

**Enabling an understanding of the contribution of female-owned businesses to the UK economy:
A review of the evidence gaps**

Dr. Rebecca Harding
Founder and Managing Director
Delta Economics
www.deltaeconomics.com
rebeccaharding@deltaeconomics.com

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The Objectives of the Report and the Challenges

The purpose of the report is to review datasets and literature with a view to looking at available data and analysis, discussing the strengths and weaknesses of the existing evidence base and identifying what data is needed in order to understand more about the growth path of female-owned businesses and the economic wealth and social value they create. It first reviews publicly available international comparative data sets, international country specific datasets and UK datasets to look at their scope, degree of gender and ethnicity disaggregation, comparability and the extent to which they enable analysis of the value (economic and/or social) created by women and ethnic minorities to be assessed.

The second section examines key academic publications and research that has focused specifically at entrepreneurial performance and gender and/or ethnicity. Some 85 articles from the leading entrepreneurship journals, conferences and research centres internationally were broadly about performance of some kind and selected from more than 500 articles to be reviewed for this section. The paper focuses on just 12 of these with the strongest coverage of performance issues. It is found that although there are a few, relatively small and country specific studies of women and the differences with men in terms of how they formulate strategies or the impact of their previous experiences, there are no articles that look specifically at Gross Value Added, Return on Investment or Social Return on Investment.

The paper then goes on to look at the data gaps that appear to exist from this research and, hence, to draw some conclusions about the next steps for any research and for policy. It is argued that there is scope for gender disaggregating existing data collected by national statistical offices, as indeed the Danish authorities appear to have done and as the World Bank does. Even these datasets are still only disaggregated to give a level of prevalence and not to yield levels of turnover, investment, job growth or productivity. Thus, alongside this, it is argued, systematic and regularly collected survey data would be necessary to look at the actual experiences of growth of entrepreneurs by gender and ethnicity thereby

enabling estimates of growth potential as well as any support gaps to be assessed.

What evidence has been used ?

Take, the statement that, “If women started businesses at the same rate as men, there would be 150,000 new businesses each year, creating many new jobs.” We do know, through consecutive years of research from the Global Entrepreneurship Monitor (GEM) UK data that women are half as likely to start businesses as their male counterparts.¹ In 2007, female entrepreneurship was 3.6% of the UK female adult population aged 18-64 compared to 7.5% of the male working-age population and this relationship has been consistent for the last six years. It doesn’t take too much to turn this percentage into an absolute number by taking the number of annual business registrations a year given that GEM suggests a third of all start-ups are female.

Yet data on the gender of the founder directors of businesses and their subsequent share ownership is not routinely collected, as this report sets out to demonstrate. So although we can estimate the numbers of businesses that would be created reasonably accurately since the ratios have not changed, we cannot say how many jobs they create or indeed anything else about them at all. In fact, because successive academic studies (all based on different datasets) have suggested that women’s businesses tend to be smaller, it might be that their overall impact on jobs and wealth creation is limited.

The long and the short of it is that we just don’t know. Data from the US suggests that there is a strong and vibrant cohort of women’s businesses that have survived to be older than three years, that have substantial turnovers of greater than \$100,000 and whose owners have growth and development aspirations for their companies.² This so-called “Missing Middle” constitutes 91% of female entrepreneurs in total or 16% of all female entrepreneurs if micro-enterprises are excluded (with less than 10 employees). Based on a

¹ Harding, R., Hart, M., Jones-Evans, D. and Levie, J., (2008): *Global Entrepreneurship Monitor, UK monitoring report, 2007*. Available from <http://www.gemconsortium.org/download/1221053796587/GEM%20UK%202007%20Report.pdf>

² Womenable (2007): “*Mapping the Missing Middle: Determining the Desire and Dimensions of Second Stage Women Business Owners*.” http://www.womenable.com/userfiles/downloads/ResearchinBrief_Missing_Middle.pdf

survey of 92 members of the National Association of Women Business Owners who met the age and turnover definitions, suggests that by helping the micro businesses alone to grow would increase their employment by 31%. Again, though, this is acknowledged to be a pilot study that highlights the potential of this group of businesses but ultimately is neither comparable nor based on a large enough or representative enough sample to do anything other than that.

So what do we know about women's entrepreneurship and the businesses that they run?

