uk/ons/guide-method/method-quality/specific/public-sector-methodology/articles/atkinson-review-final-report.pdf>

3 Volume of DWP output

3.1 The output volume measures used in the DWP productivity calculation reflect the end services received by the customer. Full details of the individual outputs included in the measure are given in Annex A.

3.2 The latest estimates of DWP output between 2004/05 and 2012/13 are shown in Figure 2. The rapid increase in DWP output from 2008/09 to 2010/11 was driven by the recession which saw increasing demand on DWP services, for example those related to Jobseekers Allowance. The partial fallback in 2011/12 is mainly due to a reduction in employment programmes expenditure in that year, which moved to a new ‘payment by results’ initiative.⁶ In 2012/13 there was a further fall in output due to an aggregate decrease in new and existing benefit claims.

Figure 2: DWP output, 2004/05 to 2012/13



3.3 Growth in overall aggregated output depends on the growth in individual outputs within the index and their relative size or expenditure share. Expenditure shares are used as weights in combining annual growth of outputs to create a chain-linked Laspeyres output index. More information on this methodology is provided in Annex B.

3.4 From 2007/08 to 2012/13 there has been an 18% growth in total DWP output. Table 1 shows expenditure shares of output ‘groups’ over these years and Figure

⁶ The contracts for these employment programmes, which are delivered by external providers, contain agreed pricing mechanisms with elements of performance based payment. In work to date these contracts are treated on an output=inputs basis within the DWP productivity calculation, implying output is directly related input.

3 shows their corresponding individual output index lines. Finally Figure 4 combines this information to show how each group contributes to the annual output growth (depicted by black crosses). These illustrations demonstrate that, although the recession impacted both labour market and benefit delivery, the labour market activities were more sensitive to these external drivers.

Table 1: Expenditure shares by output group, 2007/08 to 2012/13

	Percentages					
	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Operations - labour market	22.8	25.6	24.5	26.1	26.2	27.2
Operations - benefit delivery	49.8	44.9	44.8	39.3	46.0	46.8
Of which:						
Working age	33.1	28.8	31.0	26.7	32.6	34.1
Pensions	10.7	10.3	7.6	6.7	7.5	7.4
Disability	6.0	5.8	6.2	5.9	5.9	5.3
Child Maintenance	7.9	8.9	7.4	6.8	7.7	7.7
Output=inputs	8.5	6.5	5.6	4.4	5.3	4.9
Employment programmes	11.0	14.2	17.7	23.4	14.8	13.4

