VALUING THE USER BENEFITS OF COMPANIES HOUSE DATA

Report 4: Providers of Public Goods

September 2019

INDUSTRIAL STRATEGY

OGL

Contents

1 Introduction

This report has been prepared by ICF Consulting Services Limited (ICF) in collaboration with Economics for the Environment Consultancy (eftec). It is part of a series of reports that presents the findings of research commissioned by the Department for Business, Energy and Industrial Strategy (BEIS) to value the user benefits of Companies House (CH) data.

1.1 Outline

This report (Report 4) assesses the value of CH data to 'providers of public goods'. This sub-group of users includes the public sector and other organisations that use CH data to deliver public goods and public benefits, such as government departments, transparency groups and law enforcement agencies. It also includes some private sector businesses that deliver public benefits, such as banks that investigate businesses suspected of fraud, money laundering, etc.

The other reports in the series are described below:

- Report 1 sets out the methodological framework for the study.

- Report 2 presents willingness to pay (WTP) estimates for all users of CH data and provides a policy example of how this analysis can be used.

- Report 3 presents findings for another subset of users: private sector businesses that use CH data as an input to their own commercial products.

- A separate policy summary summarises the results of the research and draws overall conclusions about the value of CH data to users.

1.2 Total population of providers of public goods

Report 2 explains that the profile of the overall population of users of CH data is not known due to incomplete information. This also means that the size of the population of the 'providers of public goods' users is also unknown.

Some evidence is available from the supplemental user profile 'pop-up' survey that was undertaken as part of this study. This survey identified a total of 310 public sector users of CH data[1], representing 6% of the total sample of users. While it was not possible to identify other (private sector) providers of public goods from the survey findings, these

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[1] Including 109 Central Government organisations and 209 local authorities (after removing duplicates)

findings suggest that there are at least 310 users of CH data that provide public goods and public benefits.

1.3   Methodology

The methodological framework for this study is described in more detail in a separate, supplementary report (Report 1). The research undertaken with providers of public goods involved fieldwork with two key sub-groups:

- Public sector users who responded to the quantitative survey of all direct users of CH search and data services. The survey explored users' WTP for CH data and the overall results are presented in Report 2. It received a total of 608 responses, including 15 responses from Central Government organisations and Local Authorities. Summary findings are presented in Section 2 for these 15 public sector users.

- Qualitative telephone interviews undertaken with a separate sample of nine providers of public goods. The sample was selected purposively from the providers of public goods who are also regular users of CH bulk data products, in order to identify and provide coverage of the most frequent and intensive users of CH data within this sub-group. The interviews covered their use of CH data and other data sources, the availability of substitute data sources and the benefits that arise from their use of CH data and the findings are presented in Section 3.

1.4   Structure of this report

The remainder of this report is structured as follows:

- Section 2 presents findings from the WTP survey for providers of public goods and draws comparisons with the wider sample of direct users;

- Section 3 summarises the findings from the qualitative research with the key providers of public goods who use bulk data products; and

- Section 4 presents the conclusions of the research with providers of public goods.

- The report also provides the interview topic guide used for providers of public goods and public benefits in Annex 1.

2 Results of the willingness to pay survey: public sector organisations

This section summarises the findings of the willingness to pay (WTP) survey for public sector organisations and draws comparisons with the results for all users of CH data.

2.1 The WTP survey

As described above, Report 2 provides details of the WTP survey that was undertaken as part of this study. It discusses: the design and development of the survey (including the choice task and time savings calculator); the sampling strategy and user profiles; and an analysis of the survey findings across all user types.

The WTP survey received a total of 608 responses across the pilot and main surveys[2], including 15 responses from public sector organisations. Unfortunately this sub-sample is too small to provide robust estimates of public sector organisation's WTP for CH data. However, the survey findings do provide useful information relating to the characteristics of public sector users, their use of CH data and the resulting benefits for these organisations; and their use of alternative sources of data. These findings are presented below.

2.2 Sample profile

This section draws comparisons between the 15 public sector organisations and the total sample of 608 direct users who responded to the WTP survey. Where possible, the samples have also been compared with the profile of the 5,491 users of CH data who responded to the supplemental user profile survey[3] and UK business statistics from the ONS[4]. This is intended to provide some comparative context rather than to

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[2] The pilot and main survey data have been pooled because there were minimal changes to the survey between the pilot and main survey phases.

[3] The supplemental user profile survey was administered via links on the CHS / 'Search the Register', CHD, and WebCHeck websites over a 12-week period (December 2018 – February 2019). Users of the search services were invited to complete a short (5 minute) survey that compiled information on the type of user (business, research, or general public) and corresponding profile information. The total number of responses to the survey was 7,763. Analysis of the responses indicated that around 2,300 were potentially duplicates (i.e. responses from the same IP address). Results are reported for the sample with duplicates removed.

[4] Office for National Statistics. (2018). Statistical Bulletin: UK business; activity, size and location: https://www.ons.gov.uk/businessindustryandtrade/business/activitysizeandlocation/datasets/ukbusinessactivitysizeandlocation

judge the representativeness of the sample, since the supplemental user profile survey results are likely to be weighted towards higher frequency users.

Respondent profile

Table 2.1 provides the job title/role of the respondents to the WTP and user profile surveys. It shows that nine of the fifteen 'public sector' respondents (60%) had a professional occupation. This was a higher proportion than the overall sample of the WTP survey (44%) and the sample from the user profile survey (47%), although these other samples also included a large number of responses from the company directors of private sector organisations.

However, more than half of the 'public sector' respondents (53%) reported that they were not the main user of CH data within their organisation. The survey results suggest that the main users in 'public sector' organisations included a range of different job roles including managers, professional and technical occupations, administrative and other roles. This was in contrast to private sector respondents, who suggested that the main user was most likely to work in a professional occupation, and is likely to reflect a broader range of different uses of CH data within public sector organisations.

Table 2.1: Respondent job title/role

	Public sector organisations (n=15)	Total WTP survey (n=608)	User profile survey (n=5,491)
Company director	0%	30%	20%
Manager	7%	8%	9%
Professional occupation	60%	44%	47%
Technical occupation	7%	2%	2%
Administrative or secretarial	13%	7%	13%
Sales or customer services	0%	2%	4%
Other	13%	7%	6%
Total	100%	100%	100%

Sources: Direct user survey; Supplemental user profile survey

Organisation profile

Despite the small size of the sample of public sector users, it still provided coverage of most regions of the UK, although there was a slight concentration of respondents from the South East (five of the fifteen public sector respondents) and a lack of public sector respondents from Scotland, Northern Ireland and the East of England.

Table 2.2 shows that the sample of public sector organisations comprised five government departments (33%) and ten local authorities (67%). In contrast,

government departments only accounted for 1% of the total WTP survey sample and 2% of the user profile survey sample, while local authorities accounted for 2% and 4% respectively. Moreover, the public sector accounts for less than 1% of the total population of UK organisations.

Table 2.2: Type of organisation

		n		%
Limited company	Public sector organisations	0		0%
	Total direct user sample	435		72%
	User profile survey			64%
	National profile			71%
Partnership	Public sector organisations	0		0%
	Total direct user sample	51		8%
	User profile survey			15%
	National profile			17%
Sole trader	Public sector organisations	0		0%
	Total direct user sample	54		9%
	User profile survey			5%
	National profile			8%
Public corporation	Public sector organisations	0		0%
	Total direct user sample	18		3%
	User profile survey			5%
	National profile			0%
Central government	Public sector organisations	5		33%
	Total direct user sample	5		1%
	User profile survey			2%
	National profile			0%
Local authority	Public sector organisations	10		67%
	Total direct user sample	11		2%
	User profile survey			4%
	National profile			0%
Non-profit organisation or mutual (membership) organisation	Public sector organisations	0		0%
	Total direct user sample	34		6%
	User profile survey			3%
	National profile			3%
Total				**100%**

Sources: Direct user survey; Supplemental user profile survey; ONS statistics.

Note: Public sector organisations (n=15); Total direct user sample (n=608); Supplemental user profile survey (n=5,477).

As one would expect, most of the public sector users in the sample were relatively large organisations, with twelve of the fifteen users (80%) employing 250+ employees (Table 2.3). In contrast, large organisations accounted for only 14% of the total WTP sample, 30% of the user profile sample and less than 1% of the total population of UK organisations, while micro enterprises represented the majority of these other samples.

Table 2.3: Number of employees

		n	%
0 - 4	Public sector organisations	0	0%
	Total direct user sample	262	43%
	User profile survey		22%
	National profile		78%
5 - 9	Public sector organisations	1	7%
	Total direct user sample	78	13%
	User profile survey		8%
	National profile		11%
10 - 19	Public sector organisations	0	0%
	Total direct user sample	56	9%
	User profile survey		9%
	National profile		6%
20 - 49	Public sector organisations	2	13%
	Total direct user sample	61	10%
	User profile survey		12%
	National profile		3%
50 - 99	Public sector organisations	0	0%
	Total direct user sample	30	5%
	User profile survey		8%
	National profile		1%
100 - 249	Public sector organisations	0	0%
	Total direct user sample	33	5%
	User profile survey		10%
	National profile		1%
250+	Public sector organisations	12	80%
	Total direct user sample	88	14%
	User profile survey		30%
	National profile		0%
Total			**100%**

Sources: Direct user survey; Supplemental user profile survey; ONS statistics.

Note: Public sector organisations (n=15); Total direct user sample (n=608); User profile survey (n=5,491).

Similarly, eleven of the fifteen public sector users (73%) reported an annual turnover in excess of £50m (Table 2.4). This was also signficantly higher than for the total WTP survey sample (14%), the user profile survey sample (24%) and the total population of UK organisations (less than 1%). There was only one public sector user (representing 7% of the sample) who reported a turnover of less than £250,000, compared to 45% of the total WTP survey sample, 26% of the user profile survey sample and 71% of the total population of UK organisations.

