

BUSINESS POPULATION ESTIMATES FOR THE UK AND REGIONS, 2010

METHODOLOGY NOTE

**PUBLISHED BY THE ENTERPRISE DIRECTORATE OF THE
DEPARTMENT FOR BUSINESS, INNOVATION AND SKILLS (BIS)**

PUBLISHED 24 MAY 2011

Contents

Introduction	Page 3
Section 1 - Definitions and Coverage	Pages 4-7
Definitions used in this publication	Page 4
The Time Period Covered	Page 5
Industrial classification	Page 5
Coverage	Page 5-7
Section 2 - Business Population Estimates Methodology	Pages 8-14
Methodology in brief	Page 8
Methodology in detail	Pages 9-11
Statistical disclosure control	Pages 11-12
Impact of methodological improvements in this publication	Pages 12-14
Section 3 - Comparisons with other published data	Pages 15-16
Annexes	
A ONS Inter Departmental Business Register (IDBR)	Pages 17-18
B ONS Labour Force Survey (LFS)	Page 19
C HMRC Self-assessment Tax data (SA)	Page 20
D SME statistics 1994 to 2009 - discontinuities	Pages 21-23
E Industrial classification – main changes from SIC2003 to SIC2007	Pages 24-25
F Links to sources of Enterprise and Employment Data	Pages 26-27

Introduction

1. *Business Population Estimates for the UK and Regions (BPE)* is produced by the Department for Business, Innovation and Skills (BIS). It is a continuation of the *Small and Medium Enterprise (SME) Statistics for the UK and Regions*, but uses a revised methodology to improve the quality of estimates of the number of enterprises. The publication name has been changed to alert users to the fact that the two series should be used independently.

2. The *BPE 2010* publication issued on 24 May 2011 is the first release based on this improved methodology. However, to enable comparisons with the previous year, 2009 estimates were produced using the revised methodology. These were published in an article in the ONS Economic and Labour Market Review¹ on 12 April 2011.

3. There is no single database in the UK which contains details of every active business. This publication takes data from the 2.1 million businesses on the government business register, the IDBR², which contains all businesses operating VAT and/or PAYE schemes, and then estimates how many very small *unregistered* enterprises there are to estimate the total business population for the UK.

4. This publication, therefore, is the best official source for data on the number of enterprises and their associated employment and turnover, for the entire UK business population at a particular point in time.

5. *Business Population Estimates for the UK and Regions* (hereafter referred to as *BPE*) is a National Statistics publication.

6. National Statistics are produced to high professional standards set out in the *Code of Practice for Official Statistics*. They undergo regular quality assurance reviews to ensure that they meet customer needs. They are produced free from any political interference. Further information on National Statistics can be found on the UK Statistics Authority website³.

7. In line with the *Principle on Frankness and Accessibility* from the *Code of Practice for Official Statistics* this document provides guidance for users on classifications and methods. It describes how to interpret the data in the *BPE* publication, and how it differs from the previous *SME statistics* series and other data published by the government on the UK business population.

8. The *BPE* publication for the year 2010 and *SME Statistics* publications for the years 1994 to 2009 can be downloaded from <http://stats.bis.gov.uk/ed/bpe>. For further information or to give feedback on the *BPE* publication please contact us via email at enterprise.statistics@bis.gsi.gov.uk.

¹ The ELMR article can be found at <http://www.statistics.gov.uk/articles/elmr/elmr-apr11-shaw.pdf>

² IDBR = Inter Departmental Business Register – for more details, see Annex A

³ Information on National Statistics can be found at <http://www.statisticsauthority.gov.uk/national-statistician/types-of-official-statistics/index.html>

Section 1 - Definitions and Coverage

Definitions used in this publication

Enterprises/Businesses

9. An *enterprise* is the smallest combination of legal units (generally based on VAT and/or PAYE records) which has a certain degree of autonomy within an enterprise group. A branch or office of a larger organisation is not in itself an enterprise. In this methodology note, and the Statistical Release, the terms “enterprise” and “business” are used interchangeably.

For example, a large supermarket chain will count as one enterprise, with the employment and turnover of individual stores, distribution centres etc included within this.

For example, 20 partners in a partnership could all be defined as working proprietors if none of them were drawing a salary and therefore classed as an employee.

Employees

10. The number of *employees* refers to the number of people working within the enterprise under a contract of employment in return for a wage or salary. An enterprise can be classed as having no employees if all the business is conducted by people classed as being working proprietors. In the detailed data tables for *BPE 2010*, Table 1 shows employment split out between working proprietors and employees.

For example, an enterprise with two partners and three employees will have five employment.

For example, an enterprise with 5 full-time and 5 part-time employees will be classed as having 10 employees.

Employment

11. This refers to the number of employees plus the number of self-employed people (working proprietors) who run the enterprise. Individuals with two jobs in different enterprises, and self-employed people running two enterprises will be counted against each enterprise. Both full-time and part-time employees are counted, and both are counted as an employee.

Turnover

12. This refers to the value of sales, work done and services rendered. It excludes VAT. Turnover data for registered enterprises comes from the IDBR⁴. Turnover data for unregistered enterprises is estimated (see Section 2).

Size of enterprise

13. This refers to the number of employees within an enterprise. In the Statistical Release, we refer to small as those with 0 to 49 employees, medium as 50 to 249 employees and large as 250 or more employees. We also use the term “SME” to cover all enterprises with 0 to 249 employees.

⁴ Where there is an enterprise group, turnover for all the VAT enterprises within the group may be notified (to HMRC) by a reporting or ‘standard’ unit. If this is not updated from other sources the IDBR record will hold an unusually high turnover for the reporting enterprise and other enterprises within the group will hold an estimated turnover. Therefore turnover in a small number of businesses may be too high.

The time period covered

14. *BPE* is a snapshot of the number of enterprises at the start of a calendar year.
15. A count of IDBR enterprises that were “live” at the start of the year is achieved by referring to each enterprise’s recorded start date and, where appropriate, its closure date.
16. The reporting of these dates is subject to a number of time delays. For example when an enterprise closes there may be a delay before HMRC, who collect VAT and PAYE, are informed. Closure of the VAT record may then be delayed until all liabilities are settled. There may also be short lags in recording PAYE data.