Table Notes: Figures may not sum to 100% due to rounding

Figure 3: DWP outputs by group, 2007/08 to 2012/13

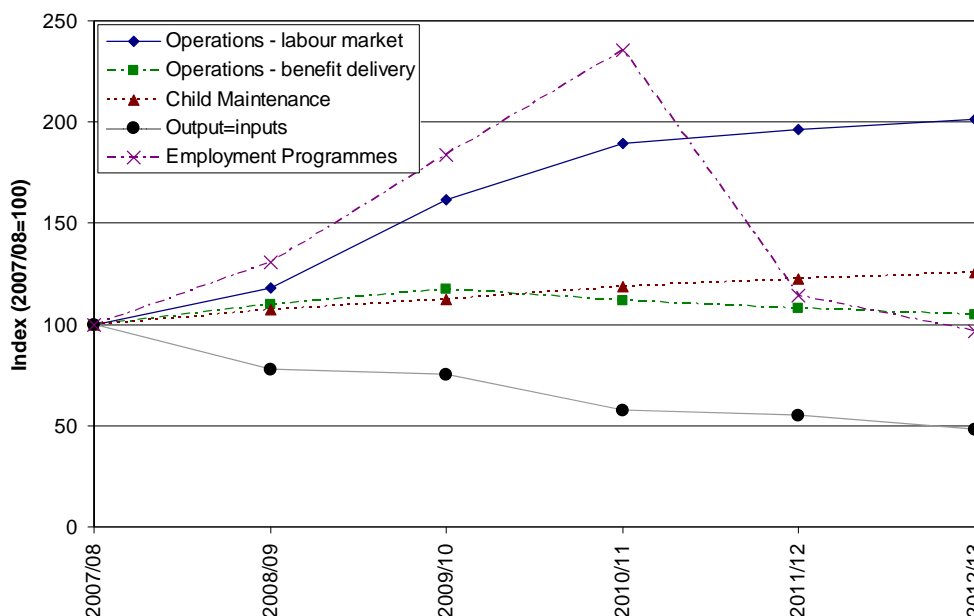
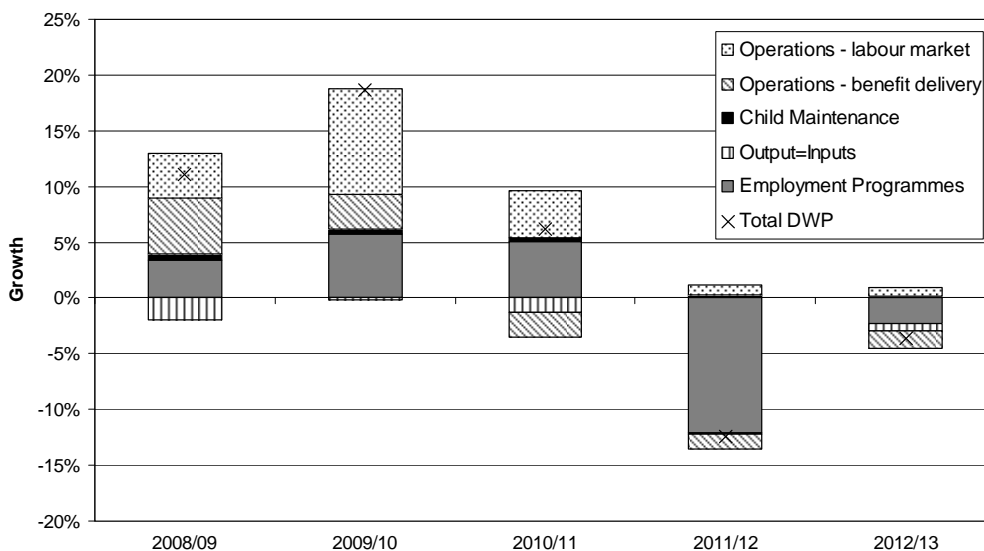


Figure 4: Contributions to DWP output growth, 2008/09 to 2012/13



3.5 DWP output measures are not currently adjusted for quality of service. Following convention, DWP productivity is currently published alongside other measures to contextualise performance (see Triangulation section).

3.6 Between 2004/05 and 2011/12, DWP labour market output was represented by aggregating volumes of personal adviser interviews and job search reviews, delivered by DWP during a customer’s time on benefit. However, there has been recent major cultural change in Jobcentres in which individual districts have far greater freedoms and flexibilities to deliver according to their local labour markets. The aim, by introducing a more flexible and tailored approach to how the business is managed, is to help more people into work. This change led to the need to review labour market output measures. DWP labour market output for reporting 2012/13 onwards will now be represented by volumes of customers being supported by DWP staff through these flexible interventions. Laspeyres chain-linking is used to incorporate this definition change into the output index. More information on this methodology is provided in Annex B.

