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Gender, Entrepreneurship, and Bank Lending: The Criteria and Processes Used by Bank Loan Officers in Assessing Applications

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Previous research provides unequivocal evidence that women-owned businesses start with both lower levels of overall capitalization and lower ratios of debt finance. Structural dissimilarities between male-owned and female-owned businesses explain most, but by no means all, of these contrasting funding profiles. Explanations of residual differences, viewed in terms of supply-side discrimination or demand-side debt and risk aversion, remain controversial. Using experimental and qualitative methodologies, this study explores the role of gender in bank lending decisions, focusing on the criteria and processes used by male and female loan officers. Results reveal similarities in the criteria used to assess male and female applicants but show modest differences in the emphasis given to certain criteria by male and female lending officers. The processes used by male and female lending officers to negotiate loan applications revealed the greatest differences.

Introduction

Previous research has frequently reported differences in the financing patterns of male-owned and female-owned businesses (Brush, 1992; Brush, Carter, Greene, Gatewood, & Hart, 2001; Coleman, 2000). Women-owned businesses tend to start up with lower levels of overall capitalization (Carter & Rosa, 1998), lower ratios of debt finance (Haines, Orser, & Riding, 1999), and much less likelihood of using private equity or venture capital (Brush et al., 2001; Greene, Brush, Hart, & Saporito, 2001).

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Studies investigating gender-based differences in debt financing have focused on two related themes. First, researchers have sought to unravel the complex relationship between gender of entrepreneur and bank finance with regard to the volume of finance lent, the terms of credit negotiated, and the perceived attitudes of bank lending officers to female entrepreneurs (Coleman, 2000; Fay & Williams, 1993; Haynes & Haynes, 1999; McKechnie, Ennew, & Read, 1998; Verheul & Thurik, 2000). Second, researchers have attempted to demonstrate whether gender-based differences are a consequence of supply-side discrimination by bank lenders, demand-side aversion to debt or risk by women entrepreneurs, or simply the result of the structural dissimilarities of male-owned and female-owned businesses (Buttner & Rosen, 1989; Fabowale, Orser, & Riding, 1995; Orser & Foster, 1994; Read, 1998; Watson & Robinson, 2003).

Overall, the weight of research evidence considering gender, entrepreneurship, and bank lending suggests that while the bank financing profiles of male and female entrepreneurs are distinctly different, much—but not all—is attributable to structural dissimilarities. The research evidence also suggests that while women entrepreneurs perceive that they are treated differently by bank lending officers (Fabowale et al., 1995), there is almost no evidence of systematic gender discrimination by banks. 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 the banks' interest to deliberately, much less systematically, exclude this growing market. The debate has continued largely because of dissatisfaction with existing explanations, coupled with the methodological difficulties facing researchers in providing clear and unequivocal evidence (Haines et al., 1999; Mahot, 1997).

This study was designed to investigate the role of gender in bank lending, focusing on both the sex of the loan applicant and the sex of the bank loan officer as key elements of the gender, entrepreneurship, and bank lending nexus. Using experimental and qualitative methodologies, data are drawn from 35 bank loan officers (19 female, 16 male) employed by one of the major U.K. clearing banks. Data were collected in two stages. The first stage replicated the experimental protocol originally used by Fay and Williams (1993) to investigate whether the loan assessment criteria used by male and female bank loan officers differed either by the sex of the bank loan officer or by the sex of the loan applicant. The second stage used single sex focus groups to draw systematic comparisons of the loan application processes used by male and female bank loan officers presented with applications from male and female entrepreneurs.

Gender, Entrepreneurship, and Bank Lending

The importance of women as a largely untapped pool of entrepreneurial talent has been widely recognized by economic development agencies in most Western economies (OECD, 1998, 2003). Within the U.K., several policy initiatives have been implemented with the aim of increasing the participation rates of women in self-employment and business ownership (Small Business Service, 2003). Yet the popular perception of a large-scale expansion in the number of female entrepreneurs in the U.K., a view perhaps influenced by the range of public policy initiatives designed to increase female self-employment, is not fully upheld by the statistical evidence. Since 1997, there has been a modest growth in the number of self-employed women, from 928,000 in 1997 to 985,000 in 2005, an increase of 6.1% (Small Business Service, 2006). However, the female share of self-employment (26%) and the proportion of women-owned businesses (16%) remain relatively stable. Trends in female self-employment in the U.K. are broadly comparable

with other northern European countries but contrast with the growth in women's enterprise in the United States where women-owned firms now account for 28% of all businesses (National Women's Business Council, 2004).