We do know:

- Women are half as likely as men to be entrepreneurially active.³
- This difference disappears for businesses that are set up for social, community or environmental purposes (social enterprises).⁴
- The flows into self employment are greater in sectors traditionally dominated by female employment such as care, health, education and community services.⁵
- There appear to be systemic problems in the capacity of female-owned businesses to grow and access growth finance on the basis of literature and case study work.⁶
- Women are less confident than men about their capacity to set up businesses and grow them and, even when successful, have typically started with lower expectations of growth and turnover than their male counterparts.⁷

The evidence base to support demand-side and lower-end supply side measures has historically been good and supplied empirically through GEM, the BERR Household

³ Harding, R. et al (2008): Harding, R., Hart, M., Jones-Evans, D. and Levie, J., (2008): *Global Entrepreneurship Monitor, UK monitoring report, 2007*. Available from <http://www.gemconsortium.org/download/1221053796587/GEM%20UK%202007%20Report.pdf>

⁴ Harding R. and Harding D. (2008): "Social Entrepreneurship in the UK." <http://www.deltaeconomics.com/media/social2008fullreport.pdf>

⁵ Harding, R. (2007): "The State of Women's Enterprise in the UK." Prowess <http://www.deltaeconomics.com/media/SOTRUK2007.pdf>

⁶ Carter, S., Shaw, E., Lam, W. and Nelson, F. (2007): Gender, Entrepreneurship and Bank Lending: the Criteria and Processes used by Bank Loan Officers in Assessing Applications *Entrepreneurship Theory and Practice* May 2007 pp 427-444. See also, Harrison, R. and Mason, C (2007): "Does Gender Matter? Women Business Angels and the Supply of Entrepreneurial Finance." *Entrepreneurship, Theory and Practice* May 2007, pp 445-472. Cowling, M. and Harding, R. (2005): "Gender and High Growth Businesses in the UK." Paper to the Diana International Conference, Stockholm, May 2005. Carter, S. and Shaw, E. (2006): "Women's Business Ownership: Recent Research and Policy Developments." BERR 2006.

⁷ Harding, R. (2005): "Stairways to Growth" Prowess; Harding, R (2007): "The State of Women's Enterprise in the UK." Prowess.

Survey and the Labour Force Survey. But much of this tells us about entrepreneurship as a labour market phenomenon rather than as a potential driver of wealth creation. In short, many of the datasets in the UK and beyond are telling us about the *prevalence* of female entrepreneurial activity in the labour market. They are not telling us about the businesses that women run or, indeed, about how they grow them, the challenges they face, how they overcome those challenges and the value (social and economic) that they create in the economy.

This report, then, undertakes a review of the data sources and literature globally. From the discussion so far it appears that we do not know the following:

- The growth path of female-owned or managed businesses (eg access to finance, use of business advice, support from professional services, turnover and employee growth, capital invested).
- The barriers, challenges and issues that female owned businesses have faced compared to male as they have grown.
- The relative innovativeness of female owned businesses compared to male.
- The relative growth potential of female owned businesses compared to male.
- The sectoral make-up of female-owned businesses
- The returns of investment: if female businesses are predominantly socially oriented sectors, would social return on investment be a more appropriate way of evaluating their performance than return on investment?⁸
- The productivity of female owned businesses compared to male owned and how this changes over time as the business grows.
- The total factor productivity and hence Gross Value Added (GVA) of female owned businesses compared to male and how this changes over time.

Building on Government Initiatives

⁸ *Return on Investment can be simply calculated by dividing the total investment in company by the level of turnover in any one time period. Social return is more complex in that it relies on the company itself having a strong understanding of the financial value of its social, community or environmental impact.*

Whatever the inadequacies of the evidence base thus far, the commitment towards promoting women's enterprise is clear. The UK government has done much to stimulate activity and awareness of women's enterprise issues through the original Strategic Framework for Women's Enterprise in 2003, the Women's Enterprise Task Force established in 2006, through the Ambassador programmes regionally and through the Enterprise Strategy, published in March 2008 which provided a commitment for a £12.5 million co-investment Women's Investment Fund and for regional Women's Business Centres to support women in their local and regional geographies.

The next stage is to provide the longitudinal and comparative evidence base such that the market failures experienced growth-oriented female owned businesses can be identified and understood. This report is a first step in the process of doing just that and concludes that if we are to generate sustainable women-owned and led businesses then we do need to ensure that the evidence base can support this type of policy by:

1. Providing a regularly updated quantitative picture of the entrepreneurial and Small and Medium sized Enterprise (SME) sectors that is gender disaggregated. This would mean using current business statistics collation (for example through the Inter-Departmental Business Register [IDBR] and HMRC and coordinated through the Office of National Statistics [ONS]) to ensure that gender and ethnic origin were routinely recorded on Companies' House data. This would mean that business statistics such as turnover estimates and performance indicators from company accounts could be analysed by gender and ethnicity.
2. A regular survey-based vehicle that captured the experiences and growth estimates of entrepreneurs themselves to estimate how many of the companies fell into "missing middle" or "high growth" categories, their enterprise "journeys" and to calculate firm level productivity and returns on investment.

