Cass Business School
CITY UNIVERSITY LONDON
EST 1894

CGAP
Centre for Charitable Giving and Philanthropy
www.cgap.org.uk

CGAP WORKING PAPER

(Please do not cite without author's permission)

Report on a 'Big Data' feasibility study

The scope for linking data on the corporate giving of the largest 300 corporate donors with that held in the Workplace Employment Relations Study

Professor Cathy Pharoah, CGAP, Cass Business School
Meta Zimmeck, Research Associate, Cass Business School

October 2014

This work was supported by ESRC research grant RES-593-25-0004 to the Centre for Charitable Giving and Philanthropy, Cass Business School, City University. For any queries on this paper, contact Catherina.Pharoah.1@city.ac.uk

Abstract

This paper reports the experience of trying to match longitudinal data on corporate giving with that of the Workplace Employment Relations Survey (WERS). There is considerable appeal in attempting to match up such datasets. It was found that while in principle the data could be matched through the common identifier of company IDBR number, risks of disclosure mean that this is a fairly laborious process involving intermediaries and that the number of likely company matches in the two datasets was not high enough to enable rich analysis. It was also found that although there is a substantial body of research on factors correlated with corporate giving, employee relations have received little detailed attention.

Introduction

This paper reports on a 'big data' feasibility study of combining published data on corporate giving by the largest corporate donors with data from the Workplace Employment Relations Survey (WERS), as a potential way of finding out more about the characteristics of companies which participate in charitable giving and corporate community investment programmes. The work was funded as part of a grant to the Centre for Charitable Giving and Philanthropy (CGAP) at Cass Business School, City University, RES-593-25-0004, in 2013.

Within a context of growing government and public interest in the scope for increasing corporate giving, there is a new imperative to understand more about the field, including the motivations of companies which make philanthropic donations and any distinct characteristics which they might have as compared with those which do not give. The aim of this project was to determine the feasibility of matching up published data on corporate giving with data mined from the Workplace Employment Relations Study (WERS) in order to explore whether there were any potentially significant relationship between patterns and trends in corporate giving and workplace characteristics and relations.

About data on corporate giving

CGAP at Cass has carried out and published regular annual updates of the corporate giving of the UK's largest corporate donors for a number of years. (Pharoah, 2008-2011: Pharoah 1996-2006) These publications are limited to setting out a small range of the financial characteristics of the largest 300 corporate donors (by value of giving) amongst companies listed on the UK stock market. Data is extracted from companies' annual reports and accounts to Companies House by a number of commercial suppliers. The total figure reported by a company on its giving may include contributions of cash, employee time and commitment, products, expertise, facilities and equipment. (Pharmaceuticals, for example, make very large product donations.) Companies increasingly report a combined cash and in-kind giving figure, and as from 2014 are under no obligation to provide a breakdown on the constituent elements of the topline figure.

About the WERS

The WERS is the government's flagship survey of employment relations in Britain, and collects data on a longitudinal basis. The most recent survey, 2011, is the sixth in the series which included the years 1980, 1984, 1990, 1998 and 2004. It was co-sponsored by the Department for Business, Innovation and Skills; the Advisory, Conciliation and Arbitration Service; the Economic and Social Research Council; the UK Commission for Employment and Skills; and the National Institute of Economic and Social Research (funded by the Nuffield Foundation). Fieldwork took place from March 2011 to June 2012. WERS data are held by the UK Data Archive.

The objectives of the WERS series are:

- To map British employment relations over time
- To inform policy and practice and stimulate debate
- To provide a comprehensive and statistically reliable dataset on British workplace employment relations for public use.

WERS 2011 re-surveyed 989 workplaces that were surveyed in 2004 and were still in existence, and 1,691 new workplaces – a total of 2,680 workplaces. The new workplaces were a stratified random sample of workplaces drawn from the Inter-departmental Business Register (IDBR)[1] in August 2010. All workplaces had a minimum of 5 employees and operated in Sections C to S of the Standard Industrial Classification (SIC) 2007. Larger workplaces were oversampled in order to enable more complex analysis, and data were weighted to compensate for non-responses and 'unequal selection probabilities'. Overall the 2,680 workplaces were 'representative of all British workplaces with 5 or more employees', a population that accounted for 35 per cent of all workplaces and 90 per cent of all employees.