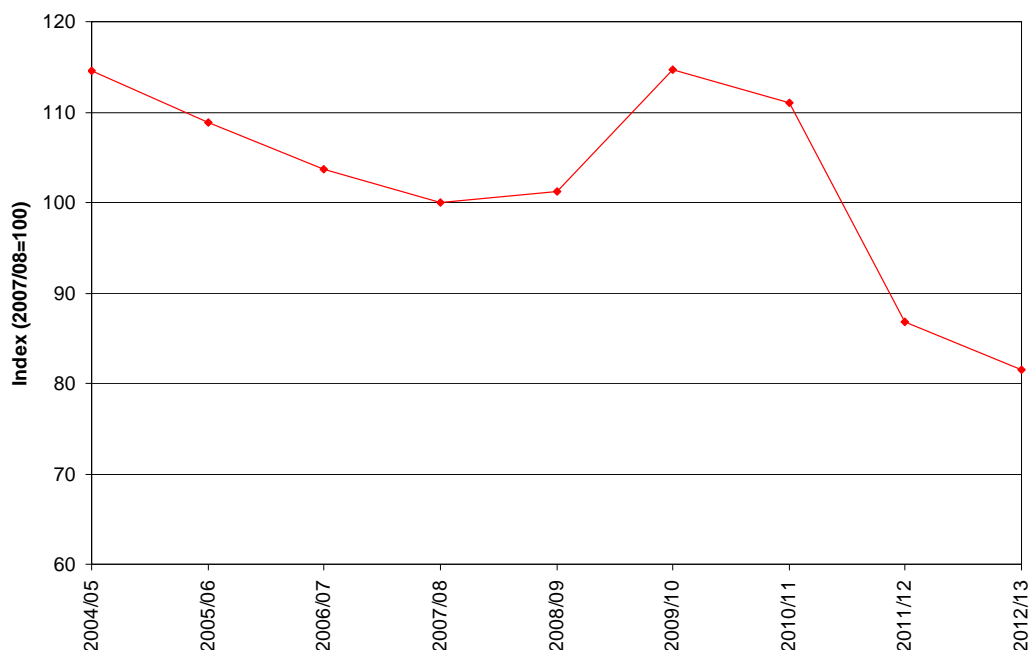
4 Volume of DWP input

- 4.1 It is possible to measure input volume directly (e.g. directly counting the volume of staff hours) or indirectly (e.g. by deflating staff expenditure). DWP utilise an indirect measure of input.
- 4.2 Following National Accounts convention, and the recommendations of the Atkinson Review, only Departmental Expenditure Limit (DEL) figures are included within the inputs for productivity calculations; Annually Managed Expenditure (AME) is excluded.⁷
- 4.3 Furthermore, only DEL expenditure on the following categories is treated as 'relevant' in these calculations with separate deflators for each:⁸
- Pay and pensions costs of staff employed;
 - Current expenditure on goods and services; and
 - 'Consumption' in respect of capital assets (depreciation).
- 4.4 The headline productivity measure is then based on recurrent expenditure on administrative activity. One-off expenditure (the cost of investment and other one-off change) is excluded from this, to closely reflect expenditure on the delivery of current outputs.
- 4.5 The latest estimates of DWP input between 2004/05 and 2012/13 are shown in Figure 5.

⁷ Broadly speaking, DEL covers Departmental administration costs and most programme expenditure, whereas AME covers the benefit expenditure.

⁸ Staff expenditure is deflated using the average weekly earnings index (AWE). Goods and services and capital consumption expenditure are deflated using RPIx, both provided by ONS for public sector classification O (Public Administration).

Figure 5: DWP inputs, 2004/05 to 2012/13



4.6 Over the SR04 period there was a fall in input of 13%, which can be associated with the Efficiency Programme. Through this programme, which was initiated by the Gershon Review,⁹ the Department delivered £1,446 million of value for money savings in this spending review period, against a target of £960 million.

4.7 Through SR07 there was a net increase in input of 11%, mainly due to extra funding in response to increased workloads through the recession. So far in SR10 we have seen a 27% decrease in input, the majority of which occurred in 2011/12 in which inputs fell by 22%. This drop reflects the change to a ‘payment by results’ incentive in employment programmes. This change will effectively delay larger proportions of expenditure to the point at which job outcomes are sustained.

4.8 The three components of input – labour, goods and services and capital consumption – are deflated and combined together using the same chain-linked indexing methodology as outputs (Laspeyres). More information on this methodology is provided in Annex B.

4.9 From 2007/08 to 2012/13 there has been a 19% fall in total DWP input. Table 2 shows expenditure shares of individual expenditure components over these years and Figure 6 shows their corresponding individual input index lines. Finally Figure 7 combines this information to show how each component contributes to annual input growth (depicted by black crosses).