Reviewing the evidence base

Academics and policy-makers alike point to the importance of female-owned businesses as a source of productivity for the economic growth whether in the UK⁹, the US¹⁰, or Europe.¹¹ Research over the past ten years has substantially increased in volume,¹² has done much to demonstrate the prevalence of women's entrepreneurship in the labour market¹³ and has highlighted some of the systemic barriers that women face when setting up a business.¹⁴

However, there are still relatively few published papers and datasets in the UK or internationally that explicitly set out to measure the performance of women-owned and managed businesses either in comparison to their male counterparts or in comparison to other women-owned business.¹⁵ There are still fewer publications that look at women from Minority Ethnic Communities.¹⁶ The result is the "Missing Middle" of women entrepreneurs referred to above, and including those from Minority Ethnic groups, who potentially contributes much to the economy but about whom we know relatively little.

This section is an overview of existing available data in tabular form. Table 1 looks at the organisations where data is held or collected, the vehicle used to collect the data, the focus of the data (in other words what researchers have sought to achieve in constructing the data set), the method and frequency of collection, whether or not it gender disaggregates and whether or not it is capable of providing economic or social impact and value creation measurements. It analyses these in five groups:

⁹ BERR, 2008: "Enterprise: Unlocking the UK's Talent." <http://www.berr.gov.uk/files/file44992.pdf>; Harding, R (2007): "The State of Women's Enterprise in the UK." Prowess; Carter, S. and Shaw, E. (2006): "Women's Business Ownership: Recent Research and Policy Developments." BERR 2006.

¹⁰ De Bruin, A., Brush, C. and Welter, F. (2007): "Advancing a Framework for Coherent Research on Women's Entrepreneurship." *Entrepreneurship: Theory and Practice* May 2007, pp 323-339; National Women's Business Council (2006): "Women-owned firms, 2002" US National Census Bureau Survey of Business Owners, Company Statistics, 2002.

¹¹ <http://ec.europa.eu/enterprise/entrepreneurship/women.htm> see also Hoeg-Koch, D. (2008): "Kvinder Kan: Få succes med egen virksomhed." <http://www.ebst.dk/file/16595/kvinderkanfaasuccesmedegenvirksomhed.pdf>

¹² Blackburn, R. and Smallbone, D (2008): "Researching small firms and entrepreneurship in the UK: developments and distinctiveness." *Entrepreneurship Theory and Practice* March 2008 pp 267-275

¹³ See discussion above and references to Harding (2005, 2007) and Carter and Shaw's (2006) work.

¹⁴ Fielden, S., Davidson, M., Dawe, A. and Makin, P. (2003): "Factors inhibiting the economics growth of female owned small businesses in North West England." *Journal of Small Business and Enterprise Development* Vol 10, No 2, 2003, pp 152-166

¹⁵ Notable exceptions include Verheul, Carree and Thurik 2007, National Women's Business Council 2006, Gundry and Welsh 2001 and Manolova, Carter, Maneu and Gyoshev (2007). The important thing about the comparison within genders is that it allows analysis of the heterogeneity of the types of women-owned businesses. Not all women can be assumed to have the same aspirations and understanding this type of diversity allows policies to be more effectively targeted at specific market failures.

¹⁶ Deakin, Ishaq, Smallbone, Whittam and Wyper 2007; Fraser, 2008.

1. International datasets: these are regular statistical datasets that, where possible, provide data on entrepreneurial and small firms which are comparable with other countries. Such datasets are often compilations from national statistical offices and therefore are nevertheless limited in terms of the frequency of data collection, the variables collected and, most worryingly, the definitional assumptions that underpin them. An example of this is the extensive use of Value Added Tax (VAT) registration and de-registration data in the UK to proxy for start-up activity as well as for businesses closures – an approach that does not directly compare to business registration and de-registrations with statistical agencies in other countries.
2. National, or country specific datasets: this is not an exhaustive list but is intended as illustrative of best practice. Thus, for example, the Nordic countries, and Denmark in particular, disaggregate business registration statistics allowing an understanding prevalence and scale but do not have the turnover, innovation and investment data that is available for all businesses disaggregated by gender. The US Census Bureau collects data that allows scale and revenues to be calculated by gender and ethnicity but has two major limitations: it does not appear from this overview to have data that allows an accurate assessment of productivity to be constructed and the frequency of the survey is once every five years. The last survey was 2002 with 2007 data unlikely to be analysed and available for further analysis until 2010.¹⁷
3. UK government-specific datasets: There are several sources of data that are routinely used for assessing the prevalence, scale and scope of entrepreneurship as well as for looking at the attitudes and motivations of entrepreneurs. Some are survey-based vehicles such as the Labour Force Survey (LFS) and the Household Survey while others are quantitative in nature such as Value Added Tax (VAT) registration data. Arguably these serve different purposes: the LFS allows a gender and ethnicity disaggregation but does not tell us much about the motivations of entrepreneurs or the challenges that they face. Instead, they are helpful as a mechanism for telling us about the levels of activity within the labour market but

¹⁷ Email exchange with Julie Weeks of Womenable and email correspondence with Wilma Goldstein of the Small Business Administration.

