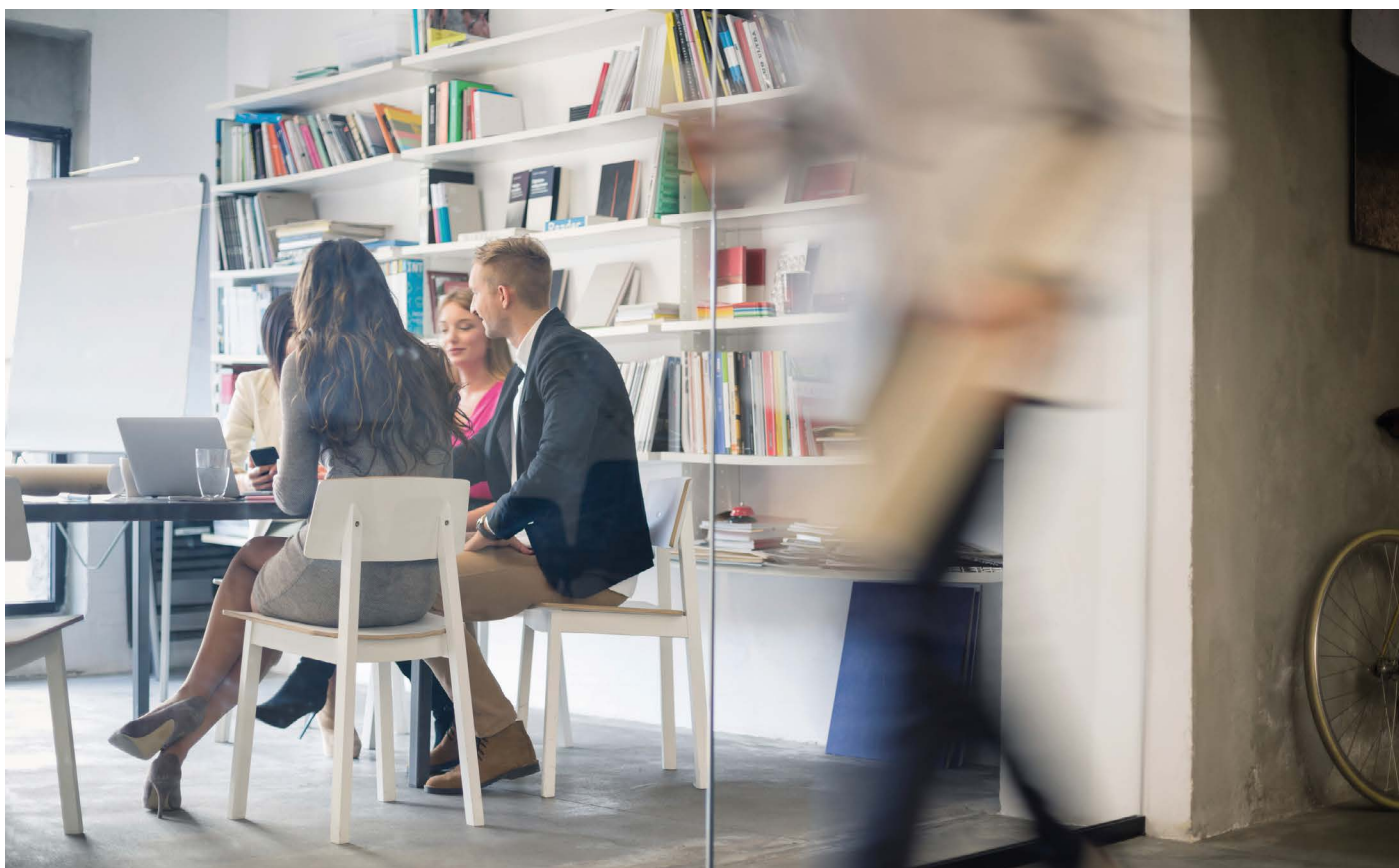




# The Economic Impact of Personal Service Companies

**Report**

**August 2016**



## Oxford Economics

This report is authored by Oxford Economics, a global economic consultancy which was founded in 1981 to provide economic forecasting and modelling to UK companies and financial institutions expanding abroad. Since then, the company has become one of the world's foremost independent global advisory firms, providing reports, forecasts and analytical tools on 200 countries, 100 industrial sectors and over 3,000 cities.

Oxford Economics is a key adviser to corporate, financial and government decision-makers and thought leaders. Their worldwide client base now comprises over 1000 international organisations, including leading multinational companies and financial institutions; key government bodies and trade associations; and top universities, consultancies, and think tanks.

## IPSE

This report was commissioned by IPSE, the Association of Independent Professionals and the Self Employed. IPSE is the largest association of independent professionals in the EU, representing over 67,000 freelancers, contractors and consultants from every sector of the economy. It's a not-for-profit organisation owned and run by its members.

We believe that flexibility in the labour market is crucial to Britain's economic success, and dedicate our work to improving the landscape for the freelance way of working through our active and influential voice in government and industry.

IPSE aims to be the principal and definitive source of knowledge about freelancing and self-employment in the UK. We work with leading academic institutions and research agencies to provide empirical evidence about evolving market trends. This research supports our work with government and industry and delivers key market intelligence to help our members with business planning.