⁹ *Releasing Resources to the Front Line: Independent Review of Public Sector Efficiency*, HMSO, 2004. http://webarchive.nationalarchives.gov.uk/http://www.hm-treasury.gov.uk/media/C/A/efficiency_review120704.pdf

Table 2: Input expenditure shares by component, 2007/08 to 2012/13

	Percentages					
	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Labour	48.9	48.7	47.8	46.9	51.3	52.2
Goods and services	48.7	48.8	50.3	51.1	46.1	45.8
Capital consumption	2.5	2.5	1.9	1.9	2.6	2.0

Table Notes: Figures may not sum to 100% due to rounding

Figure 6: The volume of DWP inputs by component from 2007/08 to 2012/13

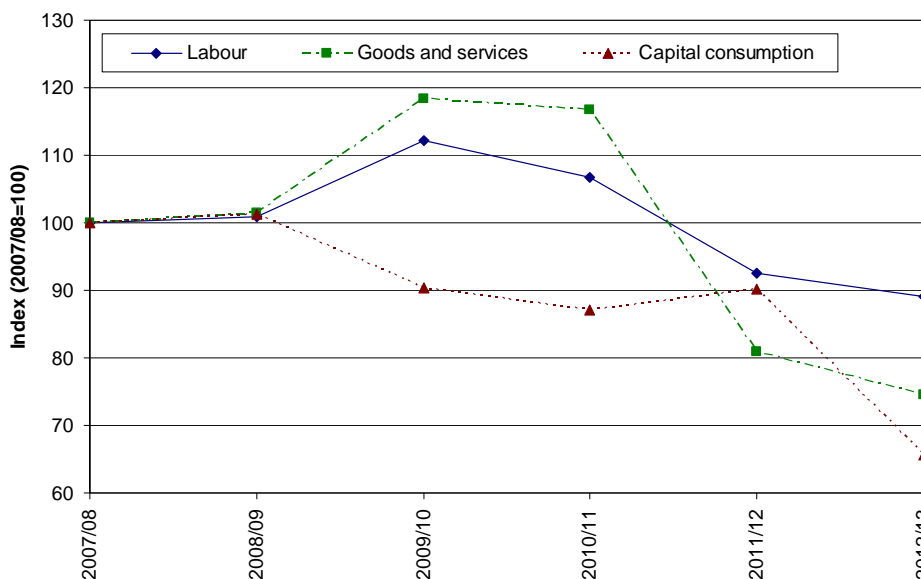
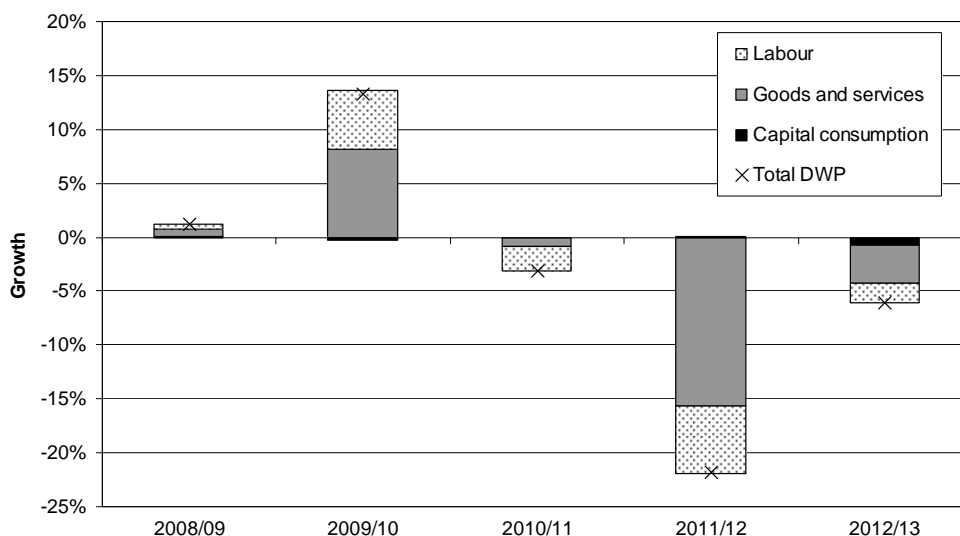