Not only are women less likely to choose entrepreneurship, but their experience of business ownership also differs substantially from that of men (Bird & Brush, 2002; Marlow, 1997, 2002). Most female entrepreneurship is confined to traditionally female occupational sectors such as retailing and low-order services, much is undertaken in a part-time capacity, and more women than men use their home as a business base (Brush, 1992, 1997; Marlow, 1997; Small Business Service, 2003). A bimodal profile of male-owned and female-owned businesses is also apparent with regard to size, age, income, and other performance measures (Brush et al., 2001; Carter & Allan, 1997; Fasci & Valdez, 1998; Marlow & Carter, 2004; Parker, 2004; Rosa, Carter, & Hamilton, 1996), although the extent and causes of female underperformance have long been contested (cf. Carter, Williams, & Reynolds, 1997; Johnsen & McMahon, 2005; Kalleberg & Leicht, 1991; Watson, 2002).

Research investigating gender-based differences in patterns of finance usage has explained women's lesser likelihood of using external debt finance in three main ways. The first explanation attributes differences to the presence of structural dissimilarities between male-owned and female-owned firms. The second approach points to (mainly inadvertent) gender discrimination in the supply-side. Finally, researchers have highlighted demand-side factors, pointing to apparently higher levels of debt aversion among women.

Structural dissimilarities between male- and female-owned businesses (Read, 1998) explain the most obvious differences between male and female finance patterns. In a large-scale survey analyzing bank loan files, Haines et al. (1999) found initial differences between male and female entrepreneurs (lower sales levels and liabilities, lower levels of salary and drawings) to be a product of business size, age, and sector. Fabowale et al. (1995) similarly argued that structural factors accounted for differences in rates of loan rejections between male and female entrepreneurs. Examining 282 matched pairs of male and female business owners, McKechnie et al. (1998) found few substantial differences once structural factors had been taken into account. Nevertheless, the view that structural dissimilarities explain gender differences has been countered by both empirical evidence and theoretical critiques. First, several studies have reported residual gender differences, even after structural factors had been controlled (Carter & Rosa, 1998; Fraser, 2005; Verheul & Thurik, 2000). Second, feminist critiques of entrepreneurship research have argued that the practice of statistically equalizing structural dissimilarities between men and women in order to explain gender differences in bank borrowing suggest that "it is business structure rather than gender that is the prime determinant of access to credit" (Mirchandani, 1999, p. 230).

In the absence of direct evidence of gender discrimination, researchers have suggested that differences in patterns of finance usage may be explained by supply-side practices, which inadvertently disadvantage women business owners. Using an experimental protocol, Fay and Williams (1993) presented bank loan officers with an identical loan application from male and female applicants. Gender-based differences were found when the applicant was described as having high school education, but not when the applicant was university educated. They concluded that their study "demonstrate[d] experimentally that some loan officers do employ differing evaluative criteria for female and male applicants, and that these differences in evaluative criteria may act to female disadvantage" (Fay & Williams, 1993, p. 304). Orser and Foster (1994, p. 16) suggested that the standard 5Cs model of bank lending (character, capacity, capital, collateral, and conditions) was applied

in a “subjective” manner to the detriment of female entrepreneurs. Coleman (2000) attributed women’s lesser use of bank debt to the lower average size of women-owned businesses. Rather than discriminating against women, Coleman (p. 49) concluded that bankers “discriminate on the basis of firm size, preferring to lend to larger and, one would assume, more established firms. This preference may put women at a disadvantage given that they are half the size of men-owned firms on average.”

A focus on supply-side discrimination has been countered by evidence of demand-side risk and debt aversion. A lower preference for risk among women has been a recurrent finding of comparative analyses of male and female entrepreneurs (Sexton & Bowman-Upton, 1990; Watson & Robinson, 2003). The greater risk aversion of women is seen not only in their reluctance to assume the burden of business debt, but also within their reluctance to engage in fast-paced business growth (Bird & Brush, 2002; Cliff, 1998). Debt aversion among women entrepreneurs, often conceptualized as a quasi-psychological characteristic, is as likely to be rooted in socioeconomic factors: women’s comparatively lower earnings in employment (EOC, 2005) are reproduced among the self-employed (Marlow, 1997; Parker, 2004).

While entrepreneurship researchers continue to debate the extent and causes of the gender, entrepreneurship, and bank finance nexus, feminist analyses may provide new insights. Marlow (2002, p. 83) argued that the failure to contextualize studies of female entrepreneurs within the larger feminist debate regarding female subordination, androcentric hegemony, and masculinized hegemony had resulted in the representation of women “as blemished men who must be assisted to become honorary men, and in so doing will then achieve within the existing paradigm of entrepreneurship.” Mirchandani (1999) similarly stresses that gender should not be seen simply as a characteristic of individuals, but as a process integral to business ownership, a critique developed by Ahl (2002) and Bird and Brush (2002). The view that gender is a process of socialization rather than a biological characteristic (Oakley, 1982) is a consistent theme within sociological analyses, but one that is rarely observed in entrepreneurship studies (Watson & Newby, 2005).