# Table of Contents

<b>Executive Summary</b> .....	<b>4</b>
<b>1. Introduction</b> .....	<b>6</b>
<b>2. The Prevalence of PSCs</b> .....	<b>7</b>
<b>3. Economic Impact</b> .....	<b>8</b>
3.1 The Economic Impact Framework.....	8
3.2 Total Earnings.....	8
3.3 Direct Contribution.....	9
3.4 Indirect and Induced Contributions.....	10
3.5 Impact on Different Industries.....	10
3.6 Productivity of PSCs.....	12
<b>4. Wider Economic Benefits</b> .....	<b>13</b>
<b>5. Conclusion</b> .....	<b>13</b>
<b>6. Appendix: Methodology</b> .....	<b>14</b>



## Executive Summary

In 1999 the government introduced IR35 legislation in an attempt to clarify the position of intermediary companies in regulatory and tax terms. Since that time, Personal Service Companies (PSCs) have become an increasingly popular way in which professional freelancers have structured their affairs in order to provide their services to other companies, partly driven by a pressure from clients for freelancers to operate in this way. Under this model, individuals operate as contract workers through the intermediary of an incorporated business.

Over the past 18 months, these kinds of organisations have been subject to intense scrutiny and to a series of regulatory changes either planned or already implemented. These changes are intended to clamp down on instances where an employer/employee relationship is instead structured as a client/contractor one, but also having the effect of threatening to make this form of work less viable for legitimate professional freelancers. Despite such scrutiny, relatively little is understood about PSCs and their role in the economy. In this context, this report offers a timely attempt to shed light on the economic activity of this group of companies.

**307,000**

**PSCs in the UK in 2015**

This represents annual growth of 5.5 percent since 2012/13

### Number of PSCs in the UK

**In 2015, building on HMRC's previous analysis, we estimate that 307,000 PSCs operated across the UK economy.** This suggests that the number of PSCs has grown at an average annual rate of 5.5 percent, comfortably outstripping the rate of increase of the overall business population during this period, which was only 3.8 percent.

### Direct Contribution

**PSCs had a combined turnover of £24.2 billion during 2015 and from these earnings made a direct contribution to UK GDP of £21.3 billion (1.1 percent).** Survey evidence shows that the average PSC had an income of £78,800 in 2015 and collectively made an economic contribution to UK GDP that was larger than the whole mining and quarrying industry, or all of the UK civil engineering sector.

---

# £37.9bn

**Total contribution to GDP**

---

Of this, £21.3 billion is contributed directly by PSCs' activities

---

# 602,000

**Total employment supported by PSCs' activities**

---

Nearly half of this, 294,000, comes through the supply chain and consumer spending they support

---

# £4.7bn

**Estimated value attributable to the benefits that PSCs provide clients in terms of increased flexibility & reduced risk**

---

This represents 20 percent of their total earnings

## Indirect and Induced Contributions

**Beyond this direct contribution, a considerable amount of further economic activity was sustained by the everyday purchases of goods and services by PSCs in the operation of these businesses.** PSCs sustain additional activity via their procurement expenditure on items such as travel, accommodation, accountancy services and IT equipment. Known as the indirect impact, we estimate that such spending contributed an additional £2.1 billion to UK GDP in 2015.

**In addition to earnings and supply chain spending, PSCs support a large amount of consumer spending.** The income earned by the individuals operating PSCs and the wages of employees supported along the supply chain sustains a further round of economic activity, as wages are spent throughout the consumer economy, for example in retail and leisure establishments —this is known as the induced effect. This spending contributed a further £14.5 billion to GDP in 2015. Taking the direct, supply chain and consumer spending contributions together, the total economic footprint of PSCs amounted to a substantial £37.9 billion in 2015.

**As well as generating economic output, the activities of these kinds of organisations supported 602,000 jobs in the UK economy in 2015.** Alongside the 307,000 freelancers working through PSCs, a further 43,000 jobs were sustained in the supply chains of those organisations and an additional 252,000 were supported by the expenditure of associated wage income in the consumer economy.

## Productivity

**PSCs are very productive relative to other parts of the economy.** In 2015 each PSC made an average direct contribution to GDP of £69,400, 30 percent higher than the UK average contribution per worker.

## Wider Economic Benefits

**The benefits that PSCs bring to the UK economy extend beyond this economic footprint however. Clients engaging freelancers through PSCs are afforded a wide set of benefits, chiefly in terms of enhanced flexibility.** The use of PSCs allows clients to adjust the number of workers at their disposal as required by the demand for their goods and services. This offers valuable freedom to organisations and supports the UK economy by ensuring that the UK's finite talent pool is being utilised effectively.

**Where clients benefit from flexibility, the individuals operating PSCs bear the risks of irregular working patterns and are compensated through higher earnings.** For example, survey evidence from IPSE shows that the average freelancer works for approximately 71 percent of their time, with many unable to secure the ideal number of hours, and sometimes being out of work for weeks or months at a time. In effect, freelancers absorb this risk for clients. The value that this generates to clients is reflected in the higher earnings that contract workers enjoy compared to salaried employees. Our analysis estimates that this premium is equivalent to around 20 percent of PSCs' earnings. Across the whole sector this implies that, in 2015, the benefits that PSCs provide to their clients in terms of increased flexibility and reduced risk amounted to some £4.7 billion.

**The research in this report demonstrates both that PSCs have a considerable economic footprint and provide a broader set of benefits to their clients and the wider economy.** The relative merits of regulatory reforms that might affect the viability of this operational model should be considered in the light of this value.



# 1. Introduction

Flexibility and adaptability are much lauded features of the UK labour market, which is able to respond to economic pressures and adjusting demand more easily than many other European economies. This is reflected in companies demanding flexibility on the part of workers, and is evidenced in the rapid growth in the number of people offering their services as freelancers. For example, a report by Kingston University<sup>1</sup> and subsequently updated data demonstrates that the number of freelancers grew at an annual rate of 3.7 percent between 2005 and 2015, nearly three times the 1.3 percent growth rate in self-employment.