Table 2.4: Annual turnover

		n	%
Up to £49,999	Public sector organisations	1	7%
	Total direct user sample	123	20%
	User profile survey		11%
	National profile		16%
£50,000 - £99,999	Public sector organisations	0	0%
	Total direct user sample	79	13%
	User profile survey		7%
	National profile		23%
£100,000 - £249,999	Public sector organisations	0	0%
	Total direct user sample	70	12%
	User profile survey		8%
	National profile		32%
£250,000 - £499,999	Public sector organisations	0	0%
	Total direct user sample	44	7%
	User profile survey		5%
	National profile		12%
£500,000 - £999,999	Public sector organisations	0	0%
	Total direct user sample	39	6%
	User profile survey		7%
	National profile		7%
£1,000,000 - £1,999,999	Public sector organisations	1	7%
	Total direct user sample	49	8%
	User profile survey		9%
	National profile		4%
£2,000,000 - £4,999,999	Public sector organisations	1	7%
	Total direct user sample	46	8%
	User profile survey		9%
	National profile		3%
£5,000,000 - £9,999,999	Public sector organisations	0	0%
	Total direct user sample	26	4%
	User profile survey		7%
	National profile		1%
£10,000,000 - £49,999,999	Public sector organisations	1	7%
	Total direct user sample	47	8%
	User profile survey		13%
	National profile		1%
£50,000,000 or more	Public sector organisations	11	73%
	Total direct user sample	85	14%
	User profile survey		24%
	National profile		0%
Total			**100%**

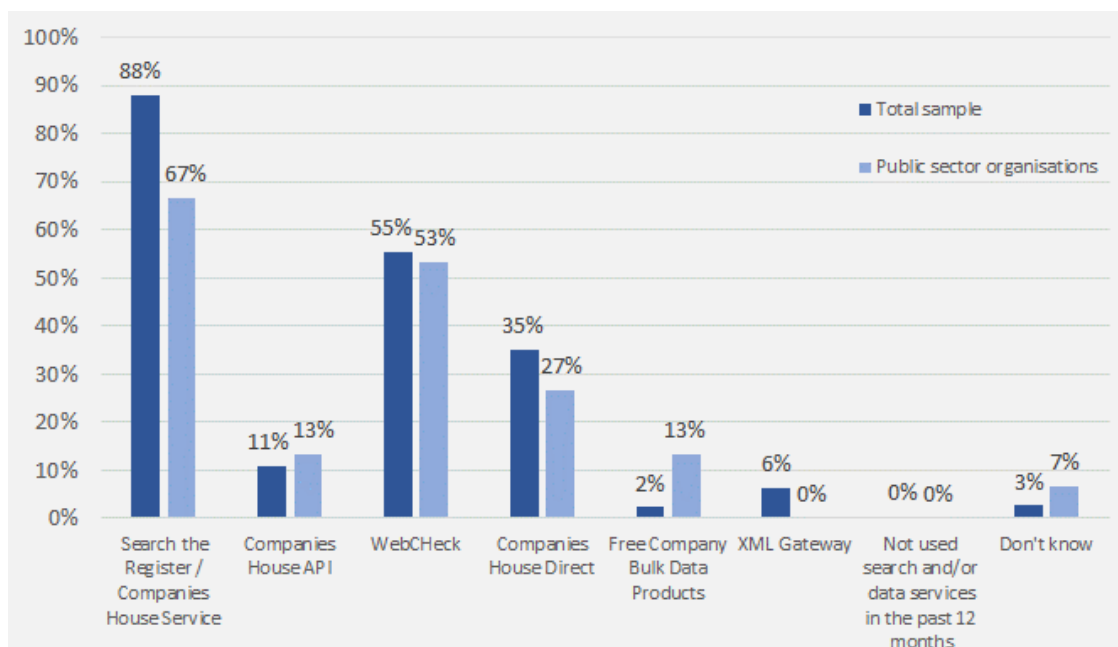Sources: Direct user survey; Supplemental user profile survey; ONS statistics.

Note: Public sector organisations (n=15); Total direct user sample (n=608); User profile survey (n=5,491).

2.3   Use of CH data

The following figures summarise findings regarding the use of CH data services, showing the total levels of usage (Figure 2.1) and the services used most often (Figure 2.2). Companies House Service (CHS) / 'Search the register' was reported to be the main service used by both the public sector users and the total WTP survey sample. These services were used by ten of the fifteen public sector users (67%, see Figure 2.1), with eight of these users (53%) reporting that this was the CH service that they used most often (Figure 2.2). However, levels of usage were even higher amongst the total WTP sample, for the CHS / 'Search the register' and Companies House Direct services.

In contrast, the sample of public sector users reported being relatively more likely to use some of the other search services, including Companies House API and bulk data products, which are typically used by more frequent and intensive users of CH data.

Figure 2.1: CH search and data services used in the past 12 months

Source: Direct user survey. Note: Public sector organisations (n=15); Total direct user sample (n=608).

Figure 2.2: CH search and data services used most often
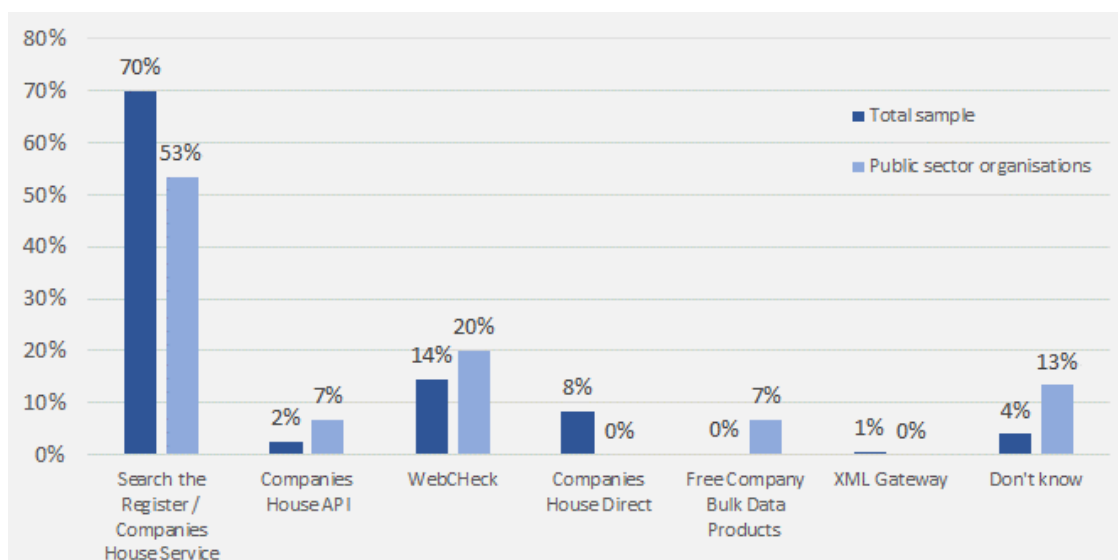
Source: Direct user survey. Note: Public sector organisations (n=15); Total direct user sample (n=608).

Figure 2.3 provides further evidence that public sector organisations are relatively frequent users of CH data. It shows that eight of the fifteen public sector users (53%) stated that they used CH data several times per day, compared to only 21% of the total WTP survey sample. This is also higher than the 33% of users in the user profile survey

who reported using CH data several times per day, although this information is not included in the chart.

Figure 2.3: Frequency of use

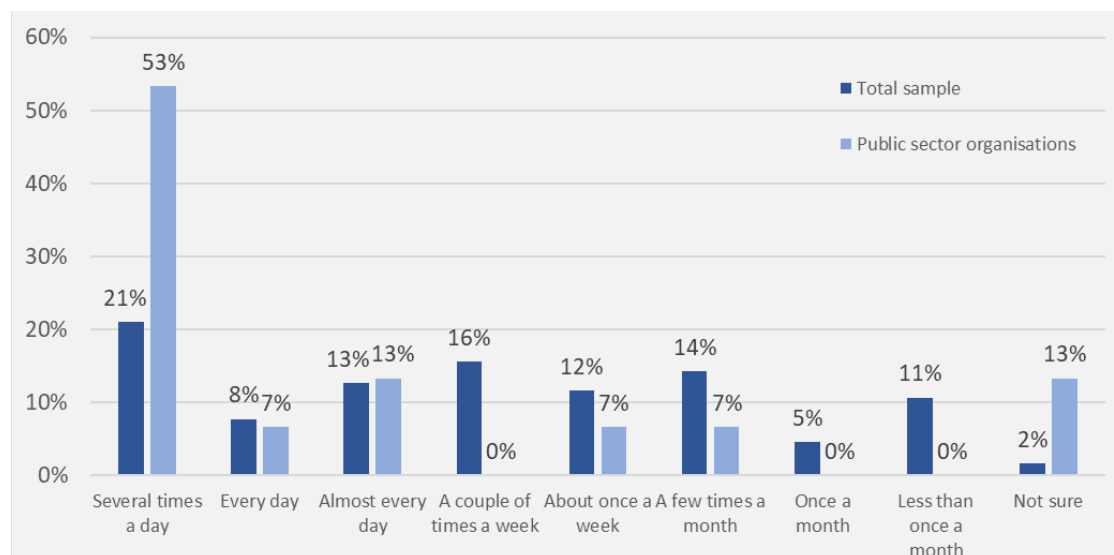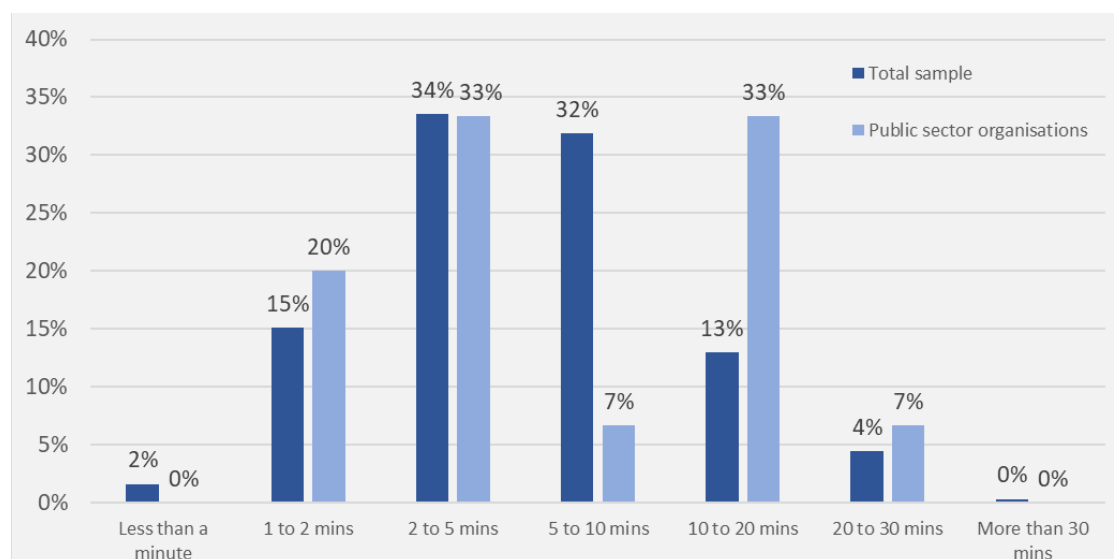

Source: Direct user survey. Note: Public sector organisations (n=15); Total direct user sample (n=608).