- tell us little about growth potential or about the growth challenges overcome.
4. Regional data in the UK: The Regional Development Agencies (RDAs) sponsor a national business survey but this is essentially a survey of the business confidence of the business sector. It provides regional comparisons but does not appear to be gender disaggregated. Similarly, the Regional Observatories collect VAT registrations and de-registrations and LFS data often down to ward level. Some have boosts to the Household Survey and some have gender specific interpretations but the comparability of their approaches and the extent to which data is routinely gender or ethnicity disaggregated is limited. The Department for Business, Enterprise and Regulatory Reform (BERR) Annual Small Business Survey (ASBS, to be conducted biennially from now onwards) provides a rich data source of attitudes and experiences that is regionally disaggregated and that gives some gender and Minority Ethnic Group disaggregation. It allows for growth experiences or barriers to be assessed in their last year although it does not have the capacity to generate proxies for Gross Value Added (GVA), Return on Investment (RoI) or Social Return on Investment (SROI).
 5. Academic research sponsored and/or used by national governments: There are two main data sources here: the Global Entrepreneurship Monitor (GEM) which provides household survey type data on the prevalence of entrepreneurial activity generally and by gender (although not internationally by ethnicity) in 42 countries using an identical methodology. Like the LFS and the Household Survey its strength is on the demand side of entrepreneurship by estimating levels of prevalence of early stage entrepreneurial activity in the labour market. It cannot tell us much about the high growth potential entrepreneurs and their businesses. The UK Survey of Small and Medium sized Enterprise Finance (UKSMEF). This latter survey identifies growth potential and finance requirements of the SME sector by gender and was boosted after its first wave for ethnicity as well.

Summary of Strengths and Weaknesses

What is clear from Table 1 is that, despite the interest in women-owned businesses

nationally and internationally, very few of the datasets are routinely gender disaggregated and none appear capable of assessing performance either in terms of Gross Value Added or Return on Investment or in terms of their social impact. Where there are gender disaggregations, these are usually to understand the prevalence or level of female business ownership, such as the World Bank Enterpriser survey. Conversely, where the datasets appear to have the capacity to analyse productivity, such as the OECD Structural and Demographic Business Statistics (SDBS), there is no gender disaggregation.

This may be because of the way information for initial sample frames is constructed. For example, registration for VAT and registration and Companies House do not require the gender or ethnicity of the “founder” or of directors to be recorded. As a result, large datasets like the Inter-Departmental Business Register or HM Revenue and Customs company taxation data do not have the capacity to provide the Office of National Statistics with gender disaggregated data. This also means that commercial datasets, like Dun and Bradstreet, do not have the capacity to gender disaggregate routinely hence any survey-based work has deliberately to boost for women-owned businesses.

Organisation	Vehicle	Focus	Method	Frequency	Gender/ethnicity breakdown	Capacity to analyse economic or social impact
INTERNATIONAL SOURCES						
World Bank	Enterpriser survey	Developing and emerging economies	Private contractors surveying local random stratified samples based on national registrations	Annual	Gender only: prevalence	Yes, but only for all businesses; not gender disaggregated
International Finance Corporation	Enterpriser survey (as World Bank) and country-based cases	Access to finance	Private contractors	Ad hoc in line with national programmes	Yes – cases all of women and their access to finance through Gender Entrepreneurship Markets Programme	No
OECD	LEED programme local based qualitative surveys plus women's programme	Understanding local social cohesion	Desk research and visits	Evolving since 2003; no reporting on gender programme yet	No gender or ethnicity outside of social cohesion work. That programme does not appear to have reported ¹⁸	No except qualitatively
OECD	Structural and Demographic Business	Developing coherent, internationally	Collation of national datasets from statistical	Varies depending on frequency of national data	No gender or ethnic disaggregation	Yes but not by gender (productivity and

¹⁸ Email has been sent to programme director to ensure this is the case but at time of writing, no response was forthcoming.