Viewing gender differences as the outcome of socialization processes that start in childhood and persist throughout an individual’s life (Bandura, 1977; Mirchandani, 1999; Oakley, 1982) has implications for research analyses. Applying this perspective to investigate the connections between gender, entrepreneurship, and bank lending requires an approach that can accommodate three separate elements. First, gender socialization influences all the parties involved in credit decisions, including entrepreneurs, bank loan officers, brokers, and credit controllers. The research focus requires a shift away from the sex differences of male and female entrepreneurs and toward the behaviors that are displayed by all involved in credit decision making. Second, gender socialization influences an individual’s perceptions (Bandura, 1977; Mirchandani, 1999) and could be expected to be found in the criteria used to assess the loan application of male and female entrepreneurs and in the criteria that is used by male and female bank loan officers. Finally, gender socialization influences the interactions between men and women and therefore requires a focus on the processes that are used by male and female bank loan officers in negotiating the loan application. This study was designed to accommodate these three elements.

Research Method

Data were drawn from one of the major U.K. clearing banks. Three years prior to the study, a new tier of 350 new business development managers was recruited following a

major acquisition and restructuring program. The sample comprised 35 loan officers (16 male, 19 female) from this tier who volunteered to participate in an “academic study of lending practices.” As this tier had been recruited on the same date, all were expected to have similar levels of organizational knowledge and experience, minimizing the potential for bias between individuals. Participants were involved in a two-stage data collection procedure. The first stage focused on lending criteria, and the second stage, which followed immediately after the first, focused on lending processes. Data collection took place in the bank’s offices in London, Bristol, Manchester, and Edinburgh.

Investigating the criteria used to assess loan applications entailed the replication of an experimental procedure developed by Fay and Williams (1993) for their analysis of gender discrimination among bank lending officers in New Zealand. In a development of the Goldberg (1968) paradigm, Fay and Williams (1993) designed a four-page loan application case for an individual seeking bank finance to purchase an ongoing restaurant business. For this study, two amendments were made to the loan application case. First, the original case identified the applicant’s gender by a photograph. Considered a potential source of bias, the photograph was removed and the sex of the applicant was identified by use of a first name. The names given to the applicant were Emma Jones and Jack Jones, selected as the most popular first names in the U.K. in the year preceding the study. Second, some minor details within the case were changed to reflect the U.K. study context. These modifications were minimal and entailed the substitution of currency signs (NZ\$ to UK£), the home address of the applicant (from NZ to U.K.), and the applicant’s alma mater (from University of Otago to University of Manchester).

The bank loan officers were asked to read and articulate their immediate reactions to the loan application using a real time methodology. The technique of verbal protocol analysis, which requires respondents to describe their thoughts as they perform a task, is well established in studies investigating the decision making of venture capitalists, business angels, and bank loan officers (Hall & Hofer, 1993; Mason & Rogers, 1997; Mason & Stark, 2003; Zacharakis & Meyer, 1995). The technique requires that the researcher be unobtrusive, prompting only when necessary, and recording the participant’s words for later transcription and analysis. Each interviewer lasted up to 30 minutes, the time required to read the four-page plan and to simultaneously record their immediate reactions. Interviews conducted with 19 female lending officers took place in three different bank offices. Of these, staff in two offices (11 female bank loan officers in total) assessed the female loan application, and staff in one office (eight female bank loan officers) assessed the male loan application. Interviews conducted with 16 male lending officers also took place in three different bank offices. Of these, staff in two offices (10 male bank loan officers in total) assessed the male loan application, and staff in one office (six male bank loan officers) assessed the female loan application (see Table 1).

The second stage of data collection immediately followed the verbal protocol analyses. Having given their individual reactions to the Fay and Williams (1993) loan application case, participants were invited to participate in focus group discussions that explored the lending processes they typically use in negotiating a loan application. Six focus groups were held (three with male loan officers, three with female loan officers). Group discussions focused on their understanding and interpretation of the bank’s lending criteria, the characteristics they favor in loan applicants, and the procedures they follow in proposing loan applications for credit sanctioning and bank approval. To control moderator bias, the moderator was the same sex (female) for all six groups.