Figure 2.4 shows the average time involved in each 'use' of CH data. It suggests that the sample of public sector users spend a relatively long time using CH data. For example, six of the fifteen public sector users (40%) stated that they spent at least ten minutes during each 'use' of CH data, compared to just 17% of the total WTP survey sample. This also suggests that public sector organisations could be relatively intensive users of CH data.

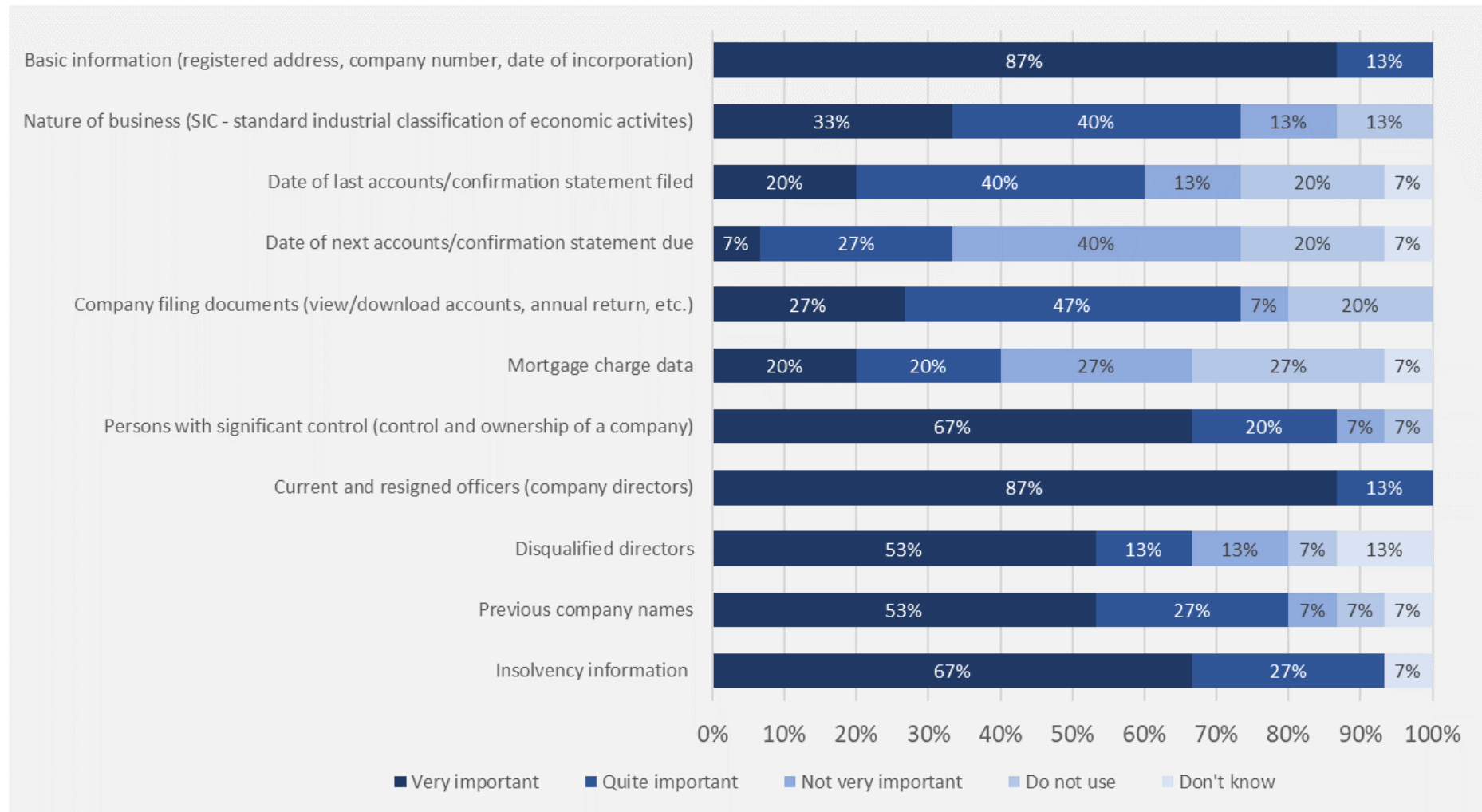**Figure 2.4: Average time for each use of CH search or data services**

Source: Direct user survey. Note: Public sector organisations (n=15); Total direct user sample (n=608).

Uses of CH information and data

Respondents to the WTP survey were also asked to rate the importance of the different aspects of the company information and data to their organisation (Figure 2.5). The most important pieces of data reported by the public sector users were the basic company information (company number, registered address, date of incorporation, etc.) and the current and resigned officers (company directors). In each case, thirteen of the fifteen public sector organisations in the sample reported these to be 'very important', with the other two organisations stating that these were 'quite important'.

Other important aspects of the data included 'persons with significant control' (PSC) data, insolvency data, and data on disqualified directors and previous company names. More than half of the public sector respondents reported that these aspects were 'very important' for their organisation. Furthermore, most public sector users (>50%) indicated that all aspects of the information were 'very important' or 'quite important' for their organisation, except for the due date of the next accounts / confirmation statement and the mortgage charge data (which were only considered to be important for five and six of the fifteen respondents, respectively).

Figure 2.5: Importance of different aspects of CH services and data for public sector organisations

|	Very important	Quite important	Not very important	Do not use	Don't know
Basic information (registered address, company number, date of incorporation)	87%				13%
Nature of business (SIC - standard industrial classification of economic activites)	33%	40%	13%	13%	
Date of last accounts/confirmation statement filed	20%	40%	13%	20%	7%
Date of next accounts/confirmation statement due	7%	27%	40%	20%	7%
Company filing documents (view/download accounts, annual return, etc.)	27%	47%	7%	20%	
Mortgage charge data	20%	20%	27%	27%	7%
Persons with significant control (control and ownership of a company)	67%	20%	7%	7%	
Current and resigned officers (company directors)	87%				13%
Disqualified directors	53%	13%	13%	7%	13%
Previous company names	53%	27%	7%	7%	7%
Insolvency information	67%	27%	7%		

Source: Direct user survey. Note: Public sector organisations (n=15); Total direct user sample (n=608).

The survey respondents reported a range of uses of CH data. Figure 2.6 shows that the most common uses were: to confirm basic information about a company; part of detailed research into a company; and to verify information provided by a company. These were the most common uses for both the total WTP survey sample and the public sector users, with at least 60% of the respective samples using CH data in this way. However, the survey responses also suggested some differences in the usage of CH data among public sector organisations:

- A relatively high proportion of public sector users reported using CH data to inform law enforcement investigations and/or inform court proceedings.

- A relatively low proportion of the public sector users reported using CH data to carry out due diligence work, check risk/creditworthiness of customers, find out about competitors, to feed into products and services sold to customers, and for marketing and sales purposes.