Figure 7: Contributions to DWP input growth 2008/09 to 2012/13

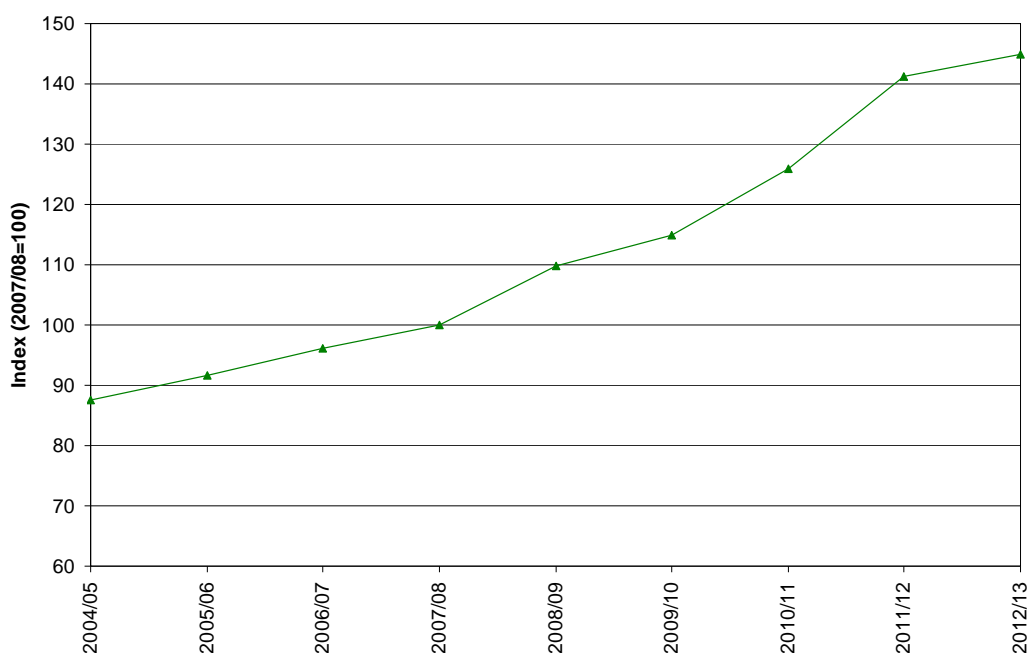


5 Productivity

5.1 Productivity is calculated by dividing the index of output by the index of inputs.

5.2 The latest estimates of DWP productivity between 2004/05 and 2012/13 are shown in Figure 8. A 15% increase is observed in the first two years of SR10, following a rise of 26% over the SR07 period and 14% in SR04.