Verbal protocol analyses (stage one) and focus group discussions (stage two) were tape recorded, transcribed verbatim and, to enhance validity, independently analyzed by three members of the research team. Comparison of the three separately undertaken

Table 1

Composition of Data Collection by Sex of Loan Applicants and Loan Officers

Sex of loan applicant	Male bank loan officers	Female bank loan officers	Total individual interviewees
Stage 1: verbal protocol analyses			
Female	6	11	17
Male	10	8	18
Total	16	19	35
Stage 2: focus groups			
	Male loan officer groups	Female loan officer groups	Total focus groups
Female	1	2	3
Male	2	1	3
Total	3	3	6

coding structures and analyses, one using a manual procedure of transcript annotation and two using NVivo Version 2.0 software with independent coding, demonstrated converging results. An advantage of NVivo is that each code can be analyzed to provide a measure of its “density.” NVivo measures density by calculating the number and percentage of text characters that respondents, in this case male and female bank loan officers, spend talking about key themes (codes). NVivo also measures the number and percentage of text characters within each code, which refers to an attribute, in this case the sex of the loan applicant. This enables a detailed analysis of qualitative data and the development of a hierarchy of codes where the density of a code indicates its relative importance. An additional benefit of code density analysis is that it removes researcher bias and subjectivity errors, a potential presence in manual analyses. As with all content analytical procedures, however, code density analysis should be viewed with some caution. While it is tempting to regard numerical measures of density from a positivist perspective as objective indicators of facts about lending criteria and processes, codes are derived from the researchers’ interpretations of the participants’ discussions (Hall & Holt, 2002). The NVivo code listing is reproduced in the Appendix.

Results

Lending Criteria

The first stage of data collection focused on the criteria used by bank loan officers to assess business loan applications. The verbal protocol analysis of the Fay and Williams (1993) loan application produced 44 criteria codes, which were grouped into five core codes: (1) the personal characteristics of the applicant; (2) the terms of the loan; (3) the characteristics of the business; (4) assumptions about the written plan that were made by the loan officer; and (5) requests for further information. Positive and negative remarks made about aspects of the plan and additional comments that did not directly address the loan application were also coded. A full list of criteria codes, text character counts, and code densities are reproduced in the Appendix.

Table 2 presents the main criteria used to assess the loan application by sex of applicant and sex of lender. Eighteen criteria codes accounted for 83% of coded output, with the remaining 26 criteria codes each accounting for less than 1% of output. The loan

Table 2
Lending Assessment Criteria by Sex of Applicant and Sex of Lender

Lending criteria codes	Total density %	Male loan applicant %	Female loan applicant %	Male loan officer %	Female loan officer %
Applicant's financial status	10.5	53.4	46.6	54.9	45.1
Positive comments about application	8.8	51.0	49.0	65.1	34.9 [†]
Need/like to meet applicant	7.3	37.1	62.9	53.4	64.9*
Experience of applicant	7.2	52.3	47.7	67.9	32.1 [†]
More information business finance history	5.8	60.6	39.4*	60.9	39.1
Location of business	5.4	42.6	57.4	50.1	49.9
More information: applicant's finance	5.1	53.1	46.9	68.5	31.6 [†]
Need more information about the lease	5.1	35.6	64.4	55.2	44.8
Need more information about applicant	4.8	41.9	58.1	36.9	63.1 [†]
Need more information about staffing	3.8	30.7	69.3	56.6	43.4
Likely competition	3.8	56.0	44.0	48.4	51.6
Need more information about the business	3.4	75.6	24.4**	46.3	53.7
Business sector	3.0	41.6	58.4	44.2	55.8
General personal characteristics	2.2	72.4	27.6*	60.8	39.2
Has applicant undertaken research	2.0	9.7	90.3**	62.5	37.5
Marital status of applicant	1.8	65.3	34.7	4.2	95.8**
Education of applicant	1.6	74.2	25.8 [†]	53.8	46.1 [†]
Commitment of applicant	1.5	36.2	63.8	96.3	3.7*

Notes: One-way chi-square: [†] $p \leq .10$; * $p \leq .05$; ** $p \leq .01$.

applicant's financial status was the most dense criteria code, occupying 10.5% of the total text output. In addition, positive comments about the loan application (8.8%), requests to meet the applicant (7.3%), experience of the applicant (7.2%), requests for more information about the business' financial history (5.8%), the location of the business (5.4%), and requests for more information about both the applicant's finances (5.1%) and the lease (5.1%) were also identified as key themes articulated by the bank loan officers. The sex of the applicant was rarely mentioned by loan officers during the verbal protocol analysis: This criteria code occupied only 0.04% of dialogue and was ranked lowest out of 44 criteria codes in terms of density.