Industrial Classification

17. The industrial classification used in this publication is the *Revised Standard Industrial Classification 2007 (SIC2007)*. An additional table based on the SIC2003 classification at broad industry level is published separately at <http://stats.bis.gov.uk/ed/bpe> and further detailed industry tables may be released in the future if there is sufficient user interest.
18. Private households and extra-territorial bodies (sections T and U) are not included, as they are outside the scope of this publication.
19. SIC 78 (Employment Activities), which covers employment agencies and human resources provision, is also excluded to avoid possible double counting of employees, who could be counted both as employees of the agency, and as employees of the business they are currently working for.
20. The most detailed tables provided in the publication are disaggregated to 3-digit SIC 2007 level for enterprises identified as employers only. This is because the estimates of the enterprises with no employees relies heavily on the ONS LFS which is a sample survey, and is not robust enough to provide accurate estimates at this level of detail.
21. Tables have not been provided at either 4 or 5 digit level, as the level of suppression would be very high.

Coverage

22. With the exception of the Whole Economy table (Table 2) in the detailed data tables, the *BPE Statistics* cover the market sector - all private sector enterprises⁵, even if they sell their products exclusively to the government. It excludes central and local government⁶, charities and other non-profit organisations, which are shown in Table 2 of the publication only.

⁵ The private sector includes a small number of public corporations and nationalised bodies.

⁶ The local and central government sector is comprised of all enterprises classed by ONS as having an institutional classification of either local or central government, and private sector enterprises with SIC2007 classification codes 841 (administration of the state and the economic and social policy of the

23. There is no lower boundary for inclusion in the *BPE* publication. Even a small amount of enterprise activity counts. However, many “no employee” businesses are labour-only sub-contractors; that is, self-employed people trading in their own skills or professional knowledge. They might work for just one customer. Many are genuine entrepreneurs or at least think of themselves as separate from the organisation to which they sell their skills. The improved *BPE* methodology now makes use of additional questions around who pays salary or wage and whether they pay their own National Insurance and Income Tax to better identify “true” self-employed activity (see Section 2).

24. Apart from Table 2 in the detailed data tables, which also includes Government and non-profit enterprises, the *BPE* publication comprises of enterprises from three types of legal status only - *sole proprietorships*, run by one self-employed person; *partnerships*, run by two or more self-employed people; and *companies* (including public corporations and nationalised bodies) in which the working directors are classed as employees. We assume that all unregistered enterprises are from the first two categories, and we exclude companies that are not on the IDBR due to inactivity.

25. Since the publication of *SME Statistics 2000*, companies with only one employee on the IDBR have been moved from the “1 employee” category into the “with no employees” category, as the employee is treated as a “working proprietor”. This was done to ensure that incorporations by individuals operating alone did not distort the overall numbers of enterprises with employees. If the reallocation of companies from the 1 to the “with no employees” band had not been undertaken then the distribution of companies across the various employee size bands would have been as shown in Table A below.

Table A: Companies (including public corporations and nationalised bodies): number of enterprises, and their associated employment and turnover by size, UK, start 2010

	Number		
	Enterprises	Employment	Turnover (£ billion) ¹
All companies	1,236,085	16,961,707	2,926
With employees	1,229,565	16,956,529	2,921
With no employees	6,520	5,178	5
1 employee	493,075	493,271	84
2+ employees	736,490	16,463,258	2,838

1. "All Industries" turnover figures exclude Section K (financial and insurance activities) where turnover is not available on a comparable basis.

26. As seen in Table A, over six thousand companies have no employees recorded on the IDBR. Companies without employees can be holding companies, investment trusts or pension funds and most of these will have no associated employment. In addition a small number are companies where, for technical reasons, employee directors are treated as working proprietors. Around 493,000 companies with one employee have been counted in the “with no employees” data in the publication.

community, 842 (provision of services to the community as a whole), and 843 (compulsory social security activities).

27. Around 21,000 enterprises have been excluded from the registered enterprise counts in *BPE 2010*. Most of those excluded are Composite and Managed Services Companies, and the remainder are registered at the address of an Official Receiver's Office. In both cases the address does not represent the location of the activities of these enterprises and they have been excluded to avoid giving a false impression of business activity in these locations. Further details on Composite and Managed Services Companies can be found on the HM Revenue & Customs website⁷.

⁷ See <http://www.hmrc.gov.uk/bulletins/tbissue74.htm#d>

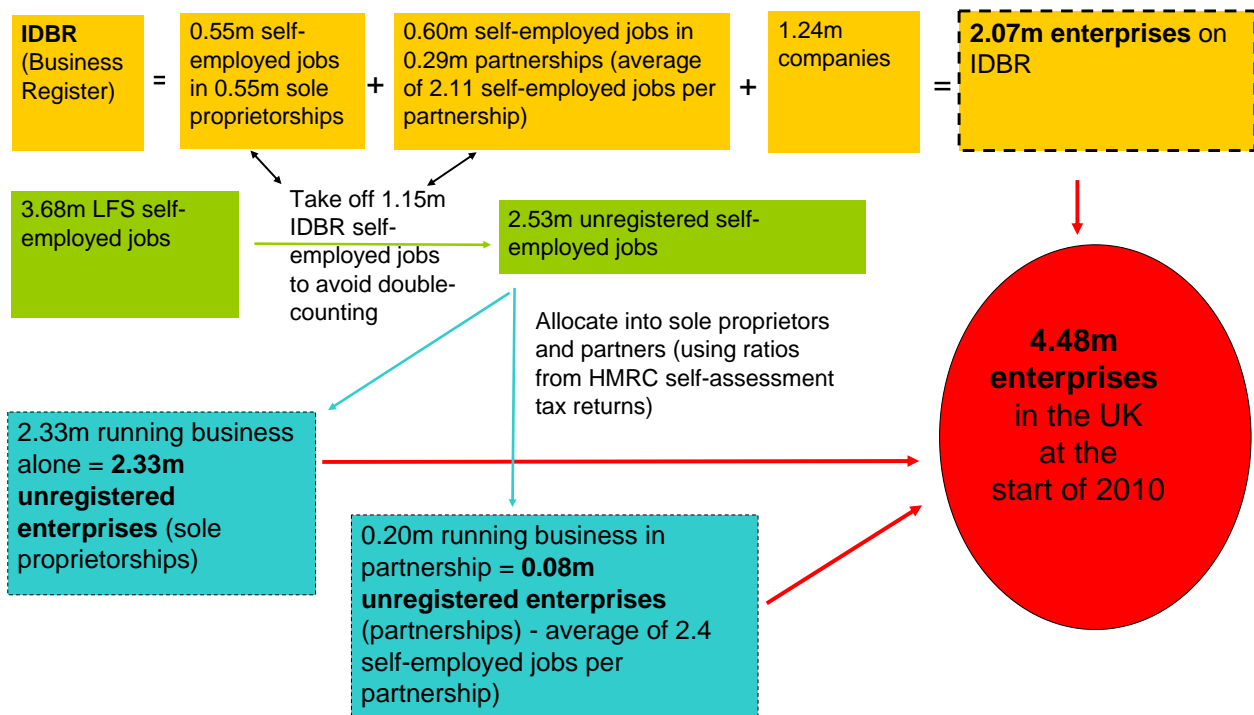
Section 2 – Business Population Estimates Methodology

