End of Award Report

Securing a Business Loan: How Important is Gender?

Background

Popular perceptions of a rapid and widespread expansion in the number of women entrepreneurs in the UK are refuted by the statistical evidence. Despite the range of public policy initiatives designed to increase female self-employment, women-owned businesses account for only 15% of UK businesses and the female share of self-employment (26%) has not changed over the past fifteen years. Such modest attainment contrasts with the growth in women’s enterprise recorded in other countries, particularly the USA where women-owned businesses now account for 28% of all enterprises and the female share of self-employment, currently 39.6%, has increased every year since 1976 (National Women’s Business Council, 2004; US Bureau of Labor Statistics, 2005).

Not only are women less likely to choose entrepreneurship, their experience of business ownership differs substantially from that of men (Bird and Brush, 2002; Marlow and Patton, 2005). Most female entrepreneurship is confined to traditionally female occupational sectors, such as retailing and low-order services; much is undertaken part-time; and more women than men use their home as a business base (Brush, 1992, 1997; Marlow, 1997, 2002). Women-owned businesses are notably smaller with regard to employment size, turnover, income and other performance measures (Rosa et al, 1996; Carter and Allan, 1997; Fasci and Valdez, 1998; Cliff, 1998; Brush et al, 2001), although the extent of female under-performance has been contested (Kalleberg and Leicht, 1991; Watson, 2002).

Access to and usage of finance is seen as a major impediment preventing women from starting and growing a successful enterprise (Greene et al, 1999; Brush et al, 2001, Marlow and Patton, 2005). Previous research provides unequivocal evidence that women-owned businesses start with both lower levels of overall capitalization and lower ratios of debt finance. The level of start-up capitalization used by women-owned businesses is, on average, only one third of that used by male-owned businesses (Carter and Rosa, 1998; Marlow and Patton, 2005). Importantly, links have been established between levels of starting capitalization and subsequent business performance (Fasci and Valdez, 1998, Watson, 2002).

Gender differences in finance usage have been associated with three main factors: structural dissimilarities between male and female owned businesses; supply-side discrimination; and demand-side risk aversion. Most researchers have concluded that structural dissimilarities (business size, age and sector) explain most of the sex differences in funding profiles (Fabowale et al 1995; Read, 1998). Nevertheless, studies that have systematically compared matched-pairs of male and female owned businesses of identical age, size and sector report the presence of residual funding differences (Carter and Rosa, 1998; Verheul and Thurik, 2000; Brush et al, 2001). Attempts to explain residual differences have focused on bank procedures that may disadvantage women business owners. Orser and Foster (1994:16), for example,
argued that the 5Cs of bank lending (character, capacity, capital, collateral and conditions) were subjectively applied to the detriment of female entrepreneurs. A focus on supply-side discrimination has been countered by evidence of demand-side risk and debt aversion, seen in women’s reluctance both to assume the burden of business debt and engage in fast-paced business growth (Cliff, 1998; Bird and Brush, 2002). While debt aversion is often conceptualised as a quasi-psychological characteristic (Watson and Robinson, 2003), it is likely to be rooted in socio-economic factors: women’s comparatively lower earnings in employment (EOC, 2005) are reproduced among the self-employed (Marlow, 1997; Parker, 2004).

The debate has continued largely because of the methodological difficulties in providing unequivocal evidence. Conflicting results have been attributed to differences in methodological approach, sampling procedures and country context (Brush et al, 2001). Difficulties in accessing supply-side bank data have forced researchers to focus on the demand-side, relying on the retrospective testimonies of entrepreneurs. Few studies have sought to replicate methodologies and experimental protocols and, as a consequence of these difficulties, cumulative knowledge has been constrained.

Irrespective of the methodological approach adopted by previous studies, there has been a common assumption that a relationship of implied patriarchy exists between male bankers and female entrepreneurs. Recent trends mitigate this assumption. Firstly, the growth of technology-based banking has depersonalised bank decision-making, particularly in low-value lending to existing business clients. While this has removed the potential bias inherent within personal interaction, there are new concerns that automated credit scoring mechanisms and their underlying algorithms may similarly disadvantage women. Secondly, the rapid growth of women entering professional services suggests that bank loan officers are increasingly likely to be female (Dench et al, 2002). Women constitute 51% of all employees in the banking, insurance and pensions industries in the UK, and the trend is towards an increasing participation by women at executive levels (EOC, 2005). It is increasingly likely that entrepreneurs seeking bank funding to support the start-up and growth of new ventures will meet a female loan officer.