Figure 2.6: All uses of CH information and data
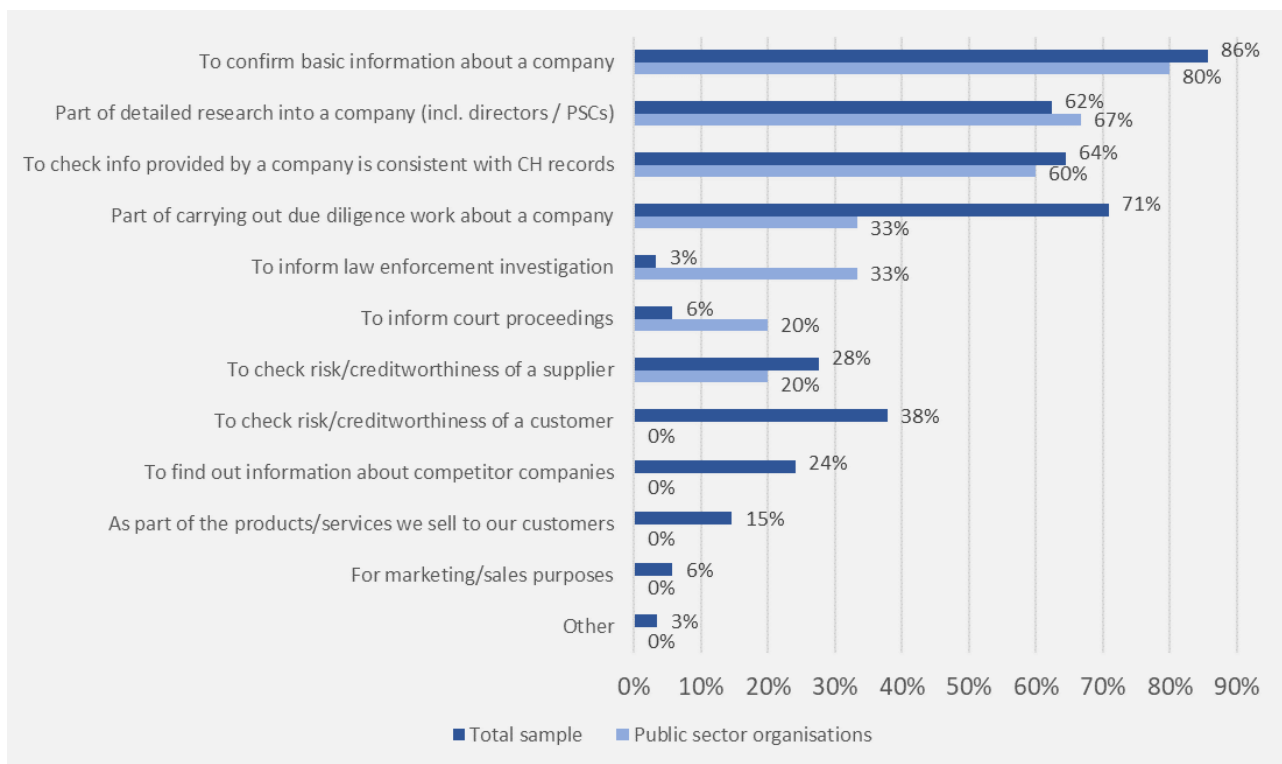
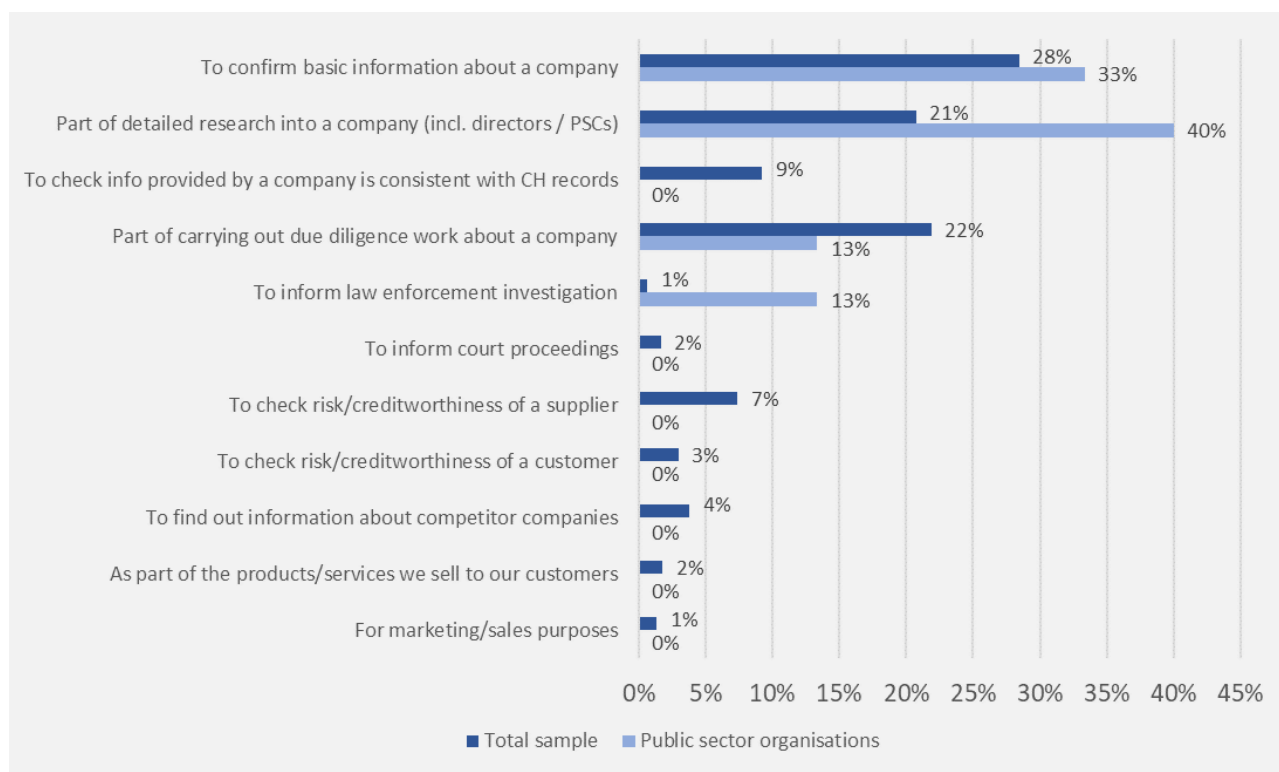Source: Direct user survey. Note: Public sector organisations (n=15); Total direct user sample (n=608).

The respondents also confirmed their main use of CH data (Figure 2.7). The findings suggest that the sample of public sector users was relatively likely to use CH data for:

- undertaking detailed research into a company (reported by six of the fifteen public sector users, or 40% vs 21% for the total WTP survey sample);

- confirming basic information about a company (reported by five public sector users, or 33% vs 28% for the total sample); and

- informing law enforcement investigations (reported by two public sector users, or 13% vs 1% for the total sample).

This is consistent with the uses expected of public sector organisations including law enforcement agencies, transparency groups, central government and local authorities.

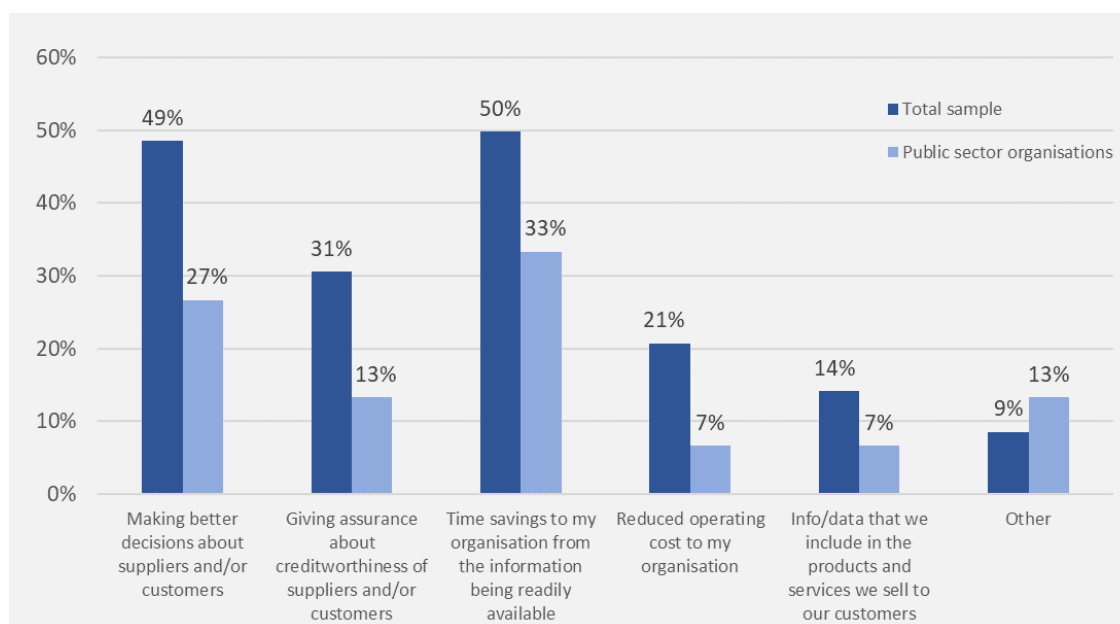**Figure 2.7: Main use of CH information and data**

Source: Direct user survey. Note: Public sector organisations (n=15); Total direct user sample (n=608).

2.4 Benefits of CH data

The WTP survey also asked respondents to state the outcomes that had benefited their organisation from using CH data (Figure 2.8). The two most common benefits were 'time savings to my organisation from the information being readily available' and 'making better decisions about suppliers and/or customers'. These benefits were identified by around 30% of the public sector users in the sample, compared to around 50% of the total WTP sample.

Overall, the results found that the public sector users were less likely to report experiencing all of these benefits, compared to the wider survey sample. However, this is likely to be because these stated benefits are generally more relevant for the private sector than for public sector organisations.

Figure 2.8: Beneficial outcomes of CH information and data

Source: Direct user survey. Note: Public sector organisations (n=15); Total direct user sample (n=608).

Overall levels of satisfaction with CH data were reported to be high, with ten of the fifteen public sector users stating that they were very satisfied with CH data services (i.e. 67% of the sample, which was the same as for the total survey sample). Furthermore, 12 of the fifteen public sector users (80%) stated that they were very or extremely confident in the accuracy and reliability of CH data. This is only slightly lower than the equivalent figure of 85% for the total WTP survey sample, and shows the positive perceptions of CH data among all of the different types of user.

2.5   Use of alternative services and products

The survey also asked respondents to indicate the alternative actions and products that their organisations used to source company information and data. Figure 2.9 shows that the most common alternative sources for the public sector sample were to use general internet searches and other free online sources (in both cases these were used by eight of the fifteen users – i.e. 53% of the sample). These were also the most common alternative sources reported across the total WTP survey sample, although public sector users were slightly more likely to report using other free online sources such as trade directories, review sites, free company check websites, free trials from data service providers and industry regulator information.

However, only three of the public sector users reported purchasing or subscribing to additional data services such as the FAME (Bureau Van Dijk) database, First Report and Endole services.

Figure 2.9: Use of alternative data and information sources
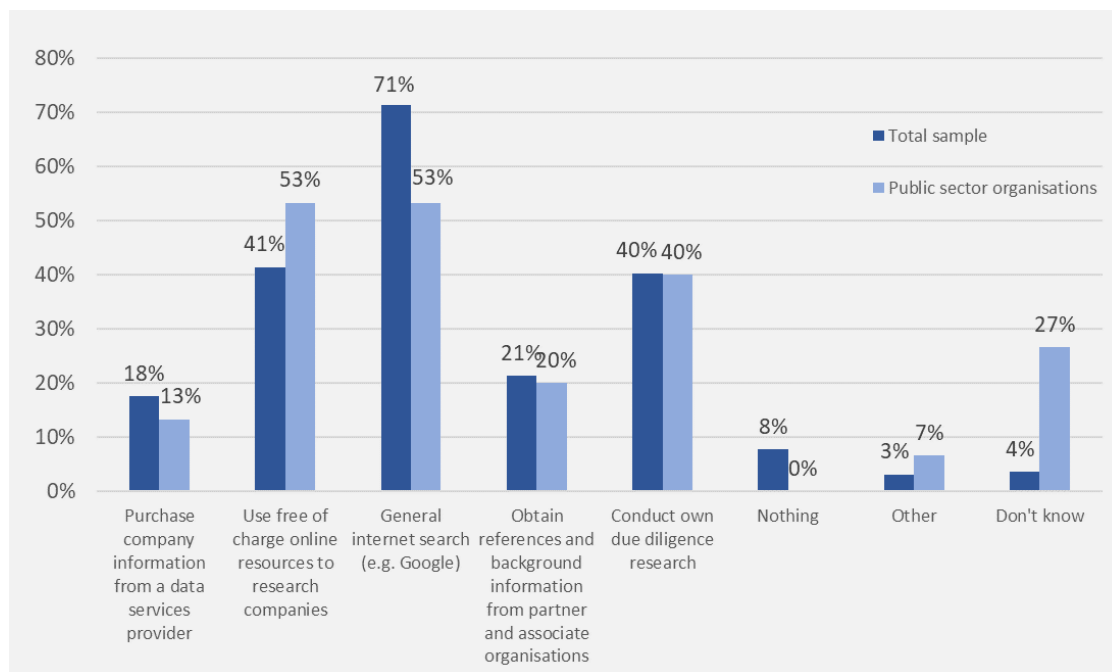
Source: Direct user survey. Note: Public sector organisations (n=15); Total direct user sample (n=608).