For each workplace WERS 2011 gathered information from a number of different sources:

- Managers: face-to-face interview with the most senior manager responsible for employment relations; average length 90 minutes; N = 2,680; with additional information on the demographic profile of the workforce supplied prior to interview and financial performance information supplied after interview
- Employee representatives: face-to-face or telephone interview with the most senior lay representative of the largest union or, if not available, the most senior non-union representative sitting on a joint workplace consultative committee or, if not available, a

[1]Established in 1994, the IDBR is the comprehensive list of UK businesses used by government for statistical purposes. It is the main sampling frame for surveys of businesses carried out by the ONS and by other government departments, and a key source for analysis of business activity. It covers 2.1 million businesses in all sectors of the UK economy. See 'Introduction to the Inter-Departmental Business Register (IDBR)' at http://www.ons.gov.uk/ons/about-ons/products-and-services/idbr/index.html. The Department for Business, Innovation and Skills publishes annual overviews. For financial year 2011-12 see *Business Population Estimates for the UK and Regions 2013; Statistical Release, 23 October 2013* (London: BIS, 2013).

stand-alone employee representative; average length 30 minutes; N = 797 union representatives and 205 non-union representatives

- Employees: self-completion questionnaire to be filled in by all employees in workplaces with 25 or fewer employees and 25 employees selected randomly in larger workplaces N = 21,981. (van Wanrooy et al, 2013)

WERS 2011 provides information on a broad range of topics, including, profile of workplace (main activity/industrial sector, place in corporate structure, ownership, years in operation); demographic characteristics of workforce; segmentation of employment (full-time/part-time; in-house/contracted out; permanent/temporary/zero hours); reward and remuneration; management (locus and nature of decision-making); management-employee relations; membership and recognition of trade unions; recruitment, training and appraisal; equal opportunities policies and practices; work-life balance and impact of recession.

Methodology of feasibility study

The main aims of the feasibility study were to explore and establish:

- whether in practice data on individual companies held in the two datasets could be linked;
- the number of companies which could be matched, and the adequacy of the sample as a basis for further statistical analysis;
- the variables in the two data-sets which could be usefully explored for correlation.

Results of the feasibility exercise

1 Linking corporate donors with the WERS sample

The only link to companies in both datasets was the company IDBR number. The first part of the exercise was to determine whether it would be possible to gain access to IDBR numbers for the companies, and then have these cross-matched to the WERS company sample.

The UK Data Service confirmed that it can access both the ONS annual Business Population Estimates and the WERS 2011 through the UK Data Archive, though it does not provide access to the former. An alternative might be the Business Structure Database (BSD), which contains a small subset of variables for almost all UK businesses. It is derived from the Inter-Departmental Business Register (IDBR), the same source used for the ONS annual Business Population Estimates. (See http://discover.ukdataservice.ac.uk/catalogue/?sn=6697&type=Data%20catalogue)

Corporate donor data could be linked to the BSD data, providing the data contains a Customer Reference Number (CRN), namely the reference number assigned to a business when it registers with Companies House. UKDS hold a CRN – IDBR reference lookup table, supplied by ONS. This table is not available to researchers because of disclosure risk. This arises because it is relatively easy to find the names of companies on the Companies House website using the CRN, so once these are

linked to the ONS business data, there is a bigger risk of breaching confidentiality than is acceptable. UK Data Service, however, would be able to link any variables from a data set such as the largest corporate donors, to the IDBR reference numbers, and then make the resulting data file available to an external researcher without the CRN included. This could then be linked to the ONS business data (e.g. BSD) for the purposes of comparative research.

As the WERS 2011 dataset contains IDBR reference numbers, it would be possible to link the corporate donor data to WERS (following the process described above), in order to compare corporate donors with other companies. Access to the data and any linking is subject to approval from the data owners. UK Data Service provides access to WERS 2011. (see UK Data Service catalogue http://discover.ukdataservice.ac.uk/catalogue/?sn=6712&type=Data%20catalogue.) Approved researcher status would be necessary to access the data. Access is project-specific only, and it is necessary to apply in the same way for every project that requests the use of controlled data.[2]