However, with a changing working landscape, this shift has also been accompanied by an increasing government focus on the regulatory and tax environment within which these contractors operate. In particular there has been an emphasis on the group of freelancers working through companies known as Personal Service Companies (PSCs). These are individuals who operate as contract workers through an intermediary company, usually set up as an individual or within a partnership.

In recent years the regulatory landscape confronting PSCs has evolved rapidly with the government having implemented or announced that it is considering a number of reforms. These include:

- Restriction of tax relief made for travel and subsistence costs;<sup>2</sup>
- A consultation into the effectiveness of the existing IR35 legislation, creating uncertainty over the government's policy direction, with the possibility for a range of different policies to be tabled;<sup>3</sup> and

- A government proposal to increase the responsibilities for public sector bodies to monitor the tax liabilities of contract workers that they use.<sup>4</sup>

All of these changes risk increasing the financial costs faced by PSCs as well as introducing a significant degree of regulatory complexity for PSCs to follow. Such disruptions have the potential to affect the viability of operating as a PSC for many individuals, threatening the contribution that they make to the UK economy.

Despite the recent degree of policy scrutiny, relatively little is known about this form of freelancer, what distinguishes them or their contribution to the UK economy. This report seeks to plug this gap in the literature by providing a comprehensive assessment of the economic contribution made by PSCs during 2015. This analysis is then extended to assess the distinct benefits that this structure offers to both the organisations who hire them and the economy as a whole.

<sup>1</sup> J Kitching and D Smallbone, "Exploring the UK Freelance Workforce, 2011" (Report, 2012).

<sup>2</sup> HM Treasury, "Spending Review and Autumn Statement 2015" (Policy document, 2015).

<sup>3</sup> HM Revenue & Customs, "Intermediaries Legislation (IR35): discussion document" (Technical note, HM Revenue & Customs, 2015).

<sup>4</sup> HM Revenue & Customs, "Off-payroll working in the public sector: reforming the intermediaries legislation" (Consultation Document, 2016).

## 2. The Prevalence of PSCs

Despite their significant role in the UK economy and the increasing policy focus on PSCs, the evidence on them and their prevalence among UK freelancers is very limited. Whilst no legal definition of

PSCs exists,<sup>5</sup> one definition which this report focusses on was made by the House of Lords Select Committee, which makes an attempt to define PSCs, stating:

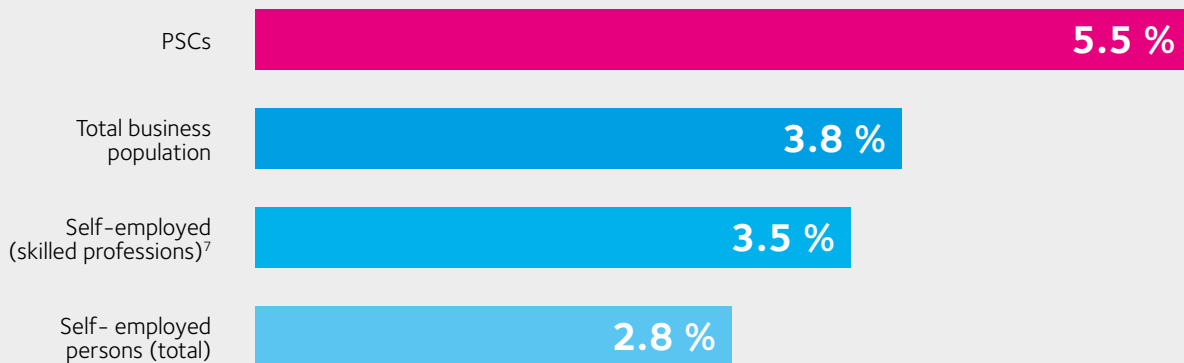
*“It is understood generally to mean a limited company, the sole or main shareholder of which is also its director, who, instead of working directly for clients, or taking up employment with other businesses, operates through his company.”<sup>6</sup>*

The most recent official analysis of PSCs estimated that there were 265,000 active in the 2012/13 financial year. Building on this research, we estimate that there were 307,000 PSCs active in 2015.

Our results point to robust growth in the number of PSCs over the past two years, a reflection of strong demand for the flexible working patterns offered by these organisations. Between the 2012/13

financial year and the 2015 calendar year, the number of PSCs increased by 16 percent, representing annual growth rate of 5.5 percent. As Fig.1 demonstrates, this is approximately double the growth in self-employment and is comfortably higher than growth in both skilled self-employment and the UK’s overall business population.

**Fig. 1. Average annual growth rates of PSCs and comparisons**



Source: Oxford Economics, ONS

### Estimating the Number of PSCs

As well as there being no precise definition of PSCs available, this is not a group that is identified in national statistics data. Instead, the only source of an estimate for the number of active PSCs comes from a 2012/13 report by the HMRC. This report found that there were a total of 265,000 active PSCs in the UK.<sup>8</sup>

As there was no update to the 2012/13 estimate made by HMRC, our analysis instead extrapolated the existing figure based on available information that is indicative of the growth over that period of time.

Business Population Estimates produced by the Department for Business, Innovation and Skills were used to identify the growth

in zero-employee incorporated firms since 2012/13, alongside quarterly data on self-employment to make the adjustment from financial-year to calendar-year.

The growth estimates that this generated were compared to analysis of the freelance sector in the 2012 and 2015 Kingston University reports, revealing a nearly identical growth (16.1 percent compared to 16.0 percent).<sup>9,10</sup> The estimate generated from the analysis of zero-employee was therefore considered robust, and preferred given that it focussed on a narrower number of businesses, of which PSCs are a component.