3 Results of the qualitative research: providers of public goods who use CH bulk data products

This section presents the results of qualitative research undertaken with a sample of users who use CH bulk data products to provide public goods and deliver public benefits.

3.1 Providers of public goods who also use CH bulk data

A subset of public sector users of CH data can also be identified through their use of 'bulk' data products. Bulk data products provide users with large quantities of CH data to inform their respective products/services, analyses and investigations. Users of bulk data products are therefore likely to be frequent and significant users of CH data.

The 'bulk' products provided by CH include a broad range of information such as:

- daily data files including new incorporations, company appointments, directory updates, liquidations, mortgages, accounts data, and some bespoke data products developed for individual users;

- weekly data files including the weekly gazette and information on disqualified directors;

- monthly data files on DVD ROM and some bespoke monthly data products covering dissolutions and liquidations; and

- additional bespoke data files prepared on a quarterly basis including data on liquidations.

While most CH data can be accessed anonymously, users of bulk data must register in order to access these products. CH provided anonymised information on all users of bulk data products to inform this study. The data showed that 156 organisations were registered to access bulk data from CH at the time of the research, including 24 providers of public goods. The data from CH also provided some basic information on the characteristics of these users and their transactions of bulk data products, which are described in more detail below. Qualitative interviews were also undertaken with nine of these providers of public goods, who were purposively selected to identify significant users of CH data. The characteristics of the interview sample are also described below, followed by a summary of the key findings of the qualitative interviews.

3.2 Characteristics of providers of public goods who also use CH bulk data

This section summarises the characteristics of providers of public goods who were also accessing bulk data. It also compares the characteristics of the nine providers of public goods that were interviewed as part of this study (who represented 38% of the wider population of organisations that use CH's bulk data products to provide public benefits).

Figure 3.1 shows that the providers of public goods who access bulk data products are generally public-sector organisations (70%) but also include some private sector businesses that deliver public benefits (e.g. transparency groups and banks using CH data to investigate businesses suspected of fraud, money laundering, etc). The most common types of public sector organisations are government departments and law enforcement agencies but also include a government agency, local authority, and a higher education institution. The interview sample also focused on three core groups and was split evenly between government departments, law enforcement agencies and transparency groups.

Figure 3.1: Type of organisation – providers of public goods who use CH bulk data
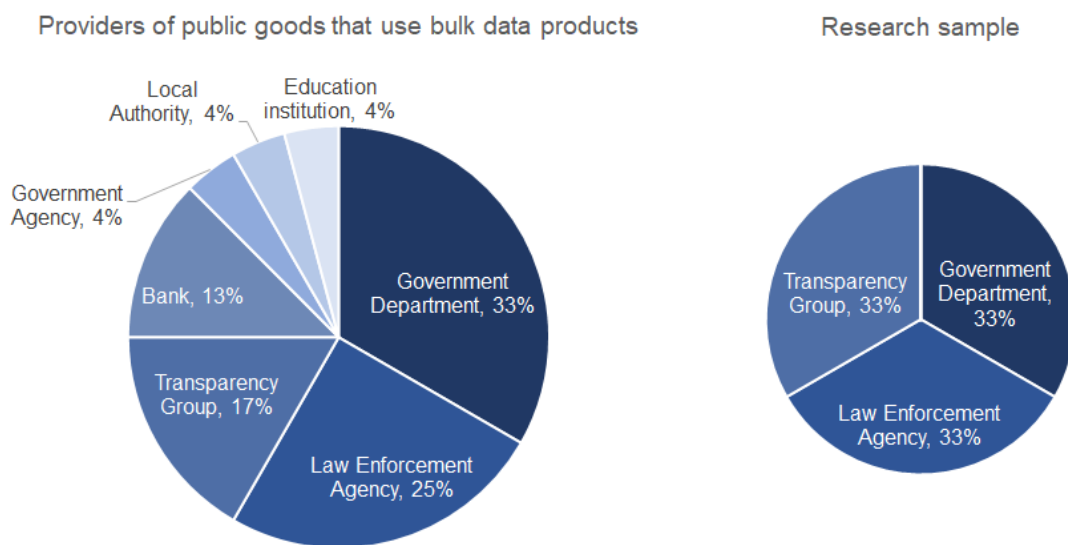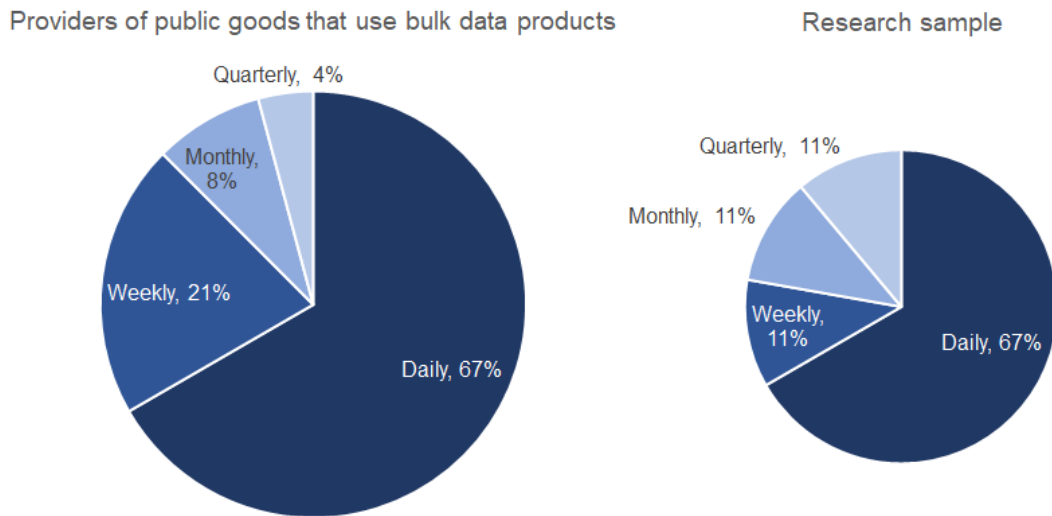

Source: ICF analysis of CH records for 24 providers of public goods that use bulk data and a sub-sample of 9 providers.

The CH data also provide information on the frequency with which bulk data products are accessed by providers of public goods. Figure 3.2 shows that they tend to be regular users of bulk data with two-thirds of these users (67%) accessing bulk data from CH on a daily basis. A further 21% access bulk data on a weekly basis, 8% access data every month and the remaining 4% every quarter.

The characteristics of the research sample are similar with six of the nine interviewees (67%) accessing bulk data on a daily basis. The remaining three interviewees reported accessing bulk data from CH on a weekly, monthly and quarterly basis.

Figure 3.2: Frequency of access to 'bulk' data – providers of public goods who use CH bulk data
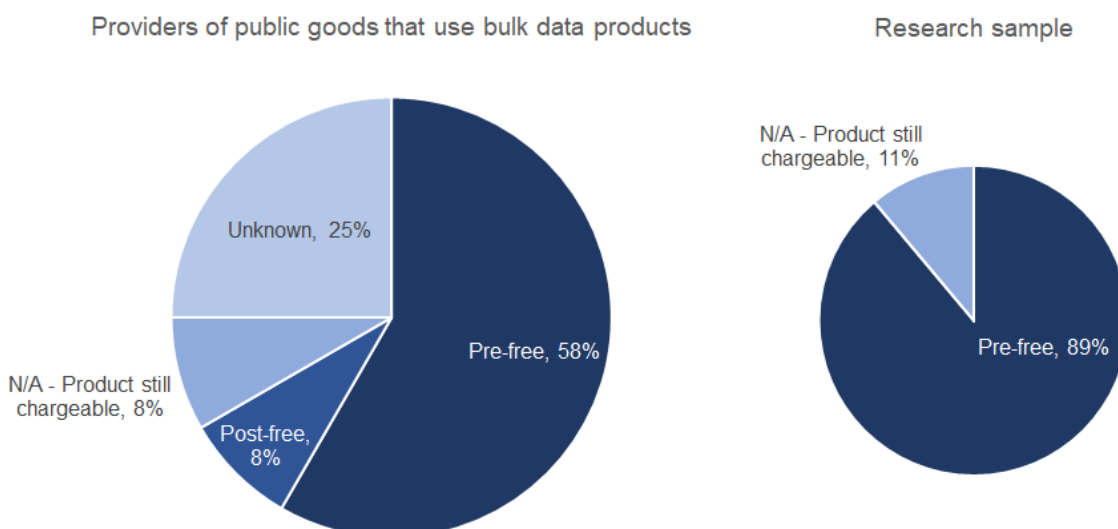

Source: ICF analysis of CH records for 24 providers of public goods that use bulk data and a sub-sample of 9 providers.

Figure 3.3 shows the length of time that users have been accessing bulk data from CH. This information has been consolidated into those that were accessing data before and after the data was made available free of charge. It shows that most of these providers of public goods (58%) were accessing bulk data from CH before the data was provided free of charge, compared to only 8% that have started accessing the data since it became available for free. A further 8% are accessing bulk products for which charges still apply (e.g. DVD ROM), while the information was not known for 25% of these users.

The research sample was mainly focused on users that had been using CH data since before it was made available free of charge. The only other provider of public goods in the sample was an organisation that still pays a fee to access a bespoke bulk data product.