2 Issues of sample size

Having established the feasibility of linking the datasets in principle, the research potential of such an exercise was explored. A key issue was the number of company matches which could be made. As noted above, WERS 2011 gathered information from 2,680 workplaces. Even though it oversampled larger workplaces, it only captured data on a very small proportion of workplaces with 100 or more employees. Only 4 percent of its sample had between 100 and 499 employees, and a further 1 percent with 500 or more employees. This meant just 5 percent of the sample in total, or 134 workplaces. (van Wanrooy et al, ibid)

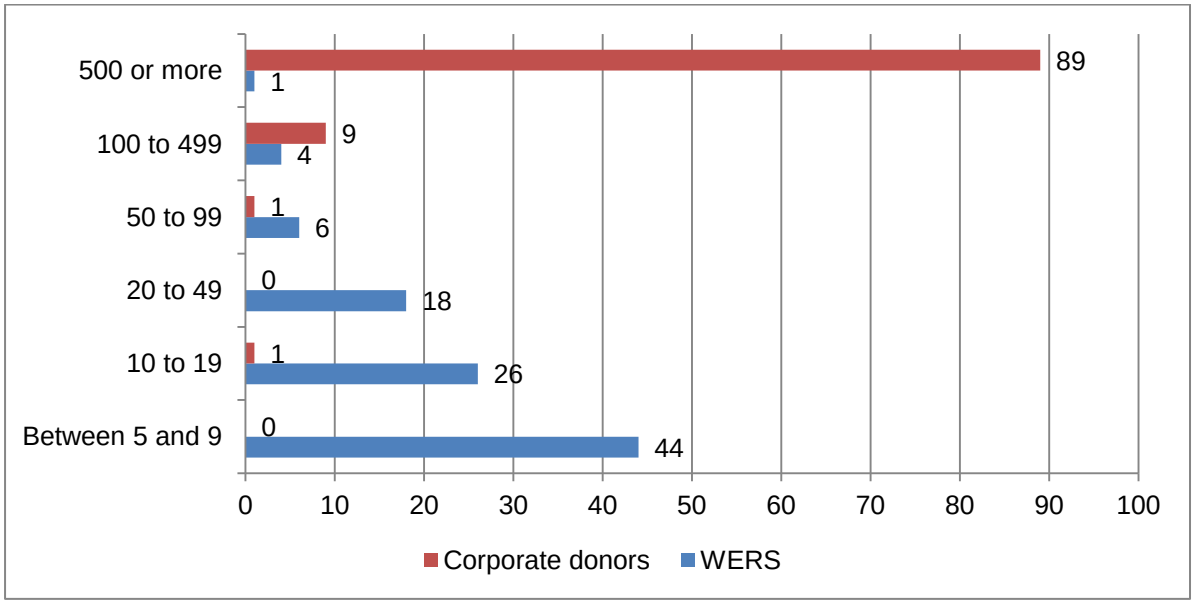
In contrast, the top 300 corporate donors in 2009/10 (the most recent list available at the time of this project) were all large companies with an average workforce of 23,388 employees. Only 2 percent had 99 or fewer employees in total; 9 percent, between 100 and 499 employees; and 89 percent 500 or more employees.

In addition, as noted above, WERS 2011 investigated workplaces of companies that operated in sectors in Sections C to S of the Standard Industrial Classification (SIC) 2007. This means that *inter alia* it excluded companies in the agriculture, forestry and fishing and mining and quarrying sectors and thus, potentially, a number of top corporate donors.

---

[2] To apply for access to any datasets offered by the UK Data Service, visit http://ukdataservice.ac.uk/ Use the 'Discover' service on the top right hand side of the homepage to find the required datasets, then follow the applying instructions given on the 'Access to the Secure Lab' pages of the website http://ukdataservice.ac.uk/get-data/how-to-access/accesssecurelab.aspx . It is 'mission critical' that all those who will be involved with the data are registered with the UK Data Service. Once approval from the data owners has been received, researchers are invited to attend a training as the last part of the application process.

Comparison of distribution of employees by workplace (WERS 2011) and all employees of top 300 corporate donors, by percentage



Even assuming that large corporate donors had multiple workplaces (and therefore multiple chances of being picked up in WERS 2011) and that an individual workplace is a proxy for a whole company, there is a poor fit between companies included in WERS 2011 and the top 300 corporate donors. If all of the workplaces in WERS2011 with 100 or more employees were among the top 300 corporate donors, the total number of 134 would be too small for statistically viable analysis except at a basic level, and would exclude key donors.