Objectives
The methodological limitations of previous studies and the impact of new trends in the banking sector suggested the need for a new study of gender, entrepreneurship and bank lending that could extend existing knowledge of the role of gender in current bank business lending practices. The study aimed to tease out the manner in which gender impacts on lending decisions and provide a more nuanced view of the relationship between banks and entrepreneurs (Mirchandani, 1999; Ahl, 2002). A multi-staged methodology was designed to pay equal attention to both supply-side and demand-side factors, replicate experimental protocols as well as implement new approaches, and include the analysis of sex differences among bank loan officers and entrepreneurs. The original objectives sought to explore:

1. The perceptions held by male and female bank officers about male and female entrepreneurs.
2. The effects of these perceptions on the ability of men and women to raise bank finance to start and sustain a business.

3. The perceptions that are held by male and female entrepreneurs about banks and other forms of capitalization.

4. The effects of economic, social and other capital on the ability of entrepreneurs to mobilise financial resources.

Preparatory interviews with five middle manager and senior level bank staff refined the operationalization of these objectives. Objectives 1 and 2 were operationalized by focusing on lending criteria, lending processes and the personal constructs held by bank loan officers. Objectives 3 and 4 were operationalized by focusing on the capitalization and performance of businesses, and the relationship between financial and non-financial capitals.

Method

The methodological approach encompassed six main stages. Stages 1-3 focused on the supply-side, drawing data from a major UK clearing bank (confidentiality agreements prevent us from naming the bank). This sample comprised 35 bank loan officers (19 female, 16 male) and data collection took place in the bank’s offices in London, Bristol, Manchester and Edinburgh. Three key bank employees assisted the research team in accessing bank employees and organised bank facilities (rooms, catering etc) to enable data collection. Stages 4-6 focused on the demand-side, drawing data from matched-pair samples of 30 male and 30 female entrepreneurs operating new enterprises within the business services sector in Central Scotland. Fieldwork took place between October 2003 and February 2005.

Stage 1 focused on the criteria used by bank loan officers to assess loan applications. This stage replicated the experimental protocol designed by Fay and Williams (1993) for their analysis of gender discrimination among bank loan officers in New Zealand. Using verbal protocol analysis, a well-established technique in studies investigating the decision-making of business financiers (Mason and Stark, 2003), bank loan officers were individually asked to read and articulate their immediate reactions to the Fay and Williams’ loan application case. In half of the interviews the applicant was described as male, and in half the applicant was described as female. This stage contributed to Objective 2.

Stage 2 focused on the processes used in assessing and negotiating bank loans. Six focus groups were held (3 with male bank loan officers, 3 with female bank loan officers) immediately after Stage 1. Discussions focused on the processes used to generate new business, their understanding and interpretation of the bank’s lending criteria, the characteristics they favour in loan applicants, and the processes used to propose loan applications for credit approval within the bank. This stage contributed to Objective 2.

Stage 3 focused on the personal constructs held by bank loan officers of male and female entrepreneurs. Drawing on Kelly’s (1955) personal construct theory, constructs held by bank loan officers were elicited using the repertory grid technique. Each bank loan officer was individually asked to identify three male and three female business owners (elements) who had approached them for a business loan. Constructs
were elicited using triads of elements, and the performance of each element rated along each construct dimension. Perceptions were investigated by exploring the personal constructs held by bank loan officers about male and female entrepreneurs. (See Output 2 for a fuller description). This stage contributed to Objective 1.

Stage 4 entailed telephone interviews with 100 entrepreneurs (50 male, 50 female). The purpose was to gain sufficient background information on the entrepreneurs and their firms in order to aid the precise matching required in Stage 5. The sample, drawn from the Yellow Pages for Central Scotland, consisted of new business owners operating in the business services sector (six sub-sectors were included: Marketing and Advertising Consultancies; Advertising Agencies; Public Relations Consultants; Management and Business Consultants; Business Services; and Training Services).