28. As there is no database of all enterprises in the UK in existence, we must use available sources to estimate the number of enterprises not on the IDBR (the business register). Further background on the IDBR can be found in Annex A.

Methodology in brief

29. The IDBR contains all registered enterprises. It is assumed that all active companies are on the IDBR, so no further estimate of unregistered companies is required. We therefore only need to estimate unregistered enterprises run by self-employed people, either alone (sole proprietorships) or with others (partnerships). We use the ONS Labour Force Survey (LFS) to obtain estimates of all self-employed people⁸. We use the IDBR to count how many self-employed people (working proprietors) are running IDBR registered enterprises. By subtracting the IDBR working proprietors from the ONS LFS self-employed total, we know how many self-employed people there are running unregistered enterprises. We then use a ratio of self-employed working alone or in partnership and the average number of partners per partnership to allocate these working proprietors into enterprises. We then add these to the IDBR registered enterprises to get the estimated total business population in the UK (see Figure A).

Figure A: Flowchart to illustrate *BPE* methodology



⁸ More background on the ONS Labour Force Survey can be found at Annex B

Methodology in detail

Self-employment estimates from the ONS Labour Force Survey (LFS)

30. There were an estimated 3.7 million self-employed jobs in the UK at the start of 2010. This has been calculated by combining data from the Q4 2009 and the Q1 2010 quarterly LFS micro-data (seasonally unadjusted) files.

31. The 3.7 million is made up of 3.4 million people self-employed in their main job, and 0.3 million (in some cases the same people) who had a second job with self-employed status⁹.

Overlap of the IDBR and LFS self-employment count

32. Simply adding the self-employment estimate from the LFS to the IDBR count would lead to double-counting in some instances since:

(i) not all self-employed people run enterprises on their own - some are in a partnership.

(ii) some of them run enterprises that are VAT and/or PAYE registered and so already appear on the IDBR.

33. The LFS does not ask individuals whether they work alone or in a partnership, or whether their enterprises are VAT or PAYE registered, so this must be estimated.

Self-employed on the IDBR

34. The first step is to estimate how many self-employed people (working proprietors) are registered for VAT and/or PAYE with HMRC, and are therefore on the IDBR.

35. The IDBR records employment via survey forms (currently, the *Business Register Employment Survey*). If there is no source of employment information (since BRES is a sample survey for the smallest units), then employment is taken from PAYE jobs where available - otherwise it is imputed from turnover data. Then to allocate the imputed employment into working proprietors or employees, the number of working proprietors is assumed to be one per sole proprietorship, and two per partnership. [Evidence from HMRC Tax Self-Assessment suggests it is slightly more than two].

36. Since directors of a company are classed as employees of the business, all private sector self-employed on the IDBR will be either in “sole proprietorships” or “partnerships”. At the start of 2010 there were 840,000 sole proprietorships and partnerships within the scope of the *BPE Statistics* on the IDBR run by 1.15 million self-employed people (see Figure A and Table B).

⁹ These figures are different to those published by the ONS in their Labour Market Statistics release. This is partly due to data being seasonally unadjusted, but mainly due to some cases being excluded to better estimate “true” self-employment. See page 13 for more detail.

Self-employed not on the IDBR

37. The second step is to estimate how many enterprises are run by the remaining 2.53 million self-employed.

38. HMRC's Self-Assessment Tax returns data (SA) is a further source of self-employment data¹⁰. We use SA data on those people running unregistered enterprises alone or in partnership to estimate the proportion of unregistered self-employed people working either as a sole proprietor or a partner.

39. 2008/09 SA data (the latest data available) for those running an enterprise not registered for VAT showed that self-employed people who were in partnership, rather than acting alone, was in the minority. However, the ratio varied from industry to industry and in the *BPE Statistics* specific ratios are applied for each industry division (2 digit SIC).

40. Each sole proprietorship is assumed to have only one working proprietor (self-employed person). Therefore the number of unregistered sole proprietors is assumed to equal the number of unregistered sole proprietorships.

41. Partnerships are assumed to have two or more working proprietors. Using information from the 2008/09 HMRC self assessment tax return data, BIS calculate that the average number of working proprietors (self-employed partners) in each partnership was 2.4 (based on self-employed businesses below the 2009/10 VAT registration threshold of £68,000 and with zero employment costs). This ratio is then used to estimate the number of unregistered partnerships.

42. The results showed that amongst unregistered enterprises, sole proprietorships were much more common than partnerships, making up 97 per cent of unregistered enterprises at the start of 2010, with partnerships making up the remaining 3 per cent (see Table B).

43. Amongst IDBR registered enterprises at the start of 2010, sole proprietorships represented 27 per cent of all enterprises, partnerships 14 per cent and companies 60 per cent.