Figure 8: DWP productivity 2004/05 to 2012/13

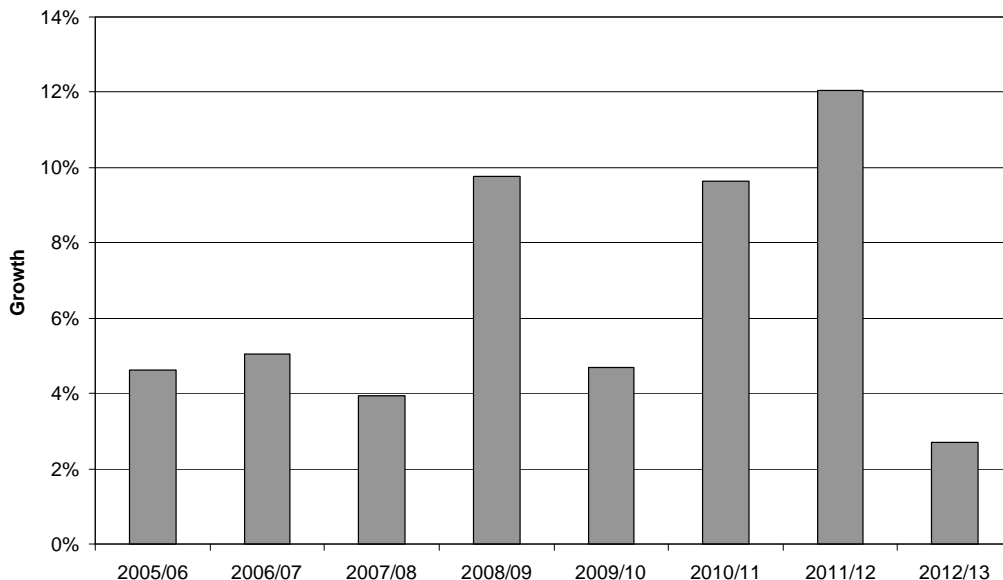


5.3 Productivity rises across the whole period because:

- In the SR04 period input dropped in line with the Gershon Review, while output was stable, as the Department was at the forefront of the drive to increase efficiency and delivered close to £1.5bn in value for money savings;
- In the SR07 period output grew more quickly than input, as workloads related to Jobseekers Allowance grew in response to the recession, and productivity increases were partly due to potentially temporary efficiencies of scale; and
- So far in SR10, overall input has fallen more rapidly than output as the recession abated. Output has remained relatively high due to continued increases in labour market intervention and work capability assessment workloads offsetting the deferred payment element of the Work Programme. As well as cost reduction there has been a major advance through the launch of digital services such as Universal Jobmatch, and the new Child Maintenance System. Already these are enabling us to administer help more efficiently, and revolutionising how people access jobs and other support.

5.4 Figure 9 contains the annual productivity growth each year from 2005/06. This shows that DWP has delivered year on year productivity increases of between 3% and 12% over this period.

Figure 9: DWP annual productivity growth 2005/06 to 2012/13



5.5 Table 3 shows output, input and productivity as indices (2007/08=100) alongside annual growth from 2004/05 to 2012/13. This is the data used to create Figures 1, 2, 4, 7 and 8.

Table 3: Indices and annual growth of outputs, inputs and productivity, 2004/05-2012/13

	Output		Input		Productivity	
	Index	Growth (%)	Index	Growth (%)	Index	Growth (%)
2004/05	100.3		114.6		87.5	
2005/06	99.7	-1	108.8	-5	91.6	5
2006/07	99.7	0	103.7	-5	96.2	5
2007/08	100.0	0	100.0	-4	100.0	4
2008/09	111.1	11	101.2	1	109.8	10
2009/10	131.7	19	114.6	13	114.9	5
2010/11	139.9	6	111.0	-3	126.0	10
2011/12	122.5	-12	86.8	-22	141.2	12
2012/13	118.1	-4	81.5	-6	145.0	3

6 Triangulation

6.1 Volume-based productivity figures provide a useful insight into whether DWP is delivering more for less. They are part of the fabric of planning and performance management within the Department. For example, the productivity figures included in this article are also reported as an input indicator in the Department's Annual Report and Accounts¹⁰ and within the Transparency section of the Department's internet site.¹¹ Moreover, they are consistent with other published information – for example, the expenditure series used in this paper reconciles to the Annual Report and Accounts.

6.2 However, these figures do not tell the whole story about the Department's performance over successive spending review periods. For this reason, DWP routinely publishes contextual information, relating to other measures of performance, alongside the productivity figures. One example is the publication of *impact* indicators alongside the productivity *input* indicator in the Annual Report and Accounts. Historic data for all DWP impact indicators (listed below) is available as part of the Transparency section of the Department's internet site:

- Rates of people moving from key out of work benefits.
- Number of people on key out of work benefits.
- Proportion of children living in workless households.
- Proportion of young people not in full time education who are not in employment.
- Proportion of the lowest earning 25-30 year olds that experience wage progression ten years later.
- Rate of disability poverty.
- Gap between the employment rates for disabled people and the overall population.
- Fraud and error in the benefit system as a percentage of benefit expenditure.
- Rate of pensioner poverty.
- Number of employees in a pension scheme sponsored by their employer.
- Average age people stop working.
- Customer and claimant opinion of DWP service levels.

6.3 In addition to providing a richer understanding of performance, considering a basket of indicators together also allows corroboration – for example, the outputs story in this paper is closely linked to the impact measures related to out of work benefits.

¹⁰ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/264555/dwp-annual-report-accounts-2012-2013.pdf

¹¹ <https://www.gov.uk/government/publications/dwp-business-plan-transparency-measures>

7 Future developments

7.1 The Department has, and continues to, undergo large change within the delivery units. Work to incorporate these changes alongside developing our measures in line with international convention is ongoing. Examples are outlined below.