Stage 5 entailed in-depth personal interviews with 30 pairs of entrepreneurs (30 male, 30 female), drawn from Stage 4 and precisely matched by industry sub-sector, business age and location. Using a structured questionnaire, the purpose was to collect detailed information regarding resource acquisition, their relative access to and use of different kinds of capital (economic, social, cultural including social and business networks and entrepreneurial finance) and their broad experiences and perceptions of bank lending. The work of Bourdieu (1977, 1990) and Mitchell (1969) provided the theoretical perspectives that underpinned the design of the questionnaire. This stage contributed to Objective 3 and 4.

Stage 6 immediately followed the Stage 5 interviews and was designed to elicit the personal constructs held by entrepreneurs of male and female entrepreneurs, replicating the process undertaken with the bank loan officers in Stage 3. The purpose was to be able to compare and contrast the constructs held by entrepreneurs and bank loan officers. This stage contributed to Objectives 1, 3 and 4.

**Analytical Procedures**

Data gathered in Stage 1 (verbal protocol analyses) and Stage 2 (focus groups) were tape recorded, transcribed verbatim and independently analysed by three researchers, two of whom used NVivo Version 2.0 software and the third used word processing to code and systematically analyse the data. Detailed description of the analytical procedures undertaken for Stages 1 and 2 are given in Output 1. Stage 3 produced three types of data for analysis: element labels, construct labels and the numerical measures of constructs awarded to each element. The repertory grids were entered into SPSS as separate syntax files with labels for constructs and elements. The statistical procedures used to analyse Stage 3 data are described in Output 2. Data collected in Stages 4 and 5 (telephone and in-depth interviews with entrepreneurs) were entered into SPSS and analysed using univariate and multivariate procedures. Data analysis of Stage 6 (repertory grids with entrepreneurs) is not yet complete, but will follow the same procedure as Stage 3.

**Results**

1. **The Lending Criteria Used By Bank Loan Officers**

The verbal protocol analyses produced 44 lending criteria codes, grouped around five core codes: personal characteristics of the applicant; terms of the loan; characteristics of the business; assumptions about the business plan; and requests for further
information. Eighteen criteria codes accounted for 83% of coded output. Code density analysis revealed that the criteria most often articulated were the loan applicant’s financial status, positive comments about the loan application, requests to meet the applicant, the applicant’s previous experience and requests for more information about the business’ financial history. The sex of the applicant was rarely mentioned by loan officers: this criteria code occupied only 0.04% of dialogue and was ranked the least of all 44 criteria codes.

Statistically significant differences between male and female loan applicants were found in four criteria codes. When the loan applicant was described as male, bank loan officers were significantly more likely to discuss the need for more information about the business (p<0.004), about the business’ financial history (p<0.04) and the general personal characteristics of the applicant (p<0.04). Conversely, when the loan applicant was described as female, bank loan officers were significantly more likely to question whether the applicant had undertaken sufficient research into the business (p<0.02).

Statistically significant differences were also observed between male and female bank loan officers. Female bank loan officers were more likely to consider the need to meet the applicant (p<0.02). Requests to meet the applicant occurred more often when the applicant was described as female (62.9%) than male (37.1%). Female bank loan officers were also significantly more likely to consider the marital status of the applicant (p<0.002). In a potential reversal of tradition, more time was spent considering the marital status of male (65.3%) than female loan applicants (34.7%). Conversely, male bank loan officers were significantly more likely to consider the commitment of the loan applicant (p<0.01), particularly the female applicant (63.8%) rather than the male (36.2%). These results reinforce the importance of trust as a crucial element of bank lending. Women are required to demonstrate evidence that they understand the nature and implications of business ownership, while men are required to demonstrate trustworthiness through social stability, evidenced by marriage.

2. The Lending Processes Used By Bank Loan Officers
The bank loan application process can be viewed as a supply-chain, which starts with professional brokers or introducers (accountants, business advisers, IFAs) approaching individual bank loan officers to present a potential applicant’s case (the entrepreneur). The loan application is initially screened by the bank loan officer who would normally meet the entrepreneur. If the loan officer supports the case, a proposal is written and submitted for sanctioning by the bank’s head-office credit control department. Credit sanctioners decide the outcome of the application and the terms and conditions of the loan. Bank loan officers are rewarded on the basis of volume and value of new business developed, while credit controllers are penalised on the basis of loan default rates. The processes that bank loan officers use to negotiate loan applications 1) with the loan applicant, 2) with the brokers or introducers and 3) with the bank’s head office credit controllers, were explored in Stage 2.