Figure 3.3: Date of first download of bulk data – providers of public goods who use CH bulk data

Source: ICF analysis of CH records for 24 providers of public goods that use bulk data and a sub-sample of 9 providers.
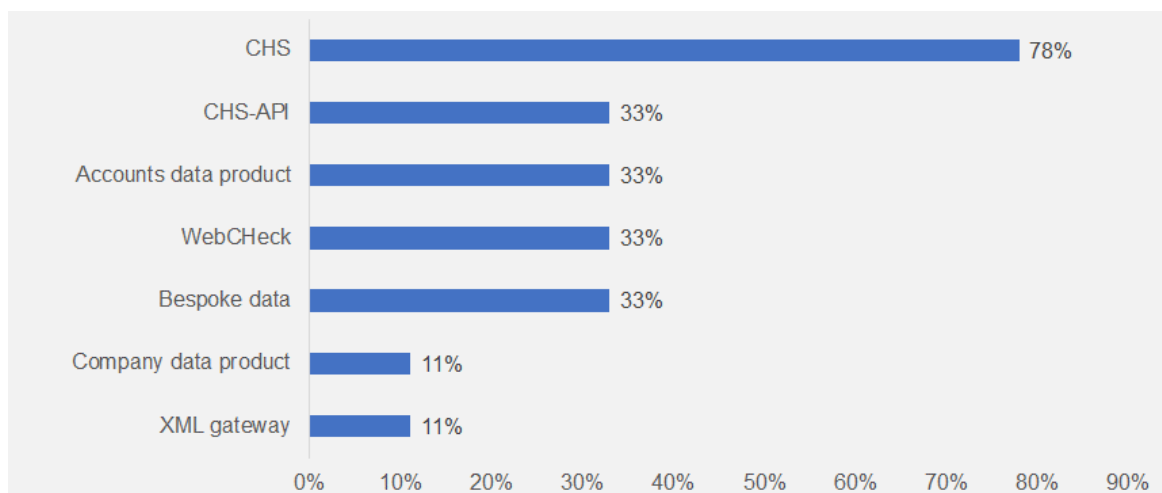
3.3   Use of CH data

The interviews with providers of public goods explored their use of CH data services. They found that all were using free data and around half (four out of nine respondents) were also paying for additional data including: a subscription to the XML gateway service; documents and images purchased from WebCHeck; and a bespoke dataset. Eight of the nine providers of public goods were also using PSC data (89%), while the most commonly used free data product was the CHS service, which was used by nearly all of the sample, as shown in Figure 3.4 below.

PSC data and the CHS service were also the most valued pieces of CH data amongst this group. The interviews found that use of these products and data was higher amongst the providers of public goods compared to the intermediaries (described in Report 3). In contrast, the providers of public goods were less likely to use CHS-API and company data product. These differences are likely to be due to the different ways these two groups tend to use the CH data. The providers of public goods reported making greater use of the data to search for information on individual companies and PSCs (or companies/PSCs that meet certain criteria) and undertake data analysis and produce statistics summarising the data. In contrast, the intermediaries were more likely to combine and incorporate large quantities of CH data into their own datasets, although two of the providers of public goods did report similar uses including:

- A government department that was downloading CH data in bulk to compare with HMRC data on company accounts and use the sources in combination to identify potential issues regarding payment of taxes; and

- A transparency group that incorporates large quantities of CH data with other sources (including business registers from other countries) in order to provide a 'global' database that provides links between company activities in different countries.

Figure 3.4: Use of CH data products and services among the sample of providers of public goods

Source: ICF analysis of 9 qualitative interviews with providers of public goods that use bulk data products.

Changes in the use and value of CH data over time

Figure 3.3 showed that the providers of public goods had been using CH data for a long time and all had been using CH data before it was made available for free. However, the interviews also found that use of CH data had increased significantly over time for most of these users (eight of the nine interviewees reported increased use of CH data over time). The increased use of CH data was due to a number of reasons including:

- Increased availability of data and the addition of new datasets such as PSC data, which had resulted in greater breadth of data available;

- Changes to the format and structure of individual datasets, particularly the introduction of the new CHS service, have made the data more user-friendly and easier for users to access, search and interrogate; and

- The introduction of free data, which was reported to have increased use of CH data amongst most of the interviewees. This had provided a number of benefits from enabling increased use of the data (such as conducting research and analysis of the data on a more continuous basis, to search for patterns in the data and identify connections between individuals and companies); and from the cost savings (estimated by one interviewee to be several thousand pounds per year). For example, a government department reported that they would not previously have purchased the underlying accounts data but are now using this on a regular basis to investigate and deal with issues relating to particular companies.

The interviewees also reported that CH data has become increasingly valuable over time for similar reasons to those described above (i.e. an increased breadth and depth of available data, improved access and formatting). Two of the transparency groups in the sample reported working with CH data alongside data from company registers in other countries, with one stating that it works with 130 different company registers. Both of these organisations stated that they believed the UK has the best company register in the world. They provided other examples of good company registers from elsewhere, such as New Zealand, which they felt provided very good data on shareholders and historic data that could be used to pinpoint changes that have occurred over time. However, the CH data was felt to provide significant breadth of high quality data and a very granular level, relative to other countries. The openness of the UK register and data was also considered a real strength and was something that these organisations would like to see adopted elsewhere.

One interviewee also highlighted the importance of having knowledgeable staff to speak to at CH when issues did arise. The CH staff were reported to have a good understanding of both the strengths and limitations of their data and the various products and services, and were felt to add real value to the data that was being accessed.

PSC data

The introduction of PSC data was reported as being particularly useful for providers of public goods and especially for transparency groups and law enforcement agencies. This is consistent with the findings of the WTP survey presented in Section 2.

The ability to identify the individuals who own and control companies is invaluable for the organisations investigating these companies, while the introduction of PSC data has also enabled additional analysis and provision of statistics, articles and reports on the ownership of UK companies. For example, one transparency group reported that the introduction of PSC data had enabled them to conduct new types of investigation, prepare reports on PSCs, and use the CH data to engage in advocacy to demonstrate the value of providing this data in other countries.

PSC data has also provided an increased transparency and understanding of corporate structures and company ownership within the UK. One government department suggested that this had provided significant benefits for their organisation and was influencing the way they interact with companies. They reported using PSC data to identify subsidiary and holding companies and then using this information to target information and requests to the holding companies and asking them to disseminate across their subsidiaries.

However, it was also felt that PSC data could be improved and become even more valuable if there was greater checking and verification of the data and if the coverage of data could be increased (e.g. if sanctions were introduced for not submitting ownership data to CH or for submitting inaccurate data, and if loopholes could be closed to make it more difficult for companies to avoid filing this information, for example by saying there is no beneficial owner when there is).

Use of complementary data sources

The providers of public goods reported using a range of complementary data sources, which is consistent with the findings of the WTP survey described in Section 2.5. The interviews also found that the list of sources varied between the different types of user:

- **Transparency groups** – As stated above, the transparency groups reported using a large number of company registers from other countries (one of which was accessing the data indirectly through other transparency groups). Other examples included data (from the UK and elsewhere) on disqualified directors, politicians accused of corruption and other datasets that are useful for investigations and flagging / mapping levels of corruption across countries.

- **Law enforcement agencies** – CH data was reported to be a key source of data for law enforcement agencies and was referred to by one interviewee as being *'the starting point'* for all investigations of fraudulent activity. Law enforcement agencies also reported supplementing CH data with other online data sources that provide more information on individuals as well as companies. Examples included data

provided by credit reference agencies and other people-focused search services, such as '192.com'. Other examples included general search engines and company websites, which are used to explore particular companies and individuals.

- **Government departments** – The use of complementary data sources was most varied across the government departments. One interviewee stated that they did not use any other sources and were solely reliant on CH data. In contrast, others described using a variety of data sourced from HMRC, their own research activities and from companies' own websites, although they also highlighted the difficulties in finding relevant and consistent data from websites, annual reports, etc.

Most of these complementary data sources were being used to access data that was not available from CH. The exception was some of the HMRC data, which duplicated some CH data, although the CH data was being used to check and validate the HMRC data in this case.

Most of the interviewees also stated that it was relatively easy to combine CH data with data from other sources by using company registration numbers. Most of the problems with matching data were reported to be due to issues with the other sources, rather than with CH data. This was also true of the transparency groups that were matching CH data with data from company registers in other countries. Matching with company registers in the US was reported to be particularly complex because there are different registers for each state.

One of the interviewees did raise an issue with the matching of individuals in the PSC data and suggested that it would be useful to have unique identifiers for the PSC data. However, another interviewee reported that there had been improvements in the PSC data by replacing free text with fixed fields for a number of variables including nationality and jurisdiction.

3.4   Benefits arising from the use of CH data among providers of public goods

The use of CH data generates benefits for providers of public goods in different ways:

- It delivers benefits for the providers themselves through reduced operating costs and increased productivity (relative to the use of substitute data sources).

- It can generate revenues for some providers who use CH data to develop their own products and services, similar to those described in Report 3 for intermediaries.

- It helps these organisations to provide public goods and wider social benefits.

It is difficult to monetise or quantify many of these benefits, although the research collected qualitative information, which is described below for the different types of benefits.

Benefits for the providers themselves

Section 2.4 described some of the benefits of CH data for public sector users, based on the findings of the WTP survey. The qualitative interviews also found evidence of organisational benefits for providers of public goods. CH data was reported to help reduce costs and increase the productivity of these organisations, by informing and supporting their activities, investigations and decisions.

For example, the Office for National Statistics (ONS) faces significant costs in administering its surveys. Recent estimates suggest that the monthly cost of running the Monthly Business Survey was £131,000 in November 2018, of which £114,000 is staff costs and £17,000 is spent on administering the telephone and paper surveys.[5] CH data enables the ONS to be more informed and targeted in administering surveys and minimise costs by avoiding the printing and posting questionnaires to businesses that have moved or ceased trading, thereby saving thousands of pounds per year.

Two of the users also stated that they use CH data as an input to their own products and services that generate revenues for their organisation. While these revenues are significantly smaller than those described in Report 3 for the intermediary users of CH data, they provide evidence of other financial benefits for the providers of public goods. For example, one of the organisations sells a publication that uses CH data and raises around £3-6,000 of revenues per annum, while another sells bulk datasets that include CH data and generate annual revenues of tens of thousands of pounds. Other users reported using CH data as an input to the development of reports and articles, but these are freely available so no income is generated, while another organisation intends to sell products and services that use CH data in the future.