Table 2 also shows the percentage of text output for each of the main criteria codes by the sex of the loan applicant. Many of the criteria codes show similarities in the proportion of output, irrespective of whether the loan applicant was described as being male or female. However, some codes appeared to indicate the possibility of sex differences in the loan application criteria used by bank loan officers. One-way chi-square tests were undertaken in order to test whether or not these observable differences were statistically significant. In total, 4 of the 18 criteria codes presented in Table 2 were found to show statistically significant differences between male and female loan applicants at the 95% confidence level. When the loan applicant was described as being male, bank loan officers were significantly more likely to consider the need for more information about the business (χ^2 8.13; $df = 1$; $p < 0.004$), about the business' financial history (χ^2 4.02; $df = 1$; $p < 0.04$), and the general personal characteristics of the applicant (χ^2 4.23; $df = 1$; $p < 0.04$). Conversely, when the loan applicant was described as being female, bank loan officers were significantly more likely to consider whether or not the applicant had undertaken sufficient research into the business (χ^2 4.97; $df = 1$; $p < 0.02$). In addition, when the applicant was described as male, their education was discussed more, but this was only significant at the 90% level.

A more nuanced perspective on bank loan assessment criteria was derived by analyzing the loan criteria codes by the sex of the bank loan officer. Table 2 presents the percentage of text output spent on each criteria code by male and female bank loan officers. Statistical analyses using one-way chi-square tests revealed significant differences at the 95% level in three criteria codes. Female bank loan officers were significantly more likely to consider the need to meet the applicant (χ^2 5.38; $df = 1$; $p < 0.02$). Several bank loan officers explained that the need to meet the applicant was to ensure that "the person fitted the business plan." Female bank loan officers were also significantly more likely to consider the marital status of the applicant (χ^2 9.55; $df = 1$; $p < 0.002$). Conversely, male bank loan officers were significantly more likely to consider the commitment of the loan applicant (χ^2 6.17; $df = 1$; $p < 0.01$). In addition, further five-criteria codes were found to be significant at the 90% level. Male loan officers were more likely to discuss positive comments about the application, to discuss the previous experience of the applicant, to request more information about the applicant's finances, and to discuss the education of the applicant. Conversely, female loan officers were more likely to discuss the need for more information about the applicant.

Although the primary purpose of the loan application case was to explore the criteria used by bank loan officers, it is worth comparing their overall view of the loan application case with the original results reported by Fay and Williams (1993). The Fay and Williams study found no significant differences in the proportion of lenders supporting the case, irrespective of applicant's sex. The results of this study support Fay and Williams' original findings that the sex of the applicant made little difference to the lending decision. In this study, bank loan officers were asked to give an indication of their reaction to the loan application and express their likely course of action, which could include either

Table 3

Assessments of Loan Application: By Sex of Lender and Sex of Applicant

Male loan officers judging male application	Male loan officers judging female application	Female loan officers judging female application	Female loan officers judging male application
Overall, pending an interview, it looks a very favorable proposal to myself and someone we would like to do business with.	Will I do this deal yes or no? The answer will be yes. . . . I would say that was a do-able deal.	So . . . we would be quite happy to look at this proposal . . . so that's certainly something . . . we'd happy to consider.	At first sight I would say it is something we would want to look at.
That is straightforward. That would be something I would look to lend on. Yeah, looking at the actual deal itself, looks particularly viable.	On the face of it, as a structure it is perfectly viable. . . . It is a deal to do . . . yeah overall yeah, we would be able to do that I would think.	I think generally it looks fairly reasonable. . . . Gut reaction looking at it, first of all is certainly that it looks like a healthy wee business.	. . . as long we satisfy those things, I think that would be something I would do.
Yeah . . . we'd take the risk on that one.	So as long as we are happy about those earlier questions and issues, and there is sufficient cash in the background, I would say there would be something there that we could do.	There is no reason why you shouldn't be able to lend that. Do you want a view on whether we would have done this or not? Given the last twelve months, and the projections I think we probably would.	On the whole I would say that certainly something that we would look to assist with, but obviously it would depend on a much more in-depth interview.
I mean on the face of it, it's definitely something we should be looking at . . . and would be something I think we would be taking forward.	Overall yeah, it would be a fairly relaxed sort of basis this, doing something for them in the long run as indicated.	We'd proceed to interview.	There is probably a deal to be done there, for somebody.
It's probably one that we would have followed.	It seems to be a good proposition . . . it looks ok.	I'd be very positive about this one, but except I'd get to understand her, understand more about the business really that she's buying.	I think it is viable. I would look to do it, I think it looks like a nice little deal.
(No decision)	It looks a reasonable prospect.	On the face of it that certainly be something I would want to take forward, definitely . . . there would obviously be lots more follow up questions. I quite like it.	It looks ok. . . . I'm sure it would be routed.
Yes, yes. I would say I am quite happy with that.		Just reviewing it (no decision)	First indications, it looks nice. And when can I meet him?
That would probably be a deal that we would look to do.		Certainly it would be one I would be looking at very favorably.	Hmm, good business.
I certainly would be in favor, yeah.		I would definitely take it further, definitely get in touch with her and see her and talk it through . . . looks like something I'd probably do.	