<sup>5</sup> Despite the lack of a legal definition, PSCs should be viewed as a subset of the wider pool of skilled professional freelancers, which is in turn a subset of the self-employed population.

<sup>6</sup> House of Lords Select Committee on Personal Service Companies, “Personal Service Companies”, in UK Parliament <<http://www.publications.parliament.uk/pa/ld201314/ldselect/ldpersonal/160/16004.htm#a1>> [accessed 20 May 2016]

<sup>7</sup> Skilled professions are defined as those in occupations covered by Standard Occupation Classification (SOC) codes 1 to 3.

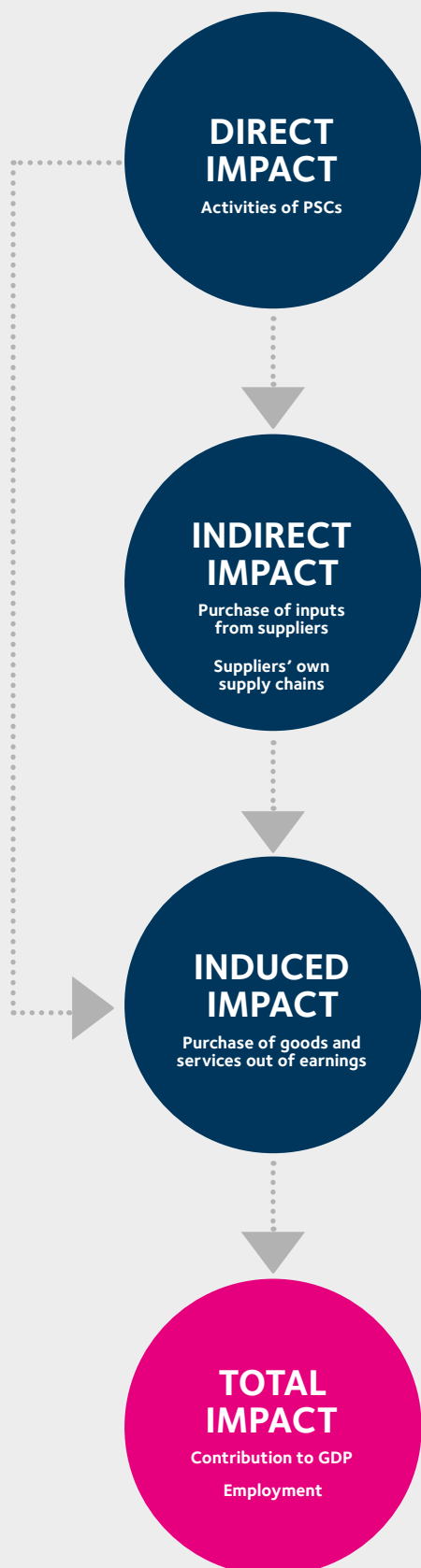
<sup>8</sup> HM Revenue & Customs, “Intermediaries Legislation (IR35): discussion document” (Technical note, HM Revenue & Customs, 2015). As part of the study, attempts were made to source a more recent figure from HMRC. However, details about any more recent research and the methodology used in the original estimate were not made available.

<sup>9</sup> J Kitching and D Smallbone, “Exploring the UK Freelance Workforce, 2011” (Report, 2012).

<sup>10</sup> J Kitching, “Exploring the UK Freelance Workforce in 2015” (Report, 2016).

# 3. Economic Impact

**Fig. 2. The economic impact framework**



## 3.1 The Economic Impact Framework

In evaluating the contribution that PSCs make we adopted a conventional economic impact framework. This approach establishes the economic contribution that these organisations make by looking at the range of impacts that their activities have on different individuals and organisations. This presents a more comprehensive view than the number of people operating in PSCs or their turnover can demonstrate in isolation.

The modelling approach quantifies economic impacts through three channels:

- **Direct effects** – This is the economic contribution that PSCs make through their own activities, including their earnings or profits, and their tax contributions;
- **Indirect effects** – PSCs purchase goods and services from other businesses as part of their day-to-day operations. Such procurement supports a further stream of economic activity; and
- **Induced effect** – As freelancers working within PSCs and the employees of suppliers consume out of their earnings.

This process is illustrated in Fig. 2. We measure these effects in terms of the contribution of PSCs to GDP and employment.

## 3.2 Total Earnings

The primary contribution that PSCs make to GDP comes through the value they generate for their clients, as reflected in their total remuneration. Our analysis of survey data provided by IPSE suggests that PSCs had an average annual turnover of £78,800 in 2015. Scaling up across the estimated 307,000 PSCs, this equates to a total earnings of £24.2 billion.

### Benchmarking our results

Relative to alternative analysis of freelancers, PSCs' average incomes are significantly higher.

The 2015 Kingston University report utilised data on the turnover of businesses with zero employees from the UK Business Population Estimates. Using this they estimated that the 1.8 million freelancers had a collective turnover of at least £109 billion. This equates to £60,600 per freelancer, meaning that average PSC incomes were 30 percent higher.<sup>11</sup>

Analysis for IPSE by Oxford Economics in 2009 considered the output of the whole freelancing sector by analysing earnings in different income groups using data from the Annual Survey of Hours and Earnings in addition to a premium that they earned based on data on the IT industry.<sup>12</sup> This valued the output of the sector at £82.2 billion across the 1.59 million freelancers active at that time, or £51,600 per individual. After inflating this to 2015 prices and adjusting for the increased productivity over this time the sales generated by freelancers in 2009, PSCs' incomes were still nearly a third higher than this.<sup>13</sup>

<sup>11</sup> J Kitching, "Exploring the UK Freelance Workforce in 2015" (Report, 2016).

<sup>12</sup> Oxford Economics, "The economic costs of IR35" (Report, 2009).