Social benefits

CH data also helps these organisations to deliver a broad range of social goods and benefits. Examples of these social benefits were identified through the interviews with providers of public goods and are described further in the boxed examples below:

- CH data helps to inform and support good policy decisions. The interviews with government departments suggested that CH data is being used to inform and influence policy decisions in a number of ways including: providing contextual data to inform government reports, policy papers, impact assessments and ministerial briefings; helping to validate other government data; and providing information, statistics and reports to support decision-making at a local level.

- CH data supports activities to address criminal behaviour including corruption, fraud and money laundering. The interviews with law enforcement agencies and transparency groups provided examples of CH data being used to directly support

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https://www.ons.gov.uk/aboutus/transparencyandgovernance/freedomofinformationfoi/monthlybusinessssurveyrunningcosts

investigations into criminal activity, and to provide information and statistics that support activities to raise awareness of criminal activities. As well as reducing criminal activities and providing justice for victims, these activities also help to support a good environment for businesses and consumers by reducing risk and uncertainty and helping to support trust.

- CH data also helps to demonstrate the value of open data in the UK and internationally. As described above, the CH register was described by some of the interviewees as the best and most open company register in the world. This helps to support the UK's position as a global leader in driving greater transparency of public data.

Law enforcement agency: benefits of CH data

CH data plays a key role in supporting law enforcement. One of the agencies interviewed in this study reported using CH data on a daily basis as part of their work to investigate fraud.

The agency considers CH data to be an essential resource for investigating companies suspected of being involved in fraudulent activity. It is considered a 'go to' resource and a useful starting point for investigations because it provides comprehensive coverage of UK companies and is free to use. While CH data cannot be guaranteed to provide an accurate picture of fraudulent companies, as it is only based on the information that has been filed by the company, it does provide a key source of information for investigations. Furthermore, the requirement for all companies to register with CH means that even fraudulent companies are listed in CH data, while the absence of companies from the register also provides evidence of suspicious activities.

The agency was using CH data to collect information relating to particular companies including addresses, financial information and the key individuals associated with that company. The introduction of PSC data has also significantly enhanced the value of CH data for their investigations and for identifying links between companies for certain individuals. CH data helps to build a picture of particular companies and individuals and also helps to identify issues or concerns that can justify further enquiries or actions, such as obtaining search warrants. It is also used to provide evidence for cases that go to court.

By supporting law enforcement agencies, CH data delivers significant social benefits. These include providing protection to the public, reducing criminal activities and the harm that they can cause, providing justice and helping victims of fraud to regain losses. While the agency was unable to attribute specific benefits to CH data, it confirmed that CH data is a significant source of information that supports investigations, helps to generate leads and reduces the time and cost of cases.

Government department: benefits of CH data

One of the key benefits of CH data is to support good policy making within the UK Government. One of the government departments interviewed in this study reported using CH data for at least 50 years to support policy making. They stated that they use CH data several times a week, for two main purposes:

- CH data provides important contextual information on the number of companies, directors, shareholders, etc. that meet certain criteria, or are likely to be affected by a change in policy. This contextual information is essential for understanding the potential scale of impacts of policy changes and is used to inform impact assessments as well as providing statistics and figures for ministerial briefings, press releases, strategies and reports.

- CH data is also used to investigate individual companies, usually in response to a specific complaint or query from the public. It provides the user with an understanding of the company and its activities and is a key source used to inform government responses to these queries.

Transparency group: benefits of CH data

CH data provides a key source of information for transparency groups. One of the groups interviewed in this study stated that the primary objectives of their organisation are to reduce levels of corruption, create a more difficult environment for corruption to take place, and push for the benefits from national resources to be distributed more fairly.

The group works on investigations of corruption and money laundering and has been using CH data since the organisation was established. They analyse CH data from a corruption perspective and use the data to undertake research and obtain information about companies, shareholders, addresses, etc. to understand who is involved in specific companies and make connections between individuals.

The increased quantity and quality of CH data (and particularly the introduction of PSC data) has enhanced their analysis, which has developed from basic lookups and investigative journalism, to the creation of large datasets and the development of tools for visualising and exploring the data. This is used to produce research reports as well as social media outputs in order to raise awareness of issues and conflict and use this to deliver change. CH data therefore provides a key tool through which they undertake research and use the information to affect change.

The organisation reported that CH data has also been used more recently to demonstrate the value of open ownership registers and is helping to influence the international debate on this issue.

Substitutes for CH data (the counterfactual)

The providers of public goods were also asked whether there were other substitute products that they could use if CH data did not exist. The most viable substitutes were described by the government departments, who suggested that they would make greater use of HMRC data and/or insolvency data from the London and Edinburgh Gazettes. These sources were felt to provide reasonable and low-cost substitutes for CH data, which would mean that impacts for these organisations would be relatively minor, such as cutting back on activities that are dependent on the CH data that is not available from these other sources.

However, most interviewees reported that there were no viable alternatives to CH data, as many other sources are based on CH data themselves (e.g. data from FAME and other Bureau Van Dijk products). Other suggested alternatives included collecting the data themselves, either directly from the companies or from internet searches, although this was expected to have a significant impact on their activities due to:

- reduced coverage of companies;

- much lower data quality (e.g. website information does not have to meet the same legal requirements as information filed with CH); and

- a large increase in labour costs to identify and collect the required information.

Interviewees found it difficult to quantify or monetise these impacts, although two organisations did provide ballpark estimates, which ranged from a two-fold to a ten-fold increase in the time and costs of accessing and processing data in the absence of CH data. This was despite both organisations only needing to collect information for a relatively small number of organisations (i.e. searching for information on companies under investigation). Other reported impacts are described below:

- One of the transparency groups suggested that there would not be any viable alternative sources for CH data, so they would instead focus on providing data and information for other countries.

- One of the organisations that was using CH data to develop its own products and services stated that demand for their products could diminish if it was not supported by CH data, given the strong reputation of CH data among their end-users.

- Another organisation suggested that social benefits would decrease significantly in the absence of CH data. They felt that the lack of CH data would lead to less scrutiny of companies in the UK and could therefore result in increases in criminal activities such as money laundering and fraud.

3.5 Suggested improvements to CH data

The interviews also explored issues and the potential to make improvements to the CH data. Enhanced powers for the Registrar are already proposed in many of these areas in BEIS' consultation on Corporate Transparency and Register Reform[6]. The potential improvements suggested by the providers of public goods related to the following themes:

- **Data quality** – many of the interviewees reported data quality to be a key strength of CH data. In some cases, interviewees suggested that there might be opportunities to make improvements through increased data checks. Examples included: reducing duplication, which can sometimes be an issue in relation to data on company directors; and introducing more structured requirements to increase the consistency of data filed across the different 'address' fields and thereby improve the effectiveness of company searches.

- **Functionality of CH data** – the interviews also identified several suggestions for improving the functionality of CH data including: providing access to raw data rather than pdf / image files to enable these data to be analysed more effectively; facilitating a more consistent approach to filing address data to help improve the effectiveness of company searches by address (as described above); and allowing users to request notification alerts of changes to key variables for particular companies.

- **Linking across records in PSC data** – there were also some suggestions that the value of PSC data could be further enhanced through the addition of unique identifiers to improve the ability to link individuals across different organisations in the PSC dataset.

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[6] BEIS (May 2019) Corporate transparency and register reform: Consultation on options to enhance the role of Companies House and increase the transparency of UK corporate entities. Available at: https://www.gov.uk/government/consultations/corporate-transparency-and-register-reform

4 Conclusions

This section summarises the key findings of the research and conclusions regarding the value of CH data to providers of public goods.

4.1   Estimating the value of CH data for providers of public goods

It has been difficult to estimate the value of CH data for providers of public goods due to a lack of information about the overall size and profile of the user population. The research findings presented in this report are based on information collected from a relatively small number of qualitative interviews with key users and should therefore be treated as indicative.

However, the research findings suggest that the use of CH data is likely to deliver significant public goods and benefits, particularly in terms of social benefits. The main social benefits identified in this research include the use of CH data to:

- provide contextual information to help inform and support good policy decisions;

- support activities to address criminal behaviour including corruption, fraud and money laundering, thereby reducing risk and uncertainty and helping to support a trusted environment for businesses and consumers; and

- help demonstrate the value of open data in the UK and internationally and maintain the UK's position as a global leader in driving transparency of public data.

CH data also delivers benefits for the operation of public sector organisations in delivering these social benefits, by reducing their operating costs and increasing productivity relative to the use of alternative data sources. In some cases, they also generate revenues from the use of CH data as inputs to products and services, similar to the benefits described in Report 3 for intermediaries.

It has not been possible to quantify and monetise the benefits associated with providers of public goods due to: the lack of information on the size of the total population; the fact that benefits tend to be specific and unique to the individual user; and the difficulty of attributing these benefits to the use of CH data. The sample of public sector organisations participating in the WTP survey was also insufficient to calculate robust estimates of their WTP for CH data. However, the qualitative interviews have provided some specific examples of the benefits of using CH data. The research findings also suggest that the benefits of CH data are likely to be significant for providers of public goods because:

- They tend to be relatively large organisations and intensive users of CH data in terms of their frequency and duration of access.

- They reported a lack of viable substitutes for CH data. In most cases, the only alternative would be for users to collect data themselves, either directly from companies or via internet searches. However, this would have significant impacts for these users and the public goods they provide in terms of: reduced data coverage; reduced data quality; and increased costs of identifying and collecting the required information, which were projected to increase costs of data collection and analysis by between two and ten times.

Perceptions of CH data were also found to be strong among most providers of public goods, in terms of accuracy and reliability. Any data quality issues were typically perceived to be due to poor information provided by the companies themselves, rather than an issue with the processing or presentation of the data by CH. The research also identified high levels of satisfaction with CH data among providers of public goods, with some international transparency groups suggesting that the UK has the best company register in the world in terms of the breadth and depth of data available. The openness of the UK register and data was also considered a real strength and something that other countries should seek to adopt themselves.