Table B: Enterprises and self-employment on and off the IDBR, UK, millions, (private sector; excludes Standard Industrial Classification, 78, O, T and U)

	On the IDBR		Not on the IDBR, unregistered	
	Number of Enterprises	Self- employed people	Number of Enterprises	Self- employed people
Sole proprietorships	0.55	0.55	2.33	2.33
Partnerships	0.29	0.60	0.08	0.20
Companies	1.24	-	-	-
All	2.07	1.15	2.41	2.53

¹⁰ For more detail on the HMRC Self-Assessment data, see Annex C

Economic contribution

44. Unregistered enterprises are clearly very small. It is assumed that they are all in the smallest size class (no employees), and are all self-employed people working alone or in partnership. Some may generate employment, but it is likely to be transitory or low paid, otherwise a PAYE scheme would be in operation.

45. Turnover in unregistered enterprises will generally be lower than that of registered businesses of the same size, as turnover in the former would usually be below the VAT threshold.

46. Turnover for unregistered enterprises is imputed by calculating the average turnover per working proprietor for no employee enterprises on the IDBR, and then halving it.

47. For some 2-digit industry divisions, this still left average annual turnover per unregistered sole proprietorship or partnership above the VAT threshold. In these cases, unregistered turnover was adjusted so that turnover per enterprise was below the 2009/2010 VAT threshold of £68,000.

48. The addition to total turnover from unregistered enterprises at the start of 2010 was about £88 billion (only 2.8 per cent of the overall turnover total).

Statistical disclosure control

49. The disclosure of data relating to individual undertakings without consent is prohibited under the Statistics of Trade Act 1947, the Value Added Tax Act 1994 and the Finance Act 1969.

50. Counts of enterprises based only on IDBR data have been rounded to avoid disclosure using controlled rounding to base five. Controlled rounding means that cells are rounded up or down to the adjacent multiples of five in a way that retains the additivity of tables. For example, an original value of 23 will be rounded to either 20 or 25, and rounded values in a row or column always add up to the rounded row/column total. Original cell values of zero or multiples of the base are unchanged. Values may be rounded down to zero and so all zeros are not necessarily true zeros¹¹.

51. As the *BPE* publication is sourced from both the IDBR and Labour Force Survey, there will be a few cases where the addition of estimates of unregistered businesses to the IDBR data means totals do not equal the sum of the data in columns. In addition, percentages may not always add to 100.

52. Employment and turnover information has to be suppressed where the count is deemed to be disclosive. To avoid disclosure by deduction additional values have been removed.

53. The “with no employees” size class estimates rely heavily on the Labour Force Survey, which is a sample survey of around 53,000 households in the UK every three months. In the *SME Statistics* 2002 to 2004, any enterprise estimates using an LFS estimate of less than 10,000 self-employed in the industry were suppressed, along with additional values to avoid disclosure by deduction. This was consistent with the

¹¹ Controlled rounding is performed using Tau Argus software.

publication guidelines used by ONS at the time to advise users which estimates met a certain level of reliability.

54. In April 2004, the Statistical Policy Committee expressed a strong preference for publishing data rather than suppressing data for reasons of quality. Following this discussion, the threshold of 10,000 (in the region of 20 respondents) has been removed from labour market outputs where possible. Therefore since the publication of *SME Statistics 2005*, such estimates are no longer suppressed, although users should be aware that some estimates are based on small sample sizes which could explain volatility in certain estimates (for example, regional data at a broad sector level) from one year to the next.

55. The exception to this is where estimates are based on fewer than three respondents. These could potentially be disclosive, so they are still suppressed in *BPE 2010*, along with additional values to avoid disclosure by deduction.

Impact of Methodological Improvements

56. In December 2008, BIS launched a public consultation on *SME Statistics* to get the views of users on the usefulness of the publication and obtain suggestions for improvements. The consultation closed in March 2009 and was followed by the release of a government response document in June 2009. Both the consultation document and the government response document are available here:

http://www.berr.gov.uk/whatwedo/enterprise_old/enterprisesmes/page49415.html

57. Additional information on further methodological developments following the review can be found in the Future Steps section of *Government Response to Consultation on Small and Medium Enterprise Statistics for the UK and Regions*, available here:

<http://www.berr.gov.uk/files/file51821.pdf>

58. BIS aimed to minimise the disruption caused by the methodological improvements and discontinuities to the *SME Statistics* series by applying as many of the changes as possible at the same time in this *BPE 2010* publication. The name of the publication has been changed to make it clear to users that there has been a discontinuity. The main changes are listed below:

(i) A change in how we use the **Labour Force Survey self-employment data** to produce the estimates. *SME Statistics* used self-reported self-employment as the basis of calculating the number of unregistered enterprises. However a proportion of LFS respondents who say they are self-employed are employee directors of incorporated enterprises – so technically employees. This over-estimate of the self-employed population results in an over-estimate of the number of unregistered enterprises. BIS has developed a new methodology which more accurately estimates the number of self-employed people. The Labour Force Survey asks self-employed people (in their main job), and employees not paid a wage or salary by an employer, who it was that pays their National Insurance and Income Tax. These individuals are also asked who it was that paid their salary and wage. These questions are used to derive a ‘true’ self-employed population, where individuals are considered to be self-employed if:

- they pay either their own Income Tax and/or National Insurance, **and** they are not a sole director of a limited company; or

- they do not give an answer to the question about Income Tax and National Insurance, **and** they do not give an answer to the question about who pays their salary or wage (on the basis that when there is no additional information the self-reported status has to be used).

These estimates of 'true' self-employed have been used for the first time in *BPE 2010*. Of all three major changes, this change has had the largest impact on the overall estimate of the number of enterprises.

(ii) a change to using **HMRC self-assessment data** in producing the estimates. Previously, HMRC's *Survey of Personal Incomes* (SPI) data was used to provide information on the ratio of sole proprietors to partners. This information is applied to the estimate of unregistered working proprietors from the Labour Force Survey to determine the number of sole proprietors and partners. *BPE* uses HMRC self-assessment (SA) data to carry out the same process. The SA data is based on the self-assessment returns database, almost a census of the self-employed, whereas the SPI is a sample survey. As well as being based on more individuals than the SPI, a further benefit comes from additional information about individuals. In particular, in the SPI, the ratios of sole proprietors to partners was derived from all enterprises, whereas SA data allows us to focus only on individuals working within unregistered enterprises, by excluding enterprises registered for VAT.