<sup>13</sup> Analysis of ONS data on the GDP deflator shows that inflation has been around 12.8% with productivity having grown by 2.5%. Inflating the 2008 figure by this much leaves PSCs operating with turnover around 32% higher.



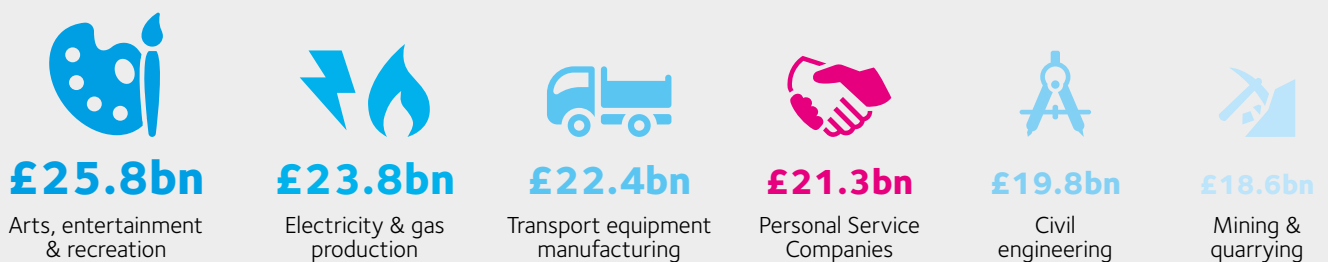


### 3.3 Direct Contribution

The direct contribution that PSCs made to UK GDP in 2015 is estimated to have been worth £21.3 billion. The contribution that PSCs made to GDP directly in 2015 was significant relative to certain other sectors. As Fig. 3 demonstrates, substantial industries such as civil engineering and the manufacture of transport equipment are of a comparable size.

Freelancers working through PSCs provide their clients with their own labour, without any additional employees of their own. The direct employment supported by PSCs' activities was therefore equal to the number that were active, resulting in a direct employment of 307,000 in 2015.

**Fig. 3. Direct contribution to GDP of PSCs and comparator sectors**



GVA, £ billions

Source: Oxford Economics, ONS

### 3.4 Indirect and Induced Contribution

The indirect contribution that PSCs make to GDP totalled £2.1 billion. This reflects the relatively moderate reliance that PSCs have on purchases of goods and services from other businesses.

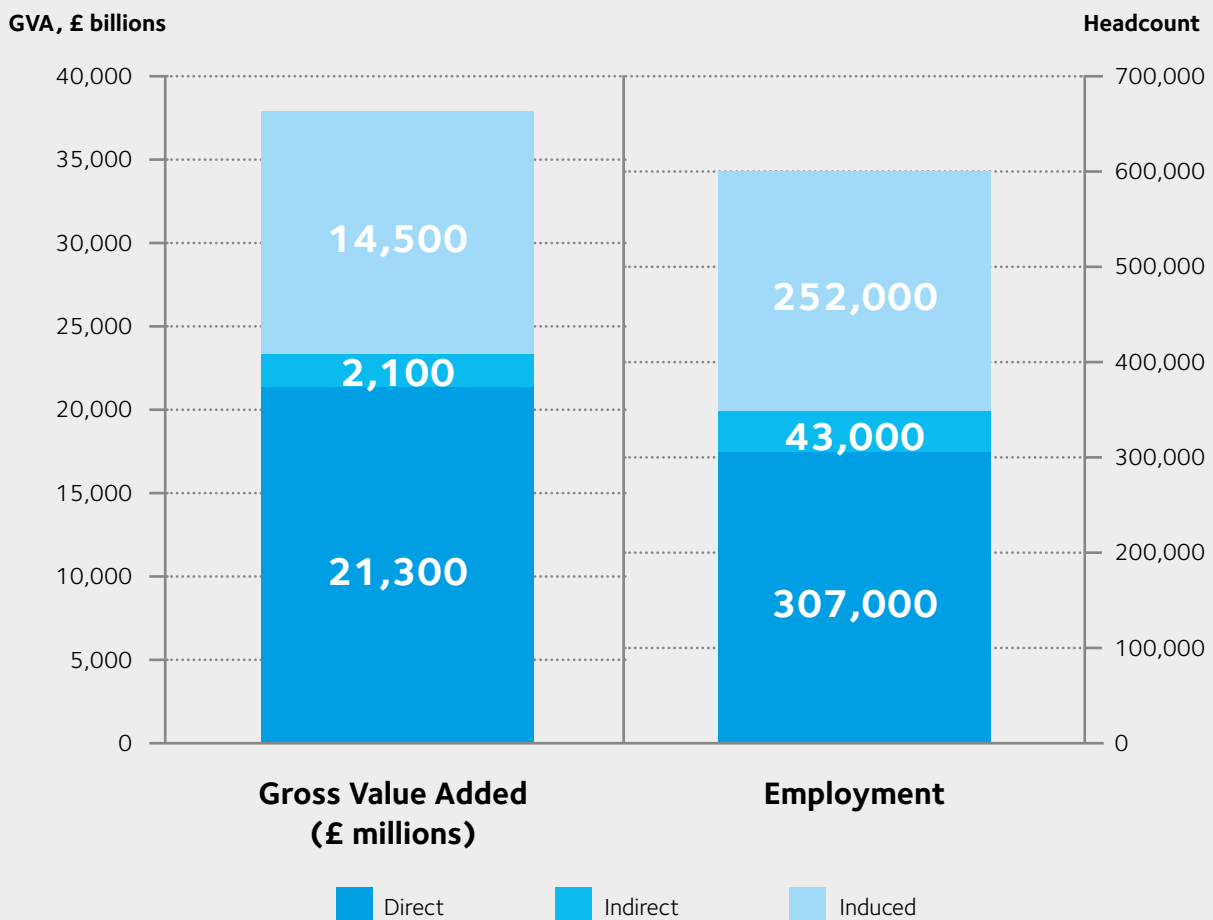
In contrast to this, a substantial £14.5 billion of GDP is supported through the induced effect as PSCs make purchases in the consumer economy from their significant income. The total contribution that PSCs made to UK GDP therefore stood at £37.9 billion in 2015.