supporting or rejecting the application. Some of the comments that emerged from the verbal protocol analysis are presented in Table 3. The same proportion of positive comments was made about the case, irrespective of the applicant's sex (positive comments, female applicant, 49%; positive comments, male applicant, 51%). However, differences were seen between the male and female loan officers, a factor not investigated in the

original study. The proportion of positive comments made about the case varied. Male bank loan officers gave more positive comments (65%) than did the female bank loan officers (35%), and this was statistically significant at the 90% level ($t = 1.919$; $df = 32$; $p < 0.064$). Female loan officers were more reserved in their judgment than male lenders, and five (27%) gave no indication of their lending decision. In contrast, male lenders made more positive comments about the application and only one (6%) gave no indication of his lending decision. This difference was statistically significant at the 90% level ($\chi^2 = 2.951$; $df = 1$; $p < 0.08$). Overall, despite the loan application attracting the support of many loan officers, few were prepared to make a categorical lending decision without first meeting the loan applicant. The need to meet the applicant and the internal bank negotiations required to proceed with the loan application were explored in the focus groups conducted in the second stage of data collection.

Lending Processes

The bank loan application process can be viewed as a supply-chain, which starts with professional brokers or introducers (often accountants or business advisers) approaching individual bank loan officers with information regarding a potential applicant (the entrepreneur). The application is initially screened by the bank loan officer, who would normally proceed by meeting 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 penalized 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 discussed within the focus groups that followed the verbal protocol analyses. The Fay and Williams (1993) case, read by loan officers for the verbal protocol analyses, was used to initiate and guide focus group discussions. In total, 22 lending process codes emerged from the analysis, of which 13 accounted for 95.2% of output. Table 4 presents the main process codes that emerged from the focus group discussions, analyzed by code density. The most important code was the need to meet the loan applicant, which occupied 18.6% of the total text output produced by the six focus groups. Four additional codes each accounted for more than 10% of the total output: (1) the lending process (15.0%); (2) general business characteristics (14.7%); (3) relationships with introducers (14.4%); and (4) relationships with credit sanctioners (10.7%).

Seven of the 13 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 ($\chi^2 8.28$; $df = 1$; $p < 0.004$), the importance of "gut instinct" in lending decisions ($\chi^2 7.52$; $df = 1$; $p < 0.006$), and the importance of developing a rapport with their client ($\chi^2 8.72$; $df = 1$; $p < 0.003$). Interestingly, discussions about lender-client rapport occurred only in the male bank loan officer focus groups and only when the loan applicant was described as being male. Female bank loan officers were significantly more likely to consider the general terms of the loan ($\chi^2 20.57$; $df = 1$; $p < 0.000$), the business plan presented by the applicant ($\chi^2 15.31$; $df = 1$; $p < 0.000$), and the size of the loan ($\chi^2 8.79$; $df = 1$; $p < 0.003$). Discussions regarding the size of the loan occurred only in the female focus groups and only when the loan applicant was described as being female.

Table 4
Lending Processes by Sex of Lender and Sex of Applicant

Lending process codes	Total density %	Male loan officer %	Female loan officer %	Male loan applicant %	Female loan applicant %
Need to meet client	18.6	53.0	47.0	67.7	32.3***
The lending process	15.0	65.3	34.7**	21.5	78.5***
General business characteristics	14.7	56.7	43.3	48.1	51.9
Relationship with introducers	14.4	28.1	71.3***	28.3	71.7***
Relationship with credit sanctioners	10.7	61.7	38.3	34.3	65.7
Terms of the loan	7.2	25.4	74.6***	32.0	68.0
Gut instinct	4.3	74.8	25.2**	50.0	50.0
Lender's experience	2.9	53.7	46.3	44.6	55.4
The business plan	2.2	9.4	90.6***	69.0	31.0*
Positive comments about application	2.0	46.4	53.6	44.4	55.6
Need more information about staffing	1.3	37.8	62.2	35.2	64.8
Rapport with applicant	1.1	100.0	0.0**	100.0	0.0***
Size of loan	0.8	0.0	100.0***	0.0	100.0**

Notes: One-way chi-square: * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$.

Female bank loan officers were also significantly more likely to consider their relationship with the brokers who introduce them to new business clients (χ^2 33.39; $df = 1$; $p < 0.000$). Some of the female loan officers reported a disadvantage arising from the scarcity of female introducers and brokers. Others described being given complicated and low-value deals by their brokers while perceiving that male colleagues were introduced to high-value business opportunities. In contrast, male loan officers were more preoccupied with their relationship with the bank's head office credit controllers. Although there were no statistically significant differences in the volume of output considering their relationship with credit controllers, the content of the discussions was markedly different in the male and female bank loan officers' focus groups. Following provisional deal agreement between loan officer and business applicant, written proposals are submitted to head office for credit sanctioning. The prevailing view within the female loan officers' focus groups was of a "Chinese wall" separating the bank's new business development and credit sanctioning departments. By comparison, several male loan officers engaged in a process of internal negotiation with the bank's credit sanctioners. Among male loan officers, there was an expectation that outcomes could be negotiated in their favor. A process of negotiation through the "Chinese wall" with individual credit sanctioners was seen both as a routine element of their job and as an integral means of doing business for the bank.