	Statistics	comparable entrepreneurship data	offices	collection; comparability acknowledged to be limited; most recent full dataset 2002		growth potential)
European Union/ DG Enterprise	Flash Eurobarometer	Establishing attitudes towards self employment	Telephone-based opinion poll: 1000 in participating nation states	Annual (last report, 2007)	Employment preferences and reasons by gender	No
Eurostat	Structured business statistics	Statistical survey of business registrations or administrative sources	Requests to national statistics offices; business level statistics from company accounts held with Companies House equivalents	Annual data requested but subject to same constraints as OECD	None	Potentially – OECD have done this.
INTERNATIONAL, COUNTRY SPECIFIC DATA						
FORA/EBST Denmark ¹⁹	Business Statistics	Understanding gender differences in prevalence and scale within SME population	National agency registration data	First report in 2008.	Disaggregates for gender	Potentially – as data is collected by FORA for whole business population on innovation but not disaggregated as

¹⁹ Email correspondence with Anders Hoffman and Dorte Høeg-Koch from FORA/EBST suggested that Sweden and Norway also collect national business data by gender.

						yet
US Census Bureau	Survey of business owners + consolidation with boosted data for women-owned and minority ethnic groups	Type of customer, capital requirements, location, size of establishment, legal status, finance required, turnover	Postal survey of 72.6% of US business stock	Five yearly (latest available is 2002 with 2007 results expected in 2010)	Both gender and ethnicity by geography in the US	Yes in terms of revenues and employees but not in terms of GVA or RoI
UK SPECIFIC DATA SOURCES (BERR/ONS datasets)						
BERR Enterprise Directorate	Annual Small Business Survey	Monitors characteristics, perceptions, growth barriers and intentions of SMEs	Telephone survey; last survey conducted November 2006-Feb 2007; 9905 SMEs of 0-250 employees (stratified random sample)	Annual since 2003. To be biennial	Yes, although specific reporting limited	No capacity to calculate firm level productivity or RoI
ONS SME statistics	Drawn from the Inter-Departmental Business Register	Size and scale; can be used as sample frame	Estimates for turnover taken from triangulation with VAT registrations. Estimates made for non-VAT registered firms	Annually updated	No reporting although possible	No
VAT registrations and	HMRC	Can indicate start up and closure as	Compiled from HMRC data for	Quarterly	No and problematic as	No (although ONS estimates

self-assessment data		well as turnovers	VAT registrations		VAT registration forms do not require data on owner/director	turnover by triangulation with IDBR
Registration data	Companies House	Start up and closure for all businesses older than 18 months	Annual company returns	Annual	No but names are recorded and Roper argues that the majority of female owned businesses could be captured using the names	Publicly available – would be possible for secondary analysis to be conducted
Annual Business Inquiry	ONS	Indicates GVA	Annual data on employment and financial performance covering 2/3rds of UK economy	Annual but data released after 2 years	Not gender disaggregated	Yes
LFS	Telephone survey	Levels of employment/self employment	Initial face to face then telephone follow up survey of adult population	Quarterly	Yes: gender and ethnicity included	No: only measures prevalence
PRIVATE SECTOR OR ACADEMIC SOURCES USED BY GOVERNMENT						
Global Entrepreneurship Monitor	Telephone survey (or face-to-face in countries where this is not possible)	Prevalence of “TEA” (early stage entrepreneurial activity up to 42 months)	Household survey/poll; minimum sample size 2000 but regional boosts in UK allow more detailed	Annual	Gender included in all countries; ethnicity only in UK and sample size small; entrepreneurs only – not their	Only in terms of job creation and job creation potential

			analysis		businesses	
Centre for Business Research, University of Cambridge	UK SME finance Survey	To test for market failure in SME credit market	Telephone and online survey; 2514 SMEs (0-250) in 2007 (owners or FDs)	Three yearly (last 2004); ethnic boost 2005 ²⁰	Gender and ethnic disaggregation	Not in terms of productivity but access to finance and high growth identified
Barclays Bank	Gender disaggregation of new business bank accounts	For information but no analytical commitment	Bank account forms and survey	Quarterly	No detailed gender or ethnic disaggregation	Unknown
REGIONAL OBSERVATORIES²¹						
East of England	No obvious gender disaggregated data available on website; have used GEM for gender and ethnic data; have VAT stock data to local level at start of year					
East Midlands	Data collection focuses on evidence needed for RES evaluation; VAT data and use GEM for gender disaggregation; reporting on ethnic minority survey.					
London	Women in London annual report but not just about economic role and is not about business; London does not have an “Observatory” but does boost the Household Survey to understand demand side					
North East	Use GEM for gender indicators (TEA); regional/sub-regional VAT data; business registration and deregistration by head of population					
North West	Evidence for Regional Economic Strategy evaluation;					
South East	Business stock; firm size and number of enterprises, survival rates and VAT registrations; no recent reporting on female businesses apparent (report dated 1970); “Female-owned business in the South East” published in 2008 by the Office of National Statistics in the South East is an analysis of Labour Force Survey data and differentiates between business ownership and self employment.					
South West						
West Midlands	GEM, LFS and VAT registrations. GEM and LFS used for gender disaggregation					
Yorkshire and	GEM, VAT registrations, Business registrations and der-registrations.					