The activity that PSCs generate within their supply chains means that PSCs supported a further 43,000 jobs indirectly. The large induced

impact resulted in the employment of a further 252,000 individuals. The total employment supported by PSCs in 2015 was therefore 602,000.

As Fig. 4 illustrates, the induced impact of consumer spending is much larger than the indirect supply chain effect. This highlights the significant impact coming from PSCs' spending out of their earnings. Overall, the activity of each PSC, in 2015, sustained approximately one extra job through the combined indirect and induced effects elsewhere in the economy.

**Fig.4. Breakdown of contributions of PSCS to GDP and employment**



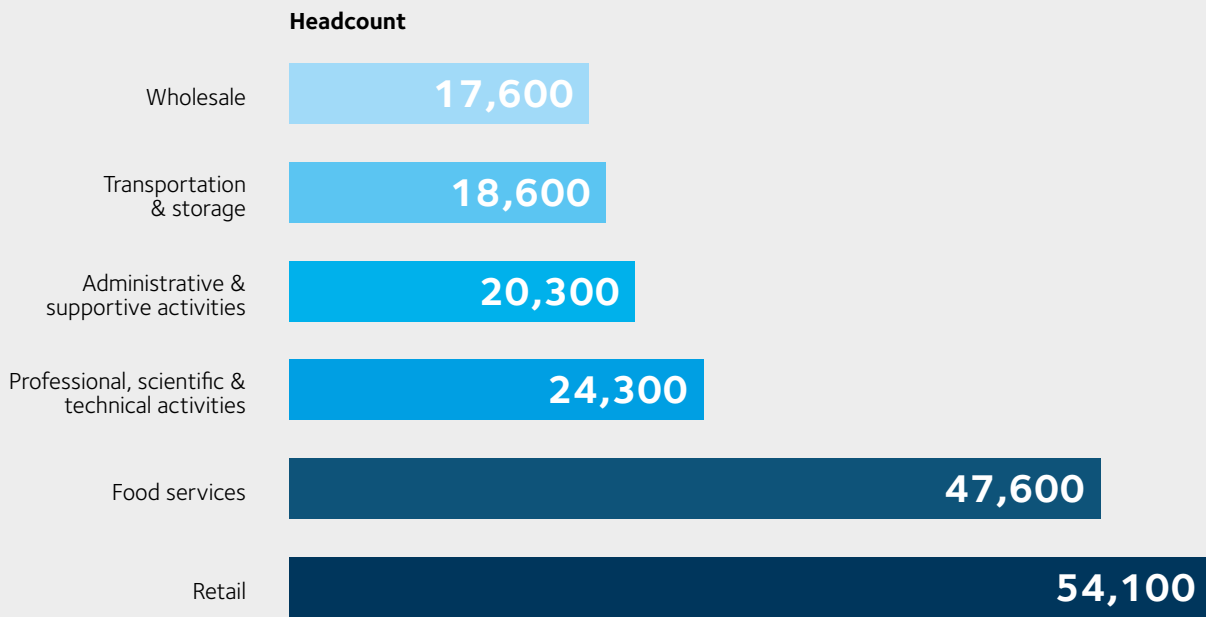
Source : Oxford Economics

### 3.5 Impact on Different Industries

One of the most noticeable characteristics of PSCs identified in this analysis is the large impact that they have on the economy through their consumer spending. Reflected in a high induced effect, this means that, whilst their reliance on their supply chain might be more limited than for many businesses, a large degree of economic output is generated across the economy as individuals consume goods and services out of their income.

As Fig. 5 demonstrates, the implication of this imbalance is that the largest beneficiaries from the combined indirect and induced effects are consumer-facing industries such as retail and catering. Here, an estimated 54,100 and 47,600 jobs were supported respectively.