Table 4 also presents the lending process codes by sex of the loan applicant described in the application case read by the bank loan officers in the verbal protocol analysis that preceded the focus groups. Six of the 13 process codes showed significant differences by sex of loan applicant described in the case. When the applicant was described as being male, bank loan officers were significantly more likely to discuss their need to meet the loan applicant (χ^2 41.25; $df = 1$; $p < 0.000$), the business plan (χ^2 5.31; $df = 1$; $p < 0.02$), and the importance of developing a rapport with the loan applicant (χ^2 12.62; $df = 1$; $p < 0.000$). When the applicant was described as being female, bank loan officers were significantly more likely to discuss the lending process (χ^2 25.53; $df = 1$; $p < 0.000$), their relationship with introducers (χ^2 11.51; $df = 1$; $p < 0.001$), and the size of the loan (χ^2 5.68; $df = 1$; $p < 0.01$).

Conclusions

This analysis provides a new insight into the debate on gender, entrepreneurship, and bank lending: a focus on the consequences of gender on the criteria and processes used in bank lending decisions and a specific focus on the sex of the bank loan officer as a hitherto overlooked variable. While previous studies of gender and finance have been predicated on transactions between male bank loan officer and female entrepreneur, the increasing entry of women into professionalized occupations such as banking ensures that entrepreneurs seeking bank finance are increasingly likely to be confronted by a female bank loan officer. While it may be assumed, *prima facie*, that the increasing number of female bank loan officers will assist the cause of female entrepreneurs, not least through the potential for a shared experience of gender disadvantage, the results of this study suggest that this view is an oversimplification of the gender dynamic within the bank–entrepreneur relationship.

These results suggest that bank loan officers use a wide range of criteria to assess loan applications from entrepreneurs. Male and female entrepreneurs applying for loans should expect to provide a variety of information both about their business plans and about themselves. However, while there is a great deal of diversity in the criteria used to assess loan applications, for the most part, these do not vary by the sex of the loan applicant. Of

the 44 identified criteria used by bank loan officers, only four showed statistically significant differences by sex of the loan applicant, a number that is hardly greater than would have been expected to occur by chance (Oakley, 1982). Nevertheless, some insight into the effects of gender on bank lending can be gained by exploring the significantly different criteria. Female loan applicants were more likely to be assessed on whether or not they had undertaken sufficient research into the business while male loan applicants were more likely to be assessed on whether or not they had supplied sufficient information about the business opportunity, the business' financial history, and their general personal characteristics.

Implicit in this finding is an assumption of gendered differences that leads bank loan officers to query both the comprehension of female entrepreneurs and the integrity and capability of male entrepreneurs. Gender plays a role in the credit decision-making process as loan officers evaluate male and female applicants not just on the merits of their individual case, but also on the basis of their perceptions of men and women that have been imbued by gender socialization processes. It is possible that these findings help to explain some of the dissatisfaction reported by women in their dealings with banks, as noted by Fabowale et al. (1995) and McKechnie et al. (1998).

Modest differences that were found in the criteria used to assess loan applications from male and female entrepreneurs were complemented by differences in the criteria applied by male and female bank loan officers. Female bank loan officers were more likely to emphasize both the need to meet the applicant and the applicant's marital status. The focus on marital status by female loan officers may be indicative of two factors. First, in this context, marital status can be seen as a proxy for personal stability and financial responsibility, a characteristic that male loan applicants may be required to demonstrate more than women, for whom these characteristics are already conferred by gender stereotyping. Second, it was notable that female bank loan officers were more concerned with marital status. While there may be other explanations, it is possible that men have learned to become more circumspect and less explicit in their use of language, while women, perceiving themselves as the sole victims of gendered behavior, fail to recognize the need to conform to these linguistic constraints. Conversely, male bank loan officers were more likely to query the commitment of the loan applicant, especially when the loan applicant was female. This criterion, and its specific application to female loan applicants, raises concerns that the gendered stereotyping of female loan applicants persists.

Adopting a research approach that could go beyond the observation of sex differences to explore aspects of gender processes, this study also focused on the behaviors and interactions that surround the loan application process. More than half of the processes discussed by bank loan officers revealed statistically significant differences. Female loan officers were more concerned both with the business plan and the terms and size of the loan, the latter being a specific feature of discussions between female loan officer and female loan applicant. In addition, female loan officers were exercised by their relative inability to access new business clients. In contrast, male bank loan officers were more likely to consider the lending process, the importance of "gut instinct," and the development of a rapport, specifically with male loan applicants. The potentially gendered nature of bank lending processes is implicit within these differences. While female loan officers appear to focus on procedural and business elements of the loan application process, male loan officers emphasize individualized decision making and internal negotiation within the bank.