²⁰ Fraser, S. (2008), using data from this boost, finds that ethnic minority groups, particularly Black and Bangladeshi groups experience poor credit outcomes even though there is no evidence of systemic ethnic discrimination. They get poorer deals in terms of interest rates and have more credit denials because of worse repayment track records which in themselves should be seen as “non-ethnic risk factors” rather than direct discrimination.

²¹ This table is based on a desk-based search of websites and therefore does not include data analysis or collection where this is not publicly available through websites

Humberside						
National Business Survey	Opinion poll IPSOS/MORI	To establish business confidence levels regionally and across UK	Postal survey and online	First wave, August 2008; sample, 5235 builds on Survey of Regional Economy started in 2003 with 9 waves	No	No

Table 1: International and national entrepreneurship and SME data sets and programmatic research

Academic Studies

This section is a summary of 12 out of 85 studies drawn from a sample of 500 articles on entrepreneurship and gender that focused specifically on the performance and/or performance potential of women-owned or led businesses. The studies were selected from:

- The major entrepreneurship conferences globally (including the BCERC and ISBE).
- A Web of Science search of academic publications.
- A search through the Emerald Publishers database.
- Specific searches of the top three entrepreneurship journals: Small Business Economics, the Journal of Business Venturing and Entrepreneurship Theory and Practice.
- Search of major known entrepreneurship research centres internationally.
- Google scholar search.

What is immediately apparent from Table 2 is that all of the studies covered look at influences on strategy or performance from gender-based, or systemic, differences. There are two exceptions to this: first the paper by Gundry and Welsch (2001) based on 832 women-owned and led businesses compares within rather than between genders. Second Chandler, Jansen and Nero (1995) look at how women business owners perform in terms of opportunity identification and economic management versus career expectations in traditional and non-traditional sectors. In other words, there is a *de facto* assumption that gender differences in themselves explain differences in performance. Yet Kim's paper (2006) suggests that if similar groups of men and women are studied (for example in terms of successful access to finance) then there is no evidence for gender-based differences in performance, although there may be in terms of the terms and conditions attached to offers finance with men actually achieving worse financing packages because of their perceived lower credit worthiness.

The other important point is that none of the studies uncovered as part of this research look specifically at measuring the economic or indeed social performance of businesses either within or between genders. This is partly because the available public data sources, as demonstrated in Table 1 do not have scope for this type of analysis. But it is also because the studies are often very small and the outcome of dedicated research projects grounded in theoretical disciplines rather than attempts to address gaps in the evidence base.

Summary of strengths and weaknesses

There are two striking issues that came out of the search for this section:

1. Where academic studies have looked at performance in relation to strategy or attitudinal variables, sample sizes are very small and localised. This may be because the international/national data sources that might otherwise be used are not gender disaggregated. As a result, researchers have to generate their own datasets for analytical purposes. Since extracting women-owned businesses from general sample frames is tricky and expensive, researchers tend to select samples from women's business membership organisations or conduct smaller or qualitative surveys. Exceptions to this are the US National Women's Business Research Centre work which is based on the US 2002 business census and the 'Gender Differences in Business Performance: Evidence from the Characteristics of Business Owners Survey'.²²
2. Studies tend to focus on general "performance" (specifically job creation and turnover) but do not look at the potential for growth of women-owned businesses. This is potentially for two reasons. First, the link between entrepreneurial activity and macro economic growth is contested and has only in the past few years established a formal body of literature using economic growth modelling.²³ As yet, there is no published gender disaggregation of this work. Second, there is a persistent interest in the attitudinal or behavioural differences between men and women that underpins much of the research on performance. This means that

²² See <http://ftp.iza.org/dp3718.pdf>

²³ Audretsch, D., Keilbach, M. and Lehmann, E. (2006): "Entrepreneurship and Economic Growth" Oxford University Press, Oxford

researchers are not examining the question, “How do female firms create wealth and value” but rather, “Why do female and male firms perform differently”. The former question allows us to understand market failures in support for women’s enterprise; the latter simply leads to the conclusion that men and women are different!