(iii) a change to the **Inter-Departmental Business Register (IDBR)** data used in producing the estimates. In the *BPE* methodology, BIS is moving closer to ONS practice by excluding a number of categories from the IDBR data (such as enterprises with no UK activity and enterprises with little evidence of trading activity). Additionally a new inclusion statement issued for the IDBR data in *BPE*. Inclusion statements are a check to remove larger enterprises with only limited evidence of their existence. In line with ONS practice, the inclusion statement has been changed for enterprises with 20 or more employment, with the result that some enterprises that were previously excluded from *SME Statistics* are now included in *BPE*.

59. Further information on these changes can be found in the article *Business Population Estimates: introducing improved statistics on the UK enterprise population*, available here:

<http://www.statistics.gov.uk/cci/article.asp?ID=2669>

60. Further detail on the *SME statistics* time series, and some minor discontinuities over time can be found in Annex D.

Timeliness of the publication

61. In the past *SME Statistics* was published in the Autumn of the year following the reference point, which was the start of each calendar year.

62. *SME Statistics* publications used an extract of the IDBR taken 15 months after the reference point (i.e. March the following year). Selection criteria were applied so that only enterprises active at the reference point were included in the count.

63. BIS have worked with the ONS to investigate whether an extract file from the IDBR can be generated with just a three month lag (March the same year) and still provide a high level of accuracy in terms of the counts of enterprises, employment and turnover.

64. As a result of these investigations, we are now in a position to publish *BPE* with a 3 month lag, therefore improving the timeliness of the publication. In future we will publish *BPE* within the same reference year - for example, *BPE 2011* should be released before the end of 2011.

Standard Industrial Classification 2007 (SIC 2007)

65. The *SME Statistics 2009* publication used SIC 2003 as a way of classifying the activities of enterprises. A major revision of the UK Standard Industrial Classification of Economic Activities was completed in 2007. The revised classifications in SIC 2007 reflect the growing importance of service activities in the economy over the last fifteen years, mainly due to the developments in information and communication technologies (ICT). The *BPE* publication uses SIC2007 as the main classification. However, a table has been produced on the SIC2003 classification and can also be found at: <http://stats.bis.gov.uk/ed/bpe> – users should note that due to the reclassification and the estimation process, the total of the SIC03 data does not match the total shown in the SIC07 tables. Further background information on SIC 2007 can be found in Annex E and via the link: <http://www.statistics.gov.uk/statbase/Product.asp?vlnk=14012>

Section 3 - Comparisons with other published data

66. This section provides comparisons with other published data and advises when each source should be used, and gives reasons for differences between published figures. A summary of key publications, telephone numbers, email addresses and web addresses can be found at Annex F.

UK Business: Activity, Size and Location (ONS)

67. This publication contains details on all active registered enterprises (VAT and/or PAYE) as at March each year, with the latest publication showing around 2.1 million registered in March 2010.

68. This total is lower than the number of enterprises in *BPE 2010*, primarily because *BPE* also includes an estimate of the number of unregistered enterprises.

69. There are also some differences in coverage, since *UK Business* includes government and non-profit organisations which are only included in the *BPE* publication in the Whole Economy table (Table 2).

70. In the *SME statistics* series, the criteria used to select active enterprises from the IDBR differed to that used in *UK Business*, but methodological improvements to *BPE* mean that we have now moved much closer to the *UK Business* criteria, with the expectation that the criteria will be harmonised in the future.

Business Demography (ONS)

71. The ONS *Business Demography* publication estimates the stock of registered enterprises active at any point over a year. The latest figure is 2.3 million active businesses during 2009. Therefore the stock is higher than the *UK Business* stock since it includes any enterprises active at any point over the year, not just those active on one particular date. However, the total is still lower than *BPE* as it excludes unregistered enterprises and the agriculture sector.

Workforce jobs (ONS)

72. Workforce jobs is the ONS preferred source for national and regional data on employment.

73. The ONS publishes official estimates of “workforce jobs”, which totalled 31.2 million in December 2009¹². The estimate of employment shown in most tables in this publication (22.5 million) differs in that it is private sector only, and excludes employment in central and local government, charities and other non-profit organisations, HM Forces and participants on government training programmes who do not have a contract of employment.

74. The “Whole Economy” table (Table 2) shows total employment of 29.8 million at the start of 2010. This is still lower than the workforce jobs estimate above – which also

¹² Source: ONS Economic and Labour Market Review April 2011 Table 2.05, <http://www.statistics.gov.uk/elmr/downloads/elmr2.pdf>

includes individuals on government training programmes, and those listed as employed by recruitment agencies, which are excluded from *BPE Statistics*.

75. Workforce jobs are drawn from a number of different sources, including employer surveys, and are seasonally adjusted.

Annual employment statistics: Business Register Employment Survey (BRES) (ONS)

76. This new publication (December 2010) shows an estimated 26.9 million employees in September 2009. This is a similar level to the 26.0 million employees at the start of 2010 in the “Whole Economy” table in *BPE*, although the reference periods differ. However regional estimates differ since in *BPE*, if an enterprise has establishments in more than one region, the total employment is allocated to the region where the enterprise is registered – in BRES, it is allocated based on the physical location of the jobs.

77. BRES also has the benefit of being able to provide sub-regional employee estimates, but does not currently provide a size breakdown. It is the ONS preferred source for employment data below regional level.

78. The BRES publication can be found at:
<http://www.statistics.gov.uk/pdffdir/bres1210.pdf>

Monthly Register Statistics (Companies House)

79. These statistics are published monthly, and are based on the Companies House register. Their latest statistics (as at 10 April 2011) show a total register of 2.7 million and an active register of 2.5 million in the UK.