Potential contribution to research on corporate philanthropy

Research on corporate philanthropy, which began in the 1960s in the United States, has surged and diversified since the 1990s. It is less well-developed in the UK than in the United States, although there is a substantive body of UK work. Most research has concentrated on quantifying the amount of giving and defining trends, identifying differences between givers and non-givers, exploring motivations for deciding to give and giving a particular amount and describing administrative and governance arrangements that are associated with giving. Motivations for giving are a popular theme, and explanatory theories put forward include:

- Managerial utility maximisation: giving is a diversion of discretionary profits away from the company or its shareholders to enhance managers' personal reputations, etc
- Profit maximisation: giving is a mechanism for increasing the company's profits
- Stakeholder: giving is a mechanism for satisfying the conflicting demands of stakeholders, including customers, shareholders, employees, suppliers, government bodies, creditors, and public interest groups. Sub-theories include

    - Strategic stakeholder management: giving is the product of prioritising stakeholder groups for which showing concern is likely to provide the greatest gain;
    - Intrinsic shareholder commitment: giving is part of the company's normative commitment to treating stakeholders well, and is the product of moral concern or sense of duty.
- Agency: giving arises out of the incompatibility of interests of shareholders and agents (managers) when ownership and control are dispersed and oversight is weak
- Leadership: giving is an important aspect of managers' discretion, whether as the product of stewardship, managers' pro-organisational and collectivist rather than self-serving and individualist behaviours, transformational leadership (charisma and the capacity to inspire) or background characteristics (education, previous work, beliefs). (Afshar, 2012)

Research on corporate giving has mainly concentrated on the following factors :

- Amount of giving, cash and or non-cash, in total or by different types of companies
- Impact of external factors on giving:
    - Business cycle/recession
    - Taxation, including Corporation Tax and Gift Aid
    - Ethical consumerism
    - Visibility (exposure to government regulation, stakeholder activism, public criticism) including advertising, institutional membership/leadership (e.g. FTSE, PerCent Club)
- Characteristics of companies (givers/non-givers):
    - Size (variously defined by number of employees, assets)
    - Age (years since incorporation)
    - Industry (variously defined – e.g. SIC or FTSE)
    - Industry concentration (greater or lesser competition)
    - Ownership including proportion of share capital owned by insiders/outsiders, proportion of share capital owned by largest shareholder or blocs of large shareholders, proportion of shareholders inside/outside UK
    - Governance including proportion of insider or women board members, rate of turnover of chief executives
    - Sponsoring relationship with corporate foundations
    - Organisational arrangements for promoting giving and other aspects of corporate social responsibility including dedicated departments with managers, policies and strategies, programmes for employee volunteering and giving
    - Leverage (ratio of debts to assets or equity)
    - Profitability (ratio of net profits before interest and tax to turnover)
    - Discretionary spending, including dividends, investment in research and development and cash flow.

Very little of this research has focused on employees other than as a component of measuring profitability. However, some research based on stakeholder theory, whether strategic or intrinsic, which treats employees as stakeholders, has done so. For example, Brammer and Millington explore the arrangements used by companies in the UK to manage corporate community involvement and find them 'highly statistically significant'. (Brammer et al, 2003) That is, they find that organisational

form varies according to industry, with companies in the finance sector more likely to manage corporate community involvement through dedicated departments; those in the utilities sector, through marketing or PR departments; and those in the services sector, through central administrations. They also find that the type of corporate community involvement varies according to organisational form, with those companies with dedicated departments having a higher level of employee involvement in total and in terms of volunteering on company time and matching employee giving than those with marketing/PR departments and central administrations. Finally, they find that priorities for corporate community involvement vary according to organisational form, with those companies with dedicated departments being more likely to prioritise educational projects and projects associated with disability than those with marketing/PR departments and central administrations and those with marketing/PR departments being more likely to prioritise environmental projects than those with dedicated departments and central administrations.

In an unusual qualitative study Foster and colleagues (2009) look at motivations for engaging in philanthropy, features of implementation and expected outcomes in a small sample of company givers in Canada and describe a typology of givers, which includes employee involvement as an important factor. On the one hand 'donors' see themselves as separate from the community. They are reactive in their motivations and give 'under duress to protect their reputation, to support the pet projects of senior executives or board members, or… respond to a community crisis'. They give to short-term projects, mainly overseas; use an *ad hoc* application process; and do not involve employees and other stakeholders. They have few expectations about their giving, which 'appears to revolve around the exchange of dollars for a modicum of legitimacy'.