**Fig. 5. Total indirect and induced employment supported by PSCs**

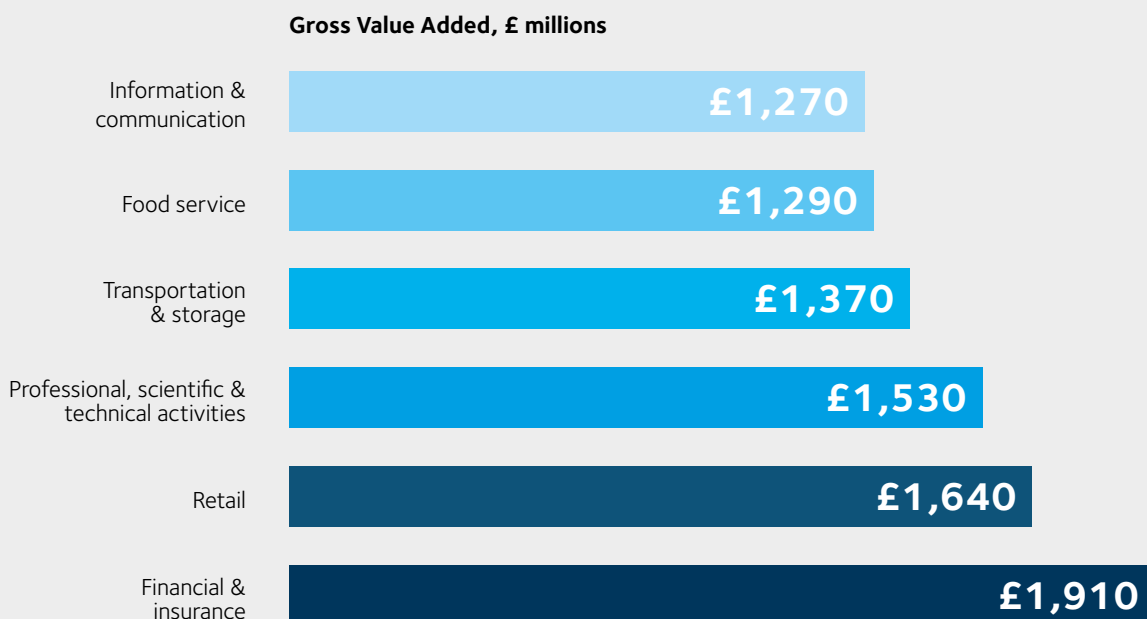


Source: Oxford Economics

The contribution to GDP that PSCs support was highest for the finance and insurance industry, worth £1.9 billion, as shown in Fig. 6. The majority of this was again from the induced effect, which was also key in driving £1.6 billion of activity in the retail sector and £1.5 billion in professional, scientific and technical services.

The purchases that support this marked induced effect will also generate valuable tax revenues, primarily in the form of VAT attributable to freelancers' own purchases.

**Fig. 6. Total indirect and induced GDP supported by PSCs**



Source: Oxford Economics

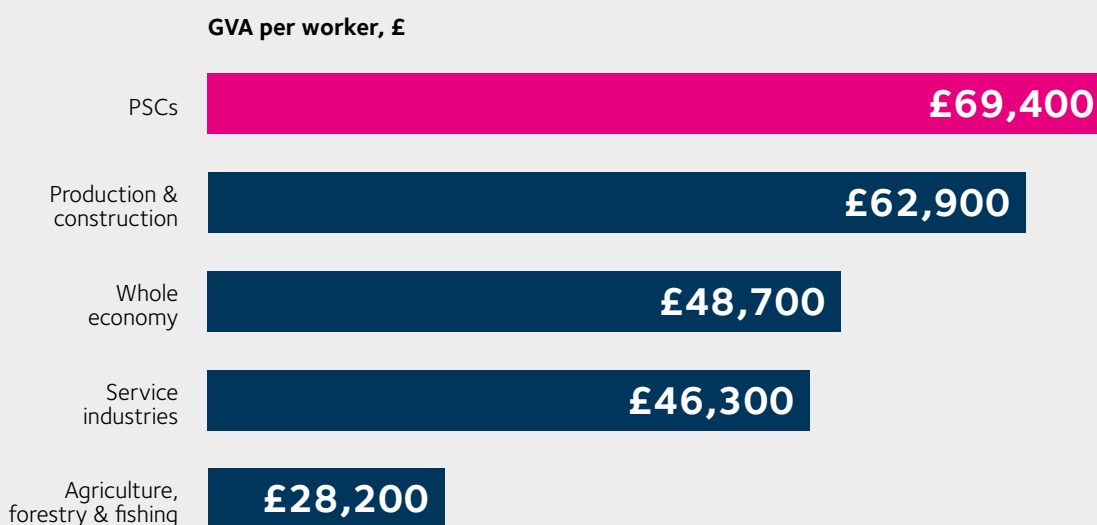


### 3.6 Productivity of PSCs

PSCs' direct contribution to GDP averaged £69,400 per worker in 2015. As Fig. 7 demonstrates, this compared to a total of £48,700 per worker across the economy as a whole. As such, the productivity of PSCs was 30 percent higher than the economy-wide average.

It was also larger than other industry groupings, with only the combined production and construction industries having productivity within 10 percent of that of PSCs.

**Fig. 7. Productivity of PSCs in context**



Source: Oxford Economics, ONS

## 4. Wider Economic Benefits

The robust growth in the number of PSCs outlined earlier in this report demonstrates the strong demand that clients have for individuals working in this capacity. This is supported by direct evidence on the preference some clients have for PSCs, identified by the House of Lords Select Committee on PSCs. This references a number of major recruiters of freelancers who either favoured or insisted on freelancers offering the limited liability that PSCs provide.<sup>14</sup>

Firms opt to engage freelance workers for a number of reasons. One of the key benefits that freelancers can offer to clients is greater flexibility. This boosts the ease and speed with which firms can adjust the size of their workforce, enabling them to more precisely match their output to demand.

Analysis of international survey evidence in one study shows a broad consensus around the benefits that employers gain from flexible working patterns. It reported that 83 percent of businesses of various forms reported productivity benefits from flexible working patterns.<sup>15</sup> This study also explored how technological advances are making it more viable for firms to engage freelance labour.

In certain sectors, the ability to engage freelance contractors is absolutely vital. In the UK construction sector, for example, managers report that they “found it hard to conceive of how the industry would operate without the freelance labour market”.<sup>16</sup> The evidence also suggests that productivity gains are made across a range of industries as a result of freelance labour through increased specialisation and reduced costs when demand falls as fewer permanent staff are required.<sup>17</sup> By allowing firms to scale their workforce up or down quickly, freelancers support the opportunities for entrepreneurship among their clients.

## 5. Conclusion

PSCs play a distinct role in providing labour for organisations across the UK economy. As the demand for a skilled and flexible workforce has increased, the presence of PSCs has risen substantially. Moreover, it seems likely that such trends will continue in the near future.