4.2   Changes in benefit values over time

The research indicated that providers of public goods were typically long term users of CH data. For example, all nine of the interviewees were found to have been using CH data since before it was made freely available. However, despite being long-term users, their reported use of CH data had increased significantly over time in eight out of the nine cases, due to:

- the increased breadth of data available, including the addition of PSC data;

- changes to the format and structure of datasets to make it easier for users to access, search and interrogate the data; and

- the introduction of free data, which has provided cost savings and enabled use of the data to increase during a period when many public sector budgets have been reduced.

The research also suggested that CH data has become increasingly valuable over time for providers of public goods as a result of these improvements. The introduction of PSC data was found to be of particular value for all providers of public goods by providing increased transparency and understanding of corporate structures and company ownership in the UK. For example, transparency groups and law enforcement agencies are now better able to identify the individuals who own and control companies, which is invaluable for their investigations, and for the provision of statistics, articles and reports on the ownership of UK companies.

4.3   CH data that generates the greatest user value

PSC data and the CHS service were the most commonly used and most valued pieces of CH data among providers of public goods. These were used by nearly all of the sample and reflect the focus of these users on using CH data to search for basic information on individual companies and PSCs, identify companies and individuals meeting certain criteria, and undertake data analysis and produce summary statistics. It was also suggested that CH data could be improved to add even greater value by:

- enhancing the quality of the data through increased checks to reduce duplication and provide greater consistency in the filing of company addresses;

- improving the functionality of CH data by: providing access to raw data (rather than pdf / image files); improving the effectiveness of company searches by address; and allowing users to request notification alerts of changes to particular variables or companies; and

- adding unique identifiers to the PSC data to improve the ability to search for individuals and identify links across different organisations.

ANNEXES

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Annex 1 Interview topic guide for 'providers of public goods'

General information

ASK ALL:

- Please can you start by telling me a little bit about your role and your experience of accessing and using data from CH. *Probe:*

    o *How they would describe the purpose of their role in the organisation*

    o *Role of interviewee*

    o *Extent of experience of using/accessing CH data (within current and/or previous roles)*

Use of CH data

ASK ALL:

- How long has your organisation been accessing data from CH or when did you started accessing data from CH?

- Why does your organisation access CH data? What is the CH data used for? Please describe.

- Does CH data provide any benefits for your organisation? If so, please describe.

- Who are the end users of the CH data (or the products or services that have been informed by CH data)? How, and to what extent, do they benefit from CH data?

- Does the CH data help to deliver any social benefits? If so, please describe. *Probe the beneficiaries, the scale and nature of benefits, any evidence of social benefits/value generated (directly or indirectly), and how / the extent to which CH data helps to deliver these benefits*

- Is the CH data used to develop any other products or services? If so, what and how? Who uses these products or services? Does your organisation generate income from selling products or services that use data from CH? If so, how much and what proportion of any revenue would you attribute to CH data?

In order to route the interviewee through relevant questions, please ask the following questions to understand the type of data being accessed:

- Do you pay fees for any of the data that you access from CH?

- Do you use any of the free data products and services provided by CH?

- Do you access data from CH on People with Significant Control (PSC)?

ASK THOSE PAYING FEES FOR CH DATA:

- Which of the following data products and services do you pay a fee to access from CH? *Probe for all products and services in the table below. If the interviewee is not aware of the different products/services, ask if they can describe the CH data that they pay for.*

'Paid-for' data products / services	Notes for interviewer		
	Description	**Fees**	**Registration required**
DVD directory	Monthly DVD of CH data with built-in search facility (2 versions: 1 allows export of data, the other does not)	Yes (monthly / annual fees, plus additional cost for export version)	Yes
XML gateway search service	A PC to PC service that allows users to search CH data from their own software / office	Yes, monthly subscription (plus fees for additional docs / requests)	Yes
Contact centres	Tel / email requests for data submitted to CH contact centres	Yes	Yes, to receive info
Information centres	Sites at Cardiff, Belfast, Edinburgh and London that can be used by the public to access data	Not for basic data. Yes for more detailed data / services	Not unless required to receive info
(Purchasing documents or images from) WebCHeck	Web-based search facility	No (except to purchase docs or images)	Not for basic data. Yes for more detailed info
Information not on the public register	Specified public authorities (SPAs) and credit reference agencies (CRAs) can pay to access additional information not on the public register	Yes (applications = £54; individual requests = £5)	Yes

- Does your organisation pay for any other data or services from CH? If so, please can you describe these other products or services.

  - *Note for interviewer: This could include 'bespoke products' (such as bespoke data on liquidations, insolvencies, forms filed, etc.) or requests for management information that is not available from the other data products.*

  o *Probe: name / type of product or service, the data provided, the frequency of use and the cost.*

For each 'paid for' product that they use, please ask:

- How frequently does your organisation access this product?

- How much do you pay to access this product?

  o *Ensure you record detail of costs per month / year (total costs and per product/ type of output) and the type of costs (e.g. regular subscription costs; costs for particular products; and ad hoc / variable costs for particular outputs)*

- What is this product used for? Please describe.

ASK THOSE ACCESSING FREE DATA:

- Which of the following free data products and services do you access from CH? *Probe for all products and services in the table below. If the interviewee is not aware of the different products/services, ask if they can describe the free data that they use.*

Free data products	Notes for interviewer		
	Product description	**Fees**	**Registration required**
Companies House Service (CHS)	Web-based search facility of real-time data	No	No, unless receiving email alerts
Companies House Service (CHS) – API service	CHS data (as above) but in a format that can be searched using other software	No	Yes, to receive data via email
WebCHeck	Web-based search facility	No (except to purchase docs or images)	Not for basic data. Yes for more detailed info
Company data product	Monthly snapshot for bulk data download (basic details)	No	No
Accounts data product	Downloadable zip-file of filed accounts (daily/monthly data)	No	No
People with Significant Control (PSC) data product	Downloadable daily snapshot of all listed PSCs	No	No
Uniform resource identifiers (URI)	Service providing URIs (unique URLs) for each company listed with CH	No	No
Mobile app	Search facility for Android and iOS devices	No	No
Information centres	Sites at Cardiff, Belfast, Edinburgh and London that can be used by the public to access data	Not for basic data. Yes for more detailed data / services	Not unless required to receive info

- Does your organisation access any other free data or services from CH? If so, please can you describe these other products or services.

    o *Note for interviewer: This could include requests for bespoke data and/or management information that is not available from the other data products.*

    o *Probe: name / type of product or service, the data provided, the frequency of use*

- How frequently does your organisation access each of those free data products? *Probe for all 'free' products that they are currently using*

- How does your organisation use the free data provided by CH?

- Has the increased availability of free data affected your organisation in any way? If so, how and why? *Probe: increased use of CH data, reduced costs / increased efficiency, increased social benefits from increased data use*

ASK THOSE ACCESSING PSC DATA:

- Please can you tell me how your organisation accesses data from the PSC register.

- How frequently does your organisation access PSC data from CH?

- What is the PSC data used for?

- Has the provision of PSC data affected your organisation in any way? If so, how and why? *Probe: increased use of CH data, development of new services, reduced costs / increased efficiency, increased social benefits from data use*

Costs of using CH data

ASK ALL:

- Do you have to process, clean or do anything else with the data you access from CH before you are able to use it? If so, please can you:

    o Describe what is involved in these activities and the reasons for doing so.

    o State which CH data products are processed or cleaned in this way.

    o Estimate the approximate time spent and any costs incurred in these activities.

Key trends and future opportunities

ASK ALL:

- Has there been any change over time in the CH data products that your organisation accesses or the frequency of access?

    o If so, how, when and why has it changed? *Probe: extent to which this is linked to when products became free to access or when new products were introduced (e.g. PSC data)*

    o Do you think that the data you access from CH has become more or less valuable over time? If so, why? *Probe: the extent to which changes are due to the type/range of products/services available, the introduction of free/PSC data*

- Are there particular CH data products that are most useful, add most value for your organisation, and/or add the greatest social benefits? If so:

    o Which CH products add the greatest value and why?

- Are there any ways in which the provision of CH data could be improved to make it easier for your organisation to use?

Current use of complementary data sources

ASK ALL:

- Do you use any other data sources in combination with CH data? If so:

    o What are these other data sources and why do you use them?

    o What are the key differences between the data provided by CH and these other sources in terms of the type of information provided, the way it is presented/accessed, the quality of the data/product?

    ▪ Do the other sources provide information that is not available from CH? If so, what? *Probe for extent of overlap between CH data and other sources and extent to which they provide additional data*

    o How easy or difficult is the processing of CH data to enable it to be combined with these other sources? Why do you say that?

Availability of substitutes for CH data

ASK ALL:

- If CH data did not exist, are there alternative sources of data that you could use instead?

    If so:

    o What are these alternative sources?

    o How does the data available from these alternative sources differ from the data provided by CH? Is it of a similar quality to CH data? If not, please describe any differences.

    o Please can you estimate the time and costs associated with accessing and processing data from these alternative sources? How might the time and costs be expected to differ from the costs associated with accessing and processing CH data? *Probe if it is possible to quantify these estimates*

    o Do you think there would be any changes to the social benefits that are likely to be generated, relative to the current use of CH data? If so, please describe. *Probe the expected scale and nature of changes to benefits, the reasons for the changes, and the beneficiaries likely to be affected by any changes*

    o Why do you choose to use data from CH? Are there benefits provided by CH data, compared to these alternative sources? If so, what? *Probe: cost savings, greater efficiency, better quality of data and/or products provided, greater breadth of information and/or products*

    If not:

    o Are there any other ways of accessing the data and type of information that you are currently accessing from CH?

        If yes, probe:

        ▪ *what this might be expected to involve;*

        ▪ *how long it would take to access/produce the required information, and the estimated costs of doing so; and*

        ▪ *what would be the impacts for your organisation (and any end users) of accessing data in this way, rather than using data from CH (e.g. higher costs, lower efficiency, lower quality products and services, or things that they would not be able to provide).*

        If no, probe:

- *what their organisation would do in the absence of CH data; and*

- *the resulting impacts for their organisation and/or their end users (e.g. is there information or are there services that they would no longer be able to provide; what would be the impact of not providing this information or these services?)*

Closing remarks

ASK ALL:

Are there any other points you would like to make about CH data that have not already been discussed?