Analysis of the six focus group transcripts produced 22 lending process codes, of which 13 accounted for 95.2% of output. Seven lending process codes showed statistically significant differences by sex of the bank loan officer. Male bank loan officers were significantly more likely to consider the general lending process
(p<0.004), the importance of “gut instinct” in lending decisions (p<0.006) and the importance of developing a rapport with their client (p<0.003). Lender-client rapport was discussed only in the male focus groups and only when the loan applicant was described as male. Female bank loan officers were significantly more likely to consider the general terms of the loan (p<0.000), the business plan presented by the applicant (p<0.000) and the size of the loan (p<0.003). The size of the loan was discussed only in the female focus groups and only when the loan applicant was described as being female.

Female bank loan officers were also significantly more likely to discuss their relationship with the brokers who introduce them to new business clients (p<0.000). Some female loan officers reported disadvantage arising from the scarcity of female introducers and brokers. Others described being offered complicated, low value deals by their brokers, while perceiving that male colleagues were introduced to higher value business opportunities. In contrast, male loan officers were more preoccupied with their relationship with bank credit controllers. Although there were no statistically significant differences in the volume of output considering relationships with credit controllers, the content of the discussions was markedly different in the male and female bank loan officers’ focus groups. The prevailing view among female loan officers was of a ‘Chinese wall’ separating the bank’s new business development and credit sanctioning departments. By comparison, several male loan officers discussed engaging in a process of internal negotiation with the bank’s credit sanctioners, in order to negotiate favourable outcomes. A process of negotiation with individual credit sanctioners, through the ‘Chinese wall’, was seen both as a routine element of their job and as an integral means of doing business for the bank.

3. The Personal Constructs Held By Bank Loan Officers of Male and Female Entrepreneurs

A high degree of heterogeneity emerged from the analysis of construct labels. Kelly’s (1969) personal construct theory suggests that constructs are likely to be shared by groups; however, this was not apparent in this study. There were virtually no similarities in the constructs used by the bank loan officers. This is a key finding and is especially pertinent given that all of the bank loan officers who participated in the study shared the same employer, the same occupational position, had been through the same bank training programmes, and shared a broadly similar frame of organizational experience and knowledge. The constructs used by bank loan officers focused mainly on the personal qualities of the applicant, emphasising the character of the entrepreneur. To a large extent, construct heterogeneity reflected the high degree of autonomy and individual judgement that bank loan officers are expected to exercise in loan decision making.

Analysis of construct ratings revealed statistically significant sex differences in 20 of the 325 constructs elicited from the 35 bank loan officers; however, this is a lower number than would be expected from chance variation. Female bank loan officers used 191 different constructs across 19 grids. Of these, ten constructs, accounting for 5.2%, drawn from six grids showed statistically significant differences. Male bank loan officers used a total of 134 different constructs across 16 grids. Of these, ten constructs, accounting for 7.4%, drawn from six grids showed statistically significant differences. Multivariate analysis was undertaken to investigate the presence of systematic gender bias only observable in combinations of constructs. MANOVA
analysis using Wilks’ Lambda tested whether any linear combination of the constructs showed any significant differences between male and female elements. Multi-Dimensional Scaling (MDS) analysis using Categorical Principal Components Analysis (catPCA) in SPSS generated a two dimensional plot representation of each grid, interpreted using t-tests on the two dimensions and MANOVA Wilks’ Lambda to explore differences within a combination of the two dimensions. The combination of analytical techniques was designed to reveal, for each repertory grid, one of three conditions: firstly, no sex differences; secondly, unsystematic differences in some constructs; or thirdly, systematic differences but not construct differences or both systematic and construct differences. Overall, the results demonstrate that most of the repertory grids (21 out of 35) fulfil condition 1, having no sex differences. A further 13 repertory grids fulfil condition 2, showing unsystematic sex differences. Only one grid (a female loan officer) fulfils condition 3, showing systematic differences but not construct differences. No grid was found to contain both systematic and construct differences.