Author and year	Paper title and publication	Scope	Method	Results
De Bruin, Brush and Welter (ETP 2007)	Advancing a Framework for Coherent Research on Women's Entrepreneurship	To address the need for systematic research perspective/framework for inclusive approach to women's entrepreneurship	Editorial/review study	Performance of female owned firms is a function of work-life balance and choices embedded in macro and micro contexts: requires multi-level approach to understand
DeTienne and Chandler (ETP 2007)	The role of gender in opportunity identification	To assess opportunity identification differences by gender since they are a source of competitive advantage	Survey of 95 senior undergraduates and 189 high tech entrepreneurs from two sectors	Men and women use different processes but neither is intrinsically superior
Gundry and Welsch (2001) JBV 16,453-470	The Ambitious Entrepreneur: high growth strategies of women-owned enterprises	To understand the underlying factors in ambitious growth companies in terms of the strategies and motivations of the entrepreneur	832 women-owned businesses responding to postal survey; Likkert scale responses and self reporting	High growth entrepreneurs take a more structured approach to organising their business in terms of market growth and technology. They have a stronger commitment to success and will make sacrifices accordingly
Anna, Chandler, Jansen and Mero (1995) JBV 15 279-303	Women Business Owners in Traditional and Non-Traditional Industries	To look at within gender differences in success (measured by sales) in traditional and non-traditional sectors	170 women business owners in Utah and Illinois surveyed	Women in traditional sectors created success through venture efficacy, and strong desire for autonomy and money in career. Women in non-

				traditional sectors created success through planning and security
Manolova, Carter, Manue and Gyoshev (ETP, 2007)	The differential effect of men and women entrepreneurs ' human capital and networking on growth expectations in Bulgaria	To understand how human capital and networking affect company growth expectations	544 Bulgarian new venture owners	Women owned businesses had higher growth expectations with prior greater experience while for men growth expectations improved with networking
Verheul, Carree and Thurik 2007, Max Planck Institute, Jena, Working paper	Allocation and productivity of time in new ventures of female and male entrepreneurs	To understand how time allocations versus experience affect productivity	Labour economics time allocation models; 1203 Dutch entrepreneurs; 1994 and 1995 dataset	Experience for both men and women was positively related to productivity; women spend less time in their businesses but have lower levels of human, social and financial capital (i.e. experience) and are therefore less productive
Cosh, Hughes, Bullock and Milner (2008); CBR Cambridge report	Financing UK SMEs: the 2007 survey	Assessment of market failures in access to finance for SMEs	2007 sample of 2514 enterprises (telephone and online)	Significant gender differences in decision making about seeking finance and growing firms
SBA and National Women's Business Council (2004-2006)	Women of Colour factsheets	To establish the contribution of minority ethnic women to the economy	Analysis of 2002 US Census Bureau data	Firms owned by women of colour grow 6% faster than all US firms.
SBA and National	Key contributions of	To establish the	Analysis of 2002 US	\$306bn generated in

Women's Business Council (2006)	women-led businesses	contribution made by women-owned businesses	Census Bureau data	revenue and \$56bn in payroll expenditure; rankings by region
Carter, S (2000 ²⁴) Education and Training, Vol 42 (4/5) 326-333	Improving the number and performance of women-owned business: implications for training and advisory services	To analyse for gender related differences in prevalence, motivation, support, finance and performance	Review article and assessment of LFS data	Hard measures on performance suggest that women-owned businesses are smaller in terms of turnover and employees
Womenable (2007) with the Centre for Women's Entrepreneurship, Chatham University Womenable research Brief	Mapping the "Missing Middle": determining the desire and dimensions of 2 nd stage women business owners"	To understand more about the women business owners who own established businesses that have not yet grown (\$100k-\$1m turnover and more than 3 years old)	227 National Association of Women Business Owners members responded to online survey; 92 met definition of "missing middle"	"Missing Middle" have strong growth aspirations, are looking for support and value mentoring. Some 91% of all women owned businesses fall into this category (or 16% if micro businesses are excluded)
Kim (2006) BCERC, June	Is success the same for men and women entrepreneurs?	Compares successful women entrepreneurs with their male counterparts in terms of access to finance and financial performance	3651 entrepreneurs drawn from Federal Reserve's survey of SME finances (1998 data: 1/3 women)	Women find accessing finance more difficult but men get worse credit conditions if successful. No evidence of under-performance by women of similar profile to men

Table 2

²⁴ Carter has written multiple articles on the potential and drivers of women's entrepreneurship, most lately the review piece (2006) for BERR: "Women's Business Ownership: recent research and policy developments. The cited article is the one that deals explicitly with performance issues and is more recent than the Small Business Economics article (1996): "Gender as a determinant of small business performance" (with Rosa, P., and Hamilton, D.)