80. The *BPE* publication shows a total of 1.2 million active companies as at the start of 2010.

81. Companies House figures are higher than the number of companies produced in the *BPE* (which are sourced from the ONS IDBR), for several reasons:

- the IDBR includes checks that companies have had recent VAT/PAYE activity, whilst Companies House figures include dormant companies with no economic activity;
- the IDBR checks whether individual company registrations have close financial links and are in fact part of the same enterprise and combines them, where appropriate;
- the IDBR will exclude some companies which are included in the Companies House data, if they are registered in the UK, but all their economic activity occurs overseas.

Annex A - ONS Inter-Departmental Business Register (IDBR)

1. The IDBR is a business register administered by the Office for National Statistics (ONS). It holds records of all enterprises registered for Value Added Tax (VAT) and all enterprises operating a Pay As You Earn (PAYE) scheme. Careful monitoring of the Register by the ONS minimises double counting. The IDBR holds information on each enterprise's employment (and hence size), turnover and industry.
2. The main administrative source for the IDBR is HM Revenue & Customs (HMRC) for VAT information (passed to the ONS under the Value Added Tax Act 1994) and PAYE information (transferred under the Finance Act 1969). Other information is added to the register if required for ONS statistical purposes, for example information from Dun and Bradstreet on company structure and information from Companies House.
3. Employment was originally taken from the biennial Census of Employment, an ONS inquiry. From 1995-1998 the main source was the Annual Employment Survey, which was replaced by the Business Register Survey (BRS). The employment information currently on the IDBR is drawn mainly from the 2009 Business Register and Employment Survey (BRES). BRES is based on a survey of 80,000 enterprises and the IDBR is updated on a monthly basis as information from returns is captured. Because this is based on a sample of enterprises, estimates from previous surveys and from other ONS surveys have also been used. For the smallest units, either PAYE jobs or employment imputed from VAT turnover is used.
4. Turnover provided to the ONS for the majority of enterprises is based on VAT returns for a 12 month period ending in December 2008, or January / February 2009, according to the reporting pattern of the enterprise. For other records, in particular members of VAT group registrations, turnover may relate to an earlier period. For enterprises who have registered more recently, turnover represents the estimate made by enterprises at the time of registration. For the small number of PAYE only records for which there are no data, turnover is imputed from employment.
5. The IDBR is being continuously updated as new data from surveys are received and enterprises open and close. In addition a variety of checks on individual records improve the quality of the register on an ongoing basis. Thus there will be differences in results taken at different times from the register as new data are added and other data revised.
6. The ONS undertakes numerous and continuous checks on the quality of the data held on the IDBR. Regular VAT and PAYE updates are received from HMRC and these updates are checked with the new VAT and PAYE registrations being matched. Many of the PAYE-based enterprises will have no VAT registration; some units may be waiting to be matched to existing VAT records on the IDBR.
7. Small enterprises are not completely covered by the IDBR. Enterprises that are neither registered for VAT, nor operate a PAYE scheme are excluded from the IDBR. The threshold for compulsory VAT registration for 2009/2010 was an annual turnover of £68,000. Below that some enterprises will register voluntarily.

8. On the other hand, enterprises with a turnover above the threshold are not required to register if they trade exclusively in exempt goods. If an enterprise has no employees or only low paid (perhaps part-time) employees, then it is unlikely to operate a PAYE scheme.
9. The IDBR provides all the data on registered enterprises in this publication.

Annex B - ONS Labour Force Survey

1. The Labour Force Survey (LFS) is a quarterly sample survey of around 53,000 households living at private addresses in Great Britain and Northern Ireland. Its purpose is to provide information on the UK labour market that can then be used to develop, manage, evaluate and report on labour market policies. The questionnaire design, sample selection, and interviewing are carried out by the Social and Vital Statistics Division of the Office for National Statistics (ONS) on behalf of the Statistical Outputs Group of the ONS.
2. ONS publishes full UK LFS results. However, the fieldwork is carried out separately; by ONS for GB, and by the Central Survey Unit of the Department of Finance and Personnel in Northern Ireland on behalf of the Department of Trade and Investment (DETINI).
3. The survey seeks information on respondents' personal circumstances and their labour market status during a specific reference period, normally a period of one week or four weeks (depending on the topic) immediately prior to the interview.
4. The LFS is carried out under a European Union Directive and uses internationally agreed concepts and definitions. It is the source of the internationally comparable labour market data, such as the International Labour Organisation measure of unemployment, known as "ILO unemployed".
5. The LFS collects data on economic activity, which is self-reported.
6. Additional questions on who pays the respondent's income tax and national insurance, and their wage or salary are also included in the survey.
7. This source is used by BIS to estimate the number of people running enterprises, and therefore by excluding those already included on the IDBR (see Annex A), BIS is able to estimate how many people are running unregistered enterprises.

Annex C - HMRC Self-Assessment Tax Returns data

1. Self-assessment data is collected by HM Revenue & Customs through tax returns completed by self employed workers either as individuals or in partnership. Full detail of the different forms is available at:

<http://search2.hmrc.gov.uk/kb5/hmrc/forms/view.page?formid=3720&record=3GgSubZFPRc>

2. Data coming from the Self-Assessment record offers several advantages over the previously used Survey of Personal Incomes. For example, it is a larger record, being a near-census of the self-employed and also distinguishes between those registered and unregistered for VAT.

3. Despite the above advantages, there are features of the Self-Assessment data that make it less than ideal. For example, there are relatively high levels of missing data that cannot be coded to regions or to industrial sectors. Also, a conversion is needed to move from the HMRC classification of industry areas to SIC 2007. However, BIS considers that this is still a marked improvement over SPI data.

4. The data are used to produce, for every 2-digit SIC classification (and for every region at 1-digit level), an estimate of the ratio of sole proprietors to partners, enabling BIS to convert the number of unregistered self employed individuals into numbers of actual businesses.

Annex D - SME Statistics 1994 to 2009 – Discontinuities

1. This section provides useful information for those who wish to use the *SME statistics* series and draw comparisons over the time period covered (1994 to 2009).
2. Due to the significant methodological changes between *SME statistics 2009* and *BPE 2010*, direct comparisons should not be made between *SME statistics* and the *BPE* publication. BIS are currently looking at whether it is possible to produce estimates on the new *BPE* methodology for previous years. In the meantime, the only comparable estimate was published in the ONS Economic and Labour Market Review April 2011, and showed an estimated enterprise population of 4.4 million at the start of 2009.