The results of our economic impact modelling illustrate that this group of firms already sustain a considerable level of economic activity across the economy. In total, PSCs support nearly £40 billion in GDP and over 600,000 jobs.

Moreover, PSCs offer more to their clients than just a source of skilled labour. The extra benefits that clients accrue from this form of work

However, by doing this, freelancers incur the risk of downtime themselves. Survey evidence on freelance work patterns shows that through 2015 freelancers were in work an average of 71 percent of the time.<sup>18</sup> This amount of time that freelancers can expect to be out of work on average is significantly higher than the average time out of work endured by salaried workers.<sup>19</sup> This demonstrates the greater degree of risk that is taken by individuals working through a PSC. Through doing so, they help to alleviate some of the costs that clients incur from periods of low demand.

Clients therefore operate significantly more efficiently as a result of employing PSCs. Quantifying the benefit of this enhanced flexibility is challenging but an indicative value can be gauged by the premium that firms are prepared to pay PSCs over salaried workers.

The more temporary and often specialist work done by freelancers working through PSCs makes such a comparison problematic. Indeed there is no data source which directly compares the earnings of the two in a strictly comparable manner. However, some evidence does exist based on a recent survey of earning patterns in the IT sector.

Analysis of this data revealed that the hourly earnings of contract workers are 20 percent higher than like-for-like employees. Assuming that this relationship is representative of the sector would suggest that, of the £24.2 billion of gross earnings raised by PSCs in 2015, £4.7 billion is value attributable to the specific benefits provided by their freelance status.

are reflected in the premium that they are willing to pay when employing them. They also take on board significant risk that is not common among salaried professions, absorbing some of the risk of downtime that their clients face.

This report has explored a range of reasons that PSCs should be regarded as a valuable component of the UK economy. As the way that the government regulates and taxes PSCs and their clients is brought into focus, recognising this value is an important part of the process of reform.

<sup>14</sup> House of Lords Select Committee on Personal Service Companies, “First Report” (Report, 2014), Ch. 2.

<sup>15</sup> Vodafone, “Vodafone global survey reveals rapid adoption of flexible working” <<http://www.vodafone.com/content/index/media/vodafone-group-releases/2016/flexible-working-survey.html#>> [accessed 03 May 2016]

<sup>16</sup> A. Burke, “The Entrepreneurship Enabling Role of Freelancers: Theory with Evidence from the Construction Industry”, *International Review of Entrepreneurship* 9(3), Report (2011).

<sup>17</sup> A. Burke, “The Role of Freelancers in the 21st Century British Economy” (Report, 2012).

<sup>18</sup> Estimates made using findings in the IPSE Freelancer Confidence Index.

<sup>19</sup> The most comparable statistics for the wider economy is underemployment, which covers all involuntary time spent unemployed or working fewer hours than desired. This averaged 6.5 percent through 2015 according to the Bell and Blanchflower underemployment index developed for the Work Foundation. Time out of work is therefore quite significantly higher given the 29 percent of PSCs with a similar type of underemployment.

# 6. Appendix: Methodology

Producing this report relied on a range of analytical techniques and data sources. For the elements of this methodology not already outlined in this report, this section details the processes used and rationale behind them.

## PSC Earnings

In order to estimate the annual earnings of PSCs our analysis utilised evidence from the surveys of freelancers' activities in the Freelancer Confidence Index (FCI). This gave a breakdown of the day rates and typical number of days worked by IPSE members and other freelancers per quarter. This allowed estimates of PSC earnings to be made, with these scaled up to quantify the whole sector's output.

## Economic Impact

Their expenses were assessed using the latest edition of the FCI, with their direct contribution to GDP measured as their earnings, minus these purchases. Retained post-tax earnings were then estimated based on the nature of the tax structure typical of this type of company, utilising the income tax allowances, corporation tax rates and dividend tax structures applicable given the average PSCs' income levels.

Analysing the economic activity in firms' supply chains used the 2010 UK Input-Output (IO) table, from the ONS. This indirect contribution was evaluated based on the purchases of goods and services that they made, with the IO table used to map the full supply chain and estimate the contribution to GDP based on the relationship between Gross Output and Gross Value Added (GVA) in each sector. Employment was estimated based on the productivity implied by ONS data on the employment and GVA of each sector.

The induced effect was analysed based on the consumption of PSCs implied by their post-tax earnings, having accounted for the level of savings that is common across private individuals. The IO table was then again utilised, with the same process outlined above.

Together, this allowed us to generate estimates for the economic contribution for the contributions to GDP that PSCs made through the direct, indirect and induced effects.

## Analysing Contract Wage Premium

Alongside the analysis of the impact that PSCs' activities have on firms that they make purchases from and the supply chains that these purchases support, we also consider the unique value that employers gain from the labour they supply.

Data on the different wages offered to contract and salaried workers is very limited. As a result this analysis focussed on data for professionals in IT professions, for which we were able to access robust statistics for 2011 from the Contractor UK Market Report.

The equivalent hourly earnings available for permanent staff were taken from the Annual Survey of Hours and Earnings from the ONS. People working in the 'computer programming, consultancy and related activities' industry and people in 'information technology and telecommunications professions' were used. The total costs that businesses would face were estimates based on Eurostat data on labour costs levels for the UK Information and Communication industry. Having scaled up the costs to account for this, we estimate that there was an average additional cost of employing a contract worker of 19.6 percent.

More up-to-date data for 2015 was available through Contract Eye. However, this considered only advertised roles, rather than the wages of all individuals in work, in addition to focussing on a very narrow part of the sector. We considered this to be an exaggeration of the likely average wage. As a result, this indicated a wage level that was higher than the 2011 data to an unrealistic degree.