Academic research papers on women's entrepreneurial performance

Plugging the data gaps

The research and data sets above do not provide sufficient, comparative and robust data that is gender disaggregated to be useful for the Women's Policy Centre evidence base as they are currently constituted. Women's enterprise support in the public and the private sector rests on an assumption that women do indeed make a valuable contribution to economy and society and while much of the support measures have been based on anecdotal evidence, if we are to generate sustainable women-owned and led businesses then we do need to ensure that the evidence base can support this type of policy by:

1. Providing a regularly updated quantitative picture of the entrepreneurial and SME sectors that is gender disaggregated. This would mean using current business statistics collation (for example through the IDBR and coordinated through ONS) to ensure that gender and ethnic origin were routinely recorded on Companies' House data. This would mean that business statistics such as turnover estimates and performance indicators from company accounts could be analysed by gender and ethnicity.
2. A regular survey-based vehicle that captured the experiences and growth estimates of entrepreneurs themselves to estimate how many of the companies fell into "missing middle" or "high growth" categories, their enterprise "journeys" and to calculate firm level productivity and returns on investment.

There are clear aspects of data that need to be collected in order to calculate actual company performance, some of which can be estimated qualitatively and some of which should be measured systematically through quantitative national statistical sources. For example:

Gross Value Added: this is an input-output measure of productivity that demonstrates the actual contribution that individual firms make to a region's or a country's economy. It can be proxied through survey data by measuring sales turnover (output) and investment capital, profitability and numbers of employees (inputs) using a standard Cobb-Douglas Production function.²⁵ However, this is indicative only and should be supported by quantitative data that looks at investments by type and expenditure by type in relation to turnover. This type of information comes directly from company accounts or tax returns and can be collected through Companies House/IDBR type sources or HM Revenue and Customs and disaggregated by gender since the

²⁵ See for example, Harding, Cowling and Turner (2005): "The Missing Link: from productivity to performance" The Work Foundation, London.

founder or owner's name is on the company registration documents.

Return on Investment: Survey vehicles, if they collect data on investment and turnover can give estimates by firm and firm type (and of course gender and ethnicity) of return on investment. Quantitatively this is accounting data that is kept at Companies' House.

Social Return on Investment: This is a highly contested term and there is no one agreed way of calculating it. One approach is a survey-based one which looks at levels of investment against monetised social returns. This however is difficult since many entrepreneurs do not set out with a goal of measuring their own social returns and this would thus be expensive to establish. It would be very difficult, if not impossible, to establish at a national, quantitative level since firms of any size are not required by law to engage in social reporting.

Concluding remarks and policy recommendations

In a sense, this report has not uncovered much that we did not know already. There is limited data that is available to analyse the economic and social impact of women-owned businesses and we understand little about their actual growth paths, challenges and experiences. Where data is available, it is localised or, where it is comparative, either based on household-survey type data (like the Global Entrepreneurship Monitor or Flash Eurobarometer data both of which have very small sample sizes in some countries).

However, it has demonstrated that there are data sets, such as the OECD's Structural and Demographic Business Statistics that have the capacity to analyse impact. The fault of these is that they are neither gender-disaggregated nor routinely and regularly collected across countries. Even so, it suggests that it is possible to collect the relevant information (turnover, costs, employment levels and so on) and should therefore also be possible to collect gender and ethnic background information.

There are, then, a number of recommendations for data collection that come from this research:

- The fact that there is no routine demographic information like this collected may suggest that there are either ethical or legal reasons for not collecting it. The case for collecting gender and ethnic background data at the point of company registration is simple: without it, we can never reach the point where the evidence base is substantial enough effectively to analyse company performance by demographic group and, hence, provide an evidence base for policy. Before any further steps are

taken, policy makers should be clear that there are no legal or ethical barriers to the collection of such data.

- The best business data that is gender disaggregated and quantitative is through the US Census Bureau. Although the business census is conducted only once every five years, it does allow detailed information on companies to be collected. While this is a costly exercise, and while the data would not necessarily be comparable with other countries, a similar, regular census-style survey does represent an opportunity for collecting a substantial and reliable dataset on businesses.
- Existing, publicly sourced business data, such as the Annual Survey of Small Business, should be made available to researchers through the UK Data Archive. The Household Panel Survey and many other social statistical sources are available on that site. Apart from the Labour Force Survey, the availability of data on entrepreneurship is limited on that site.
- A potential source of gender disaggregated data on actual turnovers, profitability and self-employed data for SMEs is HMRC. There may be scope for exploring a pilot study to provide such data.
- Finally, any quantitative and large scale data should be supported with substantial and regular qualitative and survey-based information that allows productivity, return on investment and social impact to be estimated. The survey should have the capacity to be internationalised using identical methodologies but should focus on business growth and development rather than prevalence allowing comparisons in support structures and market failures to be made.