7.2 Welfare Reform:

The Welfare Reform Act 2012, makes the most fundamental reforms to the social security system for 60 years. It will deliver a system that is simpler, fairer and ensures that work always pays. Changes include:

- The introduction of Universal Credit, which provides a new single system of means-tested support for working-age people in and out of work; and
- The replacement of Disability Living Allowance with a new non-means-tested benefit called Personal Independence Payment, which contributes to the extra costs of overcoming the challenges faced by some disabled people to enable them to lead full, active and independent lives.

The introduction and replacement of benefits provide challenges in reporting a continuous productivity time series. Work to ensure consistency in the DWP productivity measure across future years is currently being developed.

7.3 Quality Adjustment:

The Atkinson Review recommends that public sector output measurement should be adjusted for quality. Broadly speaking, this covers:

- The extent to which the service succeeds in delivering intended outcomes; and
- The extent to which the service is responsive to user needs.

Inclusion of quality adjustment for both benefit delivery and labour market output measures is under consideration.

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Annex A: DWP outputs

Public sector outputs in National Accounts are reported on by Classification of Function of Government (COFOG). DWP outputs contribute to two COFOGs;

- Social Protection – the DWP benefit delivery work falls into this COFOG by ensuring welfare of pensioners, sick and disabled and out of work customers; and
- Economic Affairs – the DWP labour market work falls into this COFOG by providing job broking services.

It is possible to measure output volume directly (e.g. directly counting end services received by the customer). Where no direct measurement of output is available, or appropriate, we assume that the additional output from an extra unit of spending would equal the cost of that spending. In other words the value of these output is assumed to be equal to the inputs (output=inputs). Within DWP approximately 80% of DWP outputs are now measured directly, with the remaining 20% treated on an output=inputs basis.

A1: Outputs measured directly

Social protection outputs:

Working Age:

Jobseeker Allowance Claims
Jobseeker Allowance Load
Employment Support Allowance Claims
Employment Support Allowance Load
Income Support Claims
Income Support Load
Incapacity Benefit Claims
Incapacity Benefit Load
Social Fund Grants and Loans
Other Working Age Benefits Claims

Child Maintenance:

Number of Children Benefiting

Pensions:

State Pension Claims
State Pension Load
Pension Credit Claims
Pension Credit Load
International State Pension Claims
International State Pension Load
Other International Benefit Claims
Future Pension Forecasts

Disability:

Disability Living Allowance Claims
Disability Living Allowance Load
Attendance Allowance Claims
Attendance Allowance Load
Carer's Allowance Claims
Carer's Allowance Load

Economic affairs outputs:

2004/05-2011/12:

DWP economic affairs outputs are represented by volumes of personal adviser interviews and job search reviews, delivered by DWP during the customer's time on benefit.

2012/13 onwards:

DWP economic affairs outputs are volumes of customers supported by personal adviser interviews and job search reviews, delivered by DWP staff during the customer's time on benefit.

A2: Outputs not measured directly (output=inputs)

Each of these will fall within one or both of the Social Protection and Economic Affairs COFOGs. They include Policy, Minister of State, Regulation (Health and Safety Executive and Independent Review Service) and Employment and Work Programmes

Annex B: Chain-linked Laspeyres schematic

Total growth is calculated via a cost-weighted index. To do this, the growth in each individual output is weighted by the share of the total expenditure consumed in producing it. These cost weights include apportioned overhead, corporate and support expenditure, and are therefore described as ‘total factor’.

The cost-weighted output growths can then be added together to form a cost-weighted output Laspeyres index, representing an aggregated measure of DWP output.

Over time the mix of outputs delivered by the Department can change. To ensure the aggregate output measure remains valid over time, the expenditure share of each output is updated annually and ‘chain-linking’ is used to join later output measures to the most recent baseline output year. This ensures that we consistently reflect prices in the baseline year, while growth from each year to the next is assessed as accurately as possible.

A schematic of the calculation of a cost-weighted chain-linked Laspeyres output index is given below (please note the data is purely for illustration, and does not relate to specific DWP figures).