4. The Capitalization and Performance of Male- and Female-owned Businesses

Despite careful matching of structural factors (business age, location and industry sub-sector), analysis of the matched-pairs sample of entrepreneurs revealed statistically significant sex differences with regard to business capitalization and performance. Business services are characterized by relatively low entry barriers, and it was unsurprising that many entrepreneurs had started with low levels of financial capital. The majority (62%) started with less than £5,000 and 18% started without any initial financial capital. In line with the results of other studies, the mean starting capital of male-owned firms (£18,683) was nearly three times higher than that used by female-owned firms (£6,433). Male entrepreneurs were also more likely to have made larger personal investments in their businesses (mean £9,603) than the female entrepreneurs (mean £4,733). Interestingly, more female-owned firms (43%) than male-owned firms (14%) started with external finance; however, the sums used by women-owned firms were very small. Most women using external finance used less than £500 (mean £1,109), while all of the men using external finance used sums greater than this (mean £1,448). Only a small number of entrepreneurs (13% women, 10% men) reported using bank debt finance as a source of start up capital. Sex differences were also apparent on a number of performance dimensions. Despite their firms being established within the same time period (the past three years), male-owned firms were significantly more likely to employ additional staff (p<0.01); reported significantly higher levels of sales turnover (p<0.01), and served corporate, rather than personal, clients (p<0.008).

These findings, based on precisely matched samples of male-owned and female-owned businesses, suggest that gender differences in capitalization and business performance cannot be fully explained by structural dissimilarities between male and female owned businesses. The next stage provided a more nuanced analysis of the way in which gender impacts on capitalization and performance.

5. The Relationship Between Non-Financial and Financial Capital

Bourdieu’s (1977) reflexive social theory, in particular his perspective on gender symbolism and his bridging of the structure-agency divide, provided a useful theoretical underpinning to the study. Bourdieu defines capital as “all the goods,
material and symbolic, without distinction, that present themselves as rare and worthy of being sought after in a particular social formation” (p.178). By recognizing the impact of different types of capital on individual structural positions, it may be possible to reveal the social practices which, while difficult to detect and address, perpetuate a hierarchical structure that benefits men and disadvantages women. Applied to studies of business ownership and finance, this perspective suggests that certain types of capital may be more sought after than others, and that resource providers and policy makers may value the various types and amounts of capital possessed by male and female entrepreneurs differently. Given the ‘natural’ attitude towards gender differences and the assumptions underpinning these, the capital women bring to business ownership may not realise the same value or may be regarded as less legitimate to that of men. Bourdieu’s social theory provides a strong theoretical perspective, but offers little guidance on how to operationalize and measure various capitals within small business research. For this, the study used the work of Becker (1964), Granovetter (1982) and Mitchell (1969) to operationalize concepts of human and social capital.

Statistically significant differences were found in the human capital possessed by male and female entrepreneurs. While both possessed similar educational qualifications, women were younger than men (female mean 41 years, male mean 51 years, p<0.001) and had less industry experience (p<0.001). Women, on average, spent 11 years working in 7 different jobs prior to start-up. Men, on average, spent 22 years working in 4 different jobs prior to start-up. No differences were found in levels of gross household income, but there were significant differences in total gross earned income in the year prior to start-up (p<.012). Men, on average, earned £46,300, while women earned £32,316 (70% of male earnings). These results suggest that because of differences in age and industry experience, women may be seen to possess significantly less human capital prior to starting their business. Further qualitative and quantitative analysis of this data will be undertaken.

Analysis of social capital focused on structural and interactional dimensions of networking activity. Women were found to be highly active networkers, investing significantly more time developing weak-ties; however, their continued dependence on friends and family for business support suggests that their weak-tie links were inappropriate for their sector. In contrast, male entrepreneurs developed strong, locally embedded ties within their industry. Although many researchers claim a link between weak-tie networking activity and business performance, this study found no evidence of this. Women’s higher levels of networking activity were not matched by superior business performance. Bourdieu’s concept of symbolic capital may help explain why women continued to participate in weak-tie networks. Nearly a third of women (30%), but no men, reported experiencing credibility problems; by networking, women sought to develop symbolic capital, legitimizing themselves as business-owners, acquiring presence and building reputation.