On the other hand 'sponsors' see themselves as operating in the community. They give more consistently, over the mid- to long-term; use a somewhat formal application process; and give employees and other stakeholders an opportunity to participate. They expect benefits to accrue to the company through supporting projects 'based on their geographical proximity to the company's operations, or based on their emotional proximity to the company's employees', but they are mainly 'exchanging their resources for community recognition and good public relations'.

Finally 'partners' see themselves as engaging with the community. They are motivated by a desire to improve society. They base their giving on a long-term, sometimes multigenerational, commitment; use a very formal process of application and evaluation; and involve employees and other stakeholders in decision-making through extensive investigation and consultation as 'part of organizational expectations'. They expect their giving to 'address widely recognized social problems' and be 'less about being seen to do the right thing and more about identifying and actually executing the right thing'. Foster and colleagues suggest that these types are discrete and not points on a continuum or hierarchy – that is, although company givers may evolve over time they do not or cannot change their basic nature. Partners are, in effect, the gold standard: 'What seems to differentiate partner companies from the rest is that the organization's vision of its core business included philanthropy from the outset. The data suggest that without this founding vision, no matter how many renewals, revisits, or revisions are made to philanthropic activities, they never become thoroughly integrated into the soul of a company. Partner companies are most likely born, not made.' (Foster et al, 2009)

Caulfield highlights the dissemination of corporate community investment practices and uses as his measures of effectiveness employee volunteering and corporate donations. (Caulfield, 2013) Like Brammer and Millington (op cit), he focuses on organisational and administrative arrangements which ensure the health of corporate community investment, including dedicated support for employee volunteering/corporate giving, monitoring and evaluation data, and strategies, policies and practices which embed employee volunteering and corporate giving in the company's activities.

It might be possible, therefore, to use data from WERS 2011 to explore the workplace's involvement of employees as stakeholders. WERS 2011 included questions about management's approach and performance in communicating, consulting and involving employees in formal structures such as joint consultative committees, works councils, briefing meetings, problem-solving groups; its views on engagement with employees through recognition of trade unions; its capacity to resolve disputes and grievances; its provision of secure and reasonably well-paid jobs and compliance with best practice in health and safety and equal opportunities. It also included questions on employees' sense of control over and satisfaction with work process, life balance and employment generally. It might be possible to use these questions as a proxy for the workplace as a 'good employer', and explore whether and how such factors were also linked to corporate giving.

In conclusion

The feasibility study showed that it would be possible to link corporate giving data with WERS 2011. It also revealed that as an exercise in open data or 'big data', this would be relatively laborious because of the need to involve intermediaries to protect against disclosure risk. Finally it was established that while the prospect of using such high-quality longitudinal data as WERS 2011 for a new (and unusual) purpose is attractive, and might be valuable in taking forward an understanding of employees as potential stakeholders in corporate giving decisions, research potential was limited because of the relatively small size of the matched sample.

References

Afshar, Taha (2012). 'Corporate Philanthropy in the UK and US: The impact of cycles, Strategy and CEO Succession', Ph.D. dissertion, London School of Economics and Political Science.

Brammer,S, Millington,A (2003) 'The Effect of Stakeholder Preferences, Organizational Structure and Industry Type on Corporate Community Involvement', *Journal of Business Ethics* 45(2003), 213-26.

Caulfield,P. (2013) 'Love not Money: Substitution and complementary effects in the dissemination of corporate community investment practices', Paper presented at CGAP Conference, 10 May 2013 at http://www.slideshare.net/givingcentre/love-not-money-paul-caulfield

Foster, M.K, Meinhard, A.G, Berger, I.E, Krpan, P. (2009) 'Corporate Philanthropy in the Canadian Context: From Damage Control to Improving Society', *Nonprofit and Voluntary Sector Quarterly* 38(3) (2009): 441-66.

Pharoah C. (1996-2011). *Charity Trends/ Dimensions of the Voluntary Sector, Annual Editions* 1996-2006. Charities Aid Foundation, West Malling. *Charity Market Monitor*, Annual Editions 2008- 2011. CaritasData. Wilmington. London