Changes in SME statistics over time

3. In *SME Statistics 2002*, and earlier releases, Primary Care Trusts and National Health Service trusts were classified as public corporations / nationalised bodies, and therefore included with the figures for companies and the private sector.
4. In 2003, the ONS reclassified these trusts, resulting in 275 enterprises, with employment of 990,000 and turnover of £41 billion, being moved out of the figures for companies and private sector, and into the figures for Central Government. So for *SME Statistics* before 2003, private sector figures will appear larger and Government figures will appear smaller than in subsequent years. This will also affect the proportion of private sector employment and turnover in small, medium and large enterprises, since many of these were medium or large enterprises.
5. In April 2004, ONS brought the historical LFS micro data into line with the results of the 2001 population census, taking into account the February – March 2003 population estimates. The new population data was significantly higher than the previous population estimates, so previous estimates of self-employment used in the production on *SME statistics* were lower than they actually were in reality.
6. The *SME Statistics 2003, 2004, 2005 and 2006* are all consistent, but as mentioned in the *SME Statistics 2003* statistical press release, the number of unregistered enterprises in *SME Statistics 2002* should have been about 70,000 higher. Earlier estimates of unregistered enterprises should also have been higher, but by increasingly smaller amounts as you go back in time.
7. A National Statistics Quality Review (report number 34 “Strategic Review of Farming and Food Statistics”) has led to an improvement in the quality of agricultural statistics from January 2006, by aligning information on the IDBR and the DEFRA Farm Survey System. This has impacted on SIC codes 011 – 013 and resulted in approximately a 7 per cent increase in the number of units registered in the *SME Statistics 2006*, at the 2-digit level (for SIC 01). However at the 3-digit level where data is taken directly from the IDBR, this change will have more variable impact.
8. A change in the way schools could return their PAYE records meant that they could either continue to be recorded against their local authority’s PAYE report or, from *SME Statistics 2006* onwards, may appear as a completely separate enterprise. This has led to a small increase in the number of enterprises in Education between 2005 and 2006, but it will not have an impact on the Whole Economy data.

9. In August 2007, ONS published mid-year population estimates for 2006 and revised population estimates for 2002-2005. In October 2007 ONS published 2006-based national population projections. In June 2008 ONS brought the LFS micro data into line with the results of the 2006-based population estimates. The effect of the new population data impacted across the LFS and showed that earlier estimates of self-employment were lower than they should have been.
10. The impact of this was that the number of unregistered enterprises in *SME Statistics 2006* should have been about 50,000 higher. Earlier estimates of unregistered businesses should also have been higher, but by increasingly smaller amounts as you go back in time. We therefore advise caution when comparing the 2007 figures with those in earlier publications.
11. The spring 2006 Labour Force Survey was the final dataset made available by ONS for micro-data analysis on a seasonal quarter basis. Since then all data sets have been released on a calendar quarter basis only. *SME Statistics 2007* therefore uses quarter four (October to December) LFS data for the first time, instead of the usual autumn quarter (September to November) data. The effect of this change was likely to be small, but cannot be accurately estimated for the *SME Statistics 2007*. However this change is an improvement to the quality of the *SME Statistics* as it brings the end point of the period covered by the LFS data up to the reference point for the IDBR extract, which is the 31 December.
12. In *SME Statistics 2008* a further improvement was made by also including quarter one (January to March) data in the estimate of self-employment from the LFS. The main advantage of combining data from two quarters is that an average set of figures can be produced (thus boosting sample sizes and therefore the reliability of the estimates). Investigation of the LFS data by BIS showed that there were no substantial seasonal effects on the levels of self-employment by industrial sector.
13. In addition for *SME Statistics 2008*, BIS has been able to estimate more accurately the number of unregistered partnerships. Previously the average number of partners in each partnership had been assumed to be two. Using information sourced from the 2007/08 HMRC self-assessment data, BIS have calculated an average ratio of partners to partnerships of 2.46 (for businesses below the 2007/8 VAT registration threshold of £64,000 and with zero employment costs). This new ratio has been used in *SME Statistics 2008*. The impact of this is that the total number of enterprises in *SME Statistics 2008* is approximately 35,000 (0.7 per cent) lower than it would have been had BIS not made this improvement.
14. From September 2009 employment data on the IDBR was collected from information from the Business Register and Employment Survey (BRES). Previously this has been sourced from the Business Register Survey (BRS). However this has introduced a new discontinuity into the *SME Statistics* series as employment data on the IDBR is now updated on a monthly rather than an annual basis. This is because information captured by the 80,000 enterprises surveyed is updated as completed forms are returned from respondents. This means that turnover data on the IDBR tends to be less timely than both enterprise counts and employment data.
15. At the start of 2010 the LFS self-employment series from the Labour Force Survey was re-weighted to the 2009 mid-year population estimates (back to Quarter 3 2006). The 2009 estimates were based on the 2009 population weighting, but the impact of re-weighting the 2008 was a reduction of 4,600 enterprises in the UK private sector.

16. The response document to the Methodology Review (see page 12) proposed a number of formatting and methodological changes which have since been implemented and include the following:

Methodological changes in SME Statistics 2008:

- Combined self-employment data from the quarter four 2007 and the quarter one 2008 Labour Force Survey. This boosted the sample size of the number of self employed and increased the reliability of the figures used in the estimates.
- Improve the assumption applied about the average number of partners in a partnership for unregistered businesses, using HMRC self-assessment data.

Presentational changes in SME Statistics 2008:

- Split out the 1 employee and 2-4 employee bands from the 1-4 employees bands in Tables 1, 3, 5 and 6.
- More one digit SIC data presented in the tables for the regions and countries. For example in each region splitting out Manufacturing (Section D) from Mining and Quarrying; Electricity, Gas and Water Supply (Sections C and E), which were previously presented together.
- A commitment to produce regular annual breakdowns for each UK country and English region, starting with *SME Statistics 2008*. Data below UK level had previously only been produced every two years.