**Initial Conclusions**

This study found no evidence that banks deliberately discriminate against women business owners. Indeed, there is a growing recognition that women entrepreneurs constitute an important new market for banks, and it is difficult to argue that it is within any banks’ interest to deliberately, much less systematically, exclude this
growing market. While the bureaucracy of banking may appear to be gender-neutral, bank lending decisions are made by individual bank loan officers about individual applicants. This permits the possibility of bias as such judgements reflect the perceptions and opinions of individual bank loan officers. The focus on the applicant’s character as a deciding factor in bank lending decisions reinforces the possibility of gendered judgements. Although gendered judgements were rare, these were just as likely to be made by female bank loan officers as male bank loan officers.

A number of significant differences emerged between the matched-pairs of male and female entrepreneurs. These differences negate the view that capitalization differences are best explained by structural dissimilarities; rather, it is clear that gender permeates and affects the experience of business ownership. When women start in business they do so not just with lower levels of financial capital, they start with lower levels of human, social and symbolic capital. Analysis of linkages between non-financial and financial capitals is underway, but not yet complete. This is a priority for the project team.

Although the study was not designed to explore this issue, unexpected differences emerged in the organizational experiences and the loan supply-chain processes of male and female bank loan officers. Female bank loan officers had less effective networks of introducers, found it harder to access new business opportunities, and failed to engage in internal bank negotiation with credit controllers. It appears that female bank loan officers correctly follow established rules of bank lending, but these constrain effective performance. Male bank loan officers have stronger external networks of introducers, make greater use of tacit knowledge and personal networks within the bank, often circumventing the rules, and in so doing perform successfully. Through our on-going discussions with key bank staff, we were informed that very few of the female bank loan officers achieved annual performance bonuses and many have since left the bank’s employment. New training and HR policies within the bank are being considered as a consequence of these results.

Activities
The study has attracted attention from academics, industry and policy-makers and dissemination to these different audiences has taken place throughout the study. The following are examples of project activities.

Academic:
- The study was the keynote presentation at the 2004 Qualitative Research in Business Symposium, Massey University, New Zealand.
- The study was presented at research seminars in several UK universities (Lancaster, Bradford, Strathclyde, and the 2005 Scottish Entrepreneurship Research Seminar).
- The study forms the UK leg of the Diana International network researching gender, finance and entrepreneurship.

Banking industry:
- Ongoing dissemination has taken place with the bank in which the research was located. This year, the study team have met with the bank on three occasions to disseminate results.
• A paper presented at the 2005 ISBE conference won the Barclay’s Bank Award for Best Small Business Finance Paper.
• Ongoing discussions with the European Microfinance Network (Paris) enabling dissemination to 41 European microfinance partners.

Policy audiences:
• The study was presented to DTI Small Business Service Research and Analytical Services staff, January 2005.
• The study was the keynote presentation at the EU Conference “Women-led Businesses: Overcoming Barriers to Growth and Improving Access to Finance”, Brussels, October 2005, organised by DG Enterprise and Industry.

Outputs
The two outputs accompanying this report are the first to have been submitted to peer-reviewed academic journals. Both report supply-side data collected in Stages 1-3.


Analysis of the demand-side data collected in Stages 4-6 is not yet complete. Notably, the first output from this data, reference below, was awarded a Best Paper prize.


Impacts
The first impact resides within banks and within the small business support and advisory community. Ensuring that women entrepreneurs are adequately capitalized in order to start and maintain businesses at a sustainable level will require amendments to the training given to bank loan officers, small business advisers and entrepreneurs. The participating bank has indicated that this may be a priority. Dissemination to the European Microfinance Network will ensure dissemination of these results and learning implications to a network of 41 affiliated organizations involved in women’s micro-finance lending. Collaboration with the ACCA is taking place to ensure that accountants are also aware of the importance of capitalization to women-owned businesses.

The second impact concerns bank loan officer training within the participating bank. Our findings with regard to the processes used by male and female bank loan officers in generating new business and in negotiating credit approval within the bank have complemented and added weight to their own assessments. The bank is now
considering amending their bank loan officer recruitment and training policies in the light of our findings.

**Future Research Priorities**
The immediate priority is to complete the data analysis. This will include a) completing the analysis of the entrepreneurs’ repertory grids; b) comparing the constructs held by bank loan officers with those of entrepreneurs; and c) detailed, multivariate analysis of the links between non-financial and financial capitals. Each of these will result in paper submissions to refereed journals.