Methodological changes in SME Statistics 2009:

- There were no significant methodological changes.

Presentational changes in SME Statistics 2009:

- Splitting out working proprietors from employees in Table 1 UK private sector.
- Providing more detail on the regional tables by splitting the 1s from the 2-4s on the employee bands.

Annex E - Industrial classification – main changes from SIC 2003 to SIC 2007

1. This release uses the 2007 revision to the Standard Industrial Classification (UKSIC(2007)) in place of the 2003 revision (UKSIC(2003)). The UKSIC(2007) is a major revision of UKSIC(2003) with changes at all levels of the SIC. These revisions are motivated by the need to adapt the classifications to changes in the world economy. The revised classifications reflect the growing importance of service activities in the economy over the last fifteen years, mainly due to the developments in information and communication technologies (ICT).

2. Details of the UKSIC(2007) are available on the National Statistics Classification website and in the following publications:

- UK Standard Industrial Classification of Economic Activities 2007
- Indexes to the UK Standard Industrial Classification of Economic Activities 2007

3. Information relating to the implementation of UKSIC(2007) and the major differences between UKSIC(2003) and UKSIC(2007), is presented in the August 2008 edition of the ONS Economic & Labour Market Review.

4. Key differences between UKSIC(2003) and UKSIC(2007) are as follows:

- Section J - Information and communication: This is a major new sector and brings together publishing, motion picture and sound recording industries, broadcasting (radio and TV industries), telecommunications, internet activities, and other news services.
- Section L – Property: Development and selling of real estate, previously in Section K (Property and business services) under UKSIC(2003), now moves to Construction under UKSIC(2007).
- Section M – Professional, scientific and technical services: Previously incorporated under “business activities” as part of section K under UKSIC(2003), this is now a new section.
- Section N – Administrative and support services: formerly covered under section K under UKSIC(2003), section N is a new grouping which pulls in units from many parts of UKSIC(2003), for example: employment services, call centres, travel arrangements and reservation services, investigation and security services.

5. Other significant changes include:

- Recycling moves from Manufacture (UKSIC(2003)) to Section E – Water supply, sewerage, waste management and remediation (UKSIC(2007)). This is grouped with Section D – Electricity, gas, steam and air conditioning supply to form the Utilities grouping.

- Sewage, refuse disposal and sanitation moves from Section O – Other community services (UKSIC(2003)) to Section E (UKSIC(2007)).
- Repair and maintenance of personal and household goods (UKSIC(2003)) moves from the Retail section to the Services sector (UKSIC(2007)).
- Holding companies move from the Services sector (UKSIC(2003)) to the Finance sector (UKSIC(2007)).
- Veterinary services move from the Health sector (UKSIC(2003)) to the Professional, scientific and technical activities sector (UKSIC(2007)).

6. Notable changes to the broad industry group under UKSIC(2007) are:

- Hotels & catering have now been relabelled Accommodation & food services.
- The former group Post & telecommunications has been split, with Postal and Courier activities being included in Transport & storage, and the remaining Telecommunications being relabelled Information & communication which now includes film, television and radio.
- Property & business services have been split into 3 new groups: Property; Professional, scientific & technical; and Business administration & support services.

Annex F - Links to other sources of Enterprise and Employment data

Small and Medium Enterprise Statistics for the UK and Regions (1994-2009)

For more information on the *SME statistics* please contact the Department for Business Innovation and Skills (BIS), Enterprise Directorate, Enterprise and Economic Development (EEDA) Team.

- Contact BIS: 0114 207 5104
- E-mail: enterprise.statistics@bis.gsi.gov.uk
- Website: <http://stats.bis.gov.uk/ed/sme>

UK Business: Activity, Size and Location

This annual publication is compiled from the IDBR. The publication contains detailed information on VAT registered and/or PAYE registered enterprises in the UK including size, classification (to 4-digit SIC), business age and location.

- Contact ONS: 01633 459602
- Email: idbrdas@ons.gov.uk
- Website: <http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=933>

Business Demography

This annual publication provides the best official guide to the pattern of enterprise births and deaths. The figures include all businesses registered for either VAT and/or PAYE.

- Contact ONS: 01633 455221
- Email: idbrdas@ons.gov.uk
- Website: <http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=15186>

Workforce Jobs (ONS)

This series provides the best guide to employment at a national and regional level.

- Contact ONS workforce jobs helpline: 01633 456776
- Email: workforce.jobs@ons.gsi.gov.uk
- Website: <http://www.statistics.gov.uk/statbase/product.asp?vlnk=8286>

Annual Employment Statistics (BRES)

This annual publication provides the best guide to employment at a sub-regional level, and compliments figures available from Workforce Jobs at a national and regional level.

- Contact ONS: 01633 456720
- E-mail: annual.employment.figures@ons.gov.uk
- Website: <http://www.statistics.gov.uk/STATBASE/Product.asp?vlnk=15390>

Company Register Statistics

This provides a monthly record of all companies registered in the UK.

- Contact Companies House: 029 20380745
- Email: jkulczycki@companieshouse.gov.uk
- Website: <http://www.companieshouse.gov.uk/about/businessRegisterStat.shtml>

Labour Force Survey

A wide range of labour market data including self-employment data is available from the Labour Force Survey, which is run by the Office for National Statistics. This is published in various formats, including the Labour Market Statistics release below.

- Contact ONS: 0845 601 3034
- Email: labour.market@ons.gov.uk
- Website: <http://www.statistics.gov.uk/STATBASE/Product.asp?vlnk=1944>

Inter-Departmental Business Register (IDBR)

The IDBR is managed by the Office for National Statistics. More detail on the IDBR can be found at the website below.

- Contact IDBR Helpdesk: 01633 455200
- E-mail: idbr.helpdesk@ons.gov.uk
- Website: <http://www.statistics.gov.uk/idbr>

Census 2001

The Census 2001 asked questions about self-employment. Data are already available by gender, ethnic group, location, and main industry group.

- Contact ONS Census Customer Services: 01329 444972
- Email: census.customerservices@ons.gsi.gov.uk
- Website: <http://www.statistics.gov.uk/census2001>