These results have important implications for the training and development of bank loan officers, in particular female loan officers. A formal feedback session with bank head

office staff 6 months after data collection found that of the 19 female bank loan officers who had participated in this study, nine had subsequently sought alternative employment, while all the male bank loan officers remained in post. Exit interviews by bank HR officers highlighted the difficulties faced by female loan officers within the bank's "masculine" culture. As a consequence, bank HR officers were actively seeking to develop support mechanisms to assist female loan officers in two ways. First, by developing their network of brokers who introduce new deals, and second, by clarifying the procedures regarding internal negotiations between bank loan officers and credit controllers.

Three caveats should be applied to these results. First, the Fay and Williams (1993) case was replicated in this study to bring robustness to the research design and to contribute to the development of a cumulative knowledge base within the subject area. This experimental protocol drew a broad agreement of support among the bank loan officers. As the case was uncontentious and as potential sources of controversy were controlled, any subsequent sex bias in rejection rates would be exposed. However, it is arguable that a more contentious loan application would have been a more appropriate means of testing sex bias in rejection rates. Second, the analysis of bank lending processes was investigated through the use of group discussions. Despite careful research design, it is possible that the issues articulated within a group setting, and in the presence of researchers, may not accurately reflect the actual practices of male and female bank loan officers. Rather, certain procedures may have been deliberately overemphasized in order to suggest explicit compliance with bank policy (female bank loan officers) or an ability to "do deals" (male bank loan officers). Finally, differences in the processes used by male and female loan officers to negotiate loan applications do not necessarily lead to differences in the outcome, to the terms of credit agreed or to the overall experience of individual loan applicants. Nevertheless, differences that were found in the loan application processes used by male and female bank loan officers in this exploratory study suggest that this issue is worthy of confirmatory quantitative research.

This study has extended previous research into the gender, entrepreneurship, and bank lending nexus by focusing on the criteria and processes used by male and female bank loan officers in their consideration of male and female loan applications. While modest differences were found in the loan assessment criteria applied by male and female bank loan officers to male and female loan applications, larger differences were found to exist within the lending processes used by male and female bank loan officers. The focus on observable sex differences between male and female loan applicants, a feature of many previous studies, has perhaps overshadowed the more deeply entrenched gender differences that have emerged through this analysis. The results suggest that gender remains an important but often hidden variable within bank lending.

Future research on gender and entrepreneurship should seek to explore the various ways in which gender socialization influences the experience of business ownership. While this study has examined the influence of gender socialization and, in particular, the differing perceptions of men and women that accrue from socialization processes, on the various parties involved in credit decision making, there are clear opportunities to explore the impact of gender socialization on other areas of entrepreneurship. Prior research has reported male and female differences in various aspects of entrepreneurship, from the propensity to start in business, the resources that are mobilized, the way that enterprises are managed, and the performance outcomes. Viewing these differences through a "gendered" lens (Bem, 1993) and exploring how these aspects of entrepreneurship are influenced by gender socialization processes will enable a more nuanced insight into the antecedents of the differences between male-owned and female-owned enterprises.

Appendix: NVivo Node Listing Based on Individual Interviews

Core code	Family code	Interviews character count	Criteria code density %	Groups character count	Process code density %	
1. Personal characteristics	Finances assets	15,717	10.5			
	Experience of applicant	10,801	7.2			
	General personal characteristics	3,274	2.2			
	Applicant has undertaken research	2,977	2.0			
	Marital status	2,617	1.8			
	Education	2,414	1.6			
	Commitment	2,165	1.5			
	Age	1,691	1.1			
	Applicant's home address	881	0.6			
	Applicant is passionate	195	0.1			
	Gender	67	0.04			
	2. Terms of the loan	General terms of the loan			17,573	7.2
		Number of years	493	0.3		
Size of loan		162	0.1	2,042	0.8	
3. Business characteristics	General business characteristics			35,741	14.7	
	Location	8,014	5.4			
	Competition	5,609	3.8			
	Sector	4,417	3.0			
4. Assumptions about plan	Business plan			5,251	2.2	
	About location	2,252	1.5			
	About previous owner's retiring	1,585	1.1			
	About staffing	1,552	1.0			
	About competition	1,388	1.0			
	About refurbishment costs	787	0.5			
	About seasonality	478	0.3			
	About the lease	336	0.2			
	About marital status & security	136	0.1			
	5. Requests for more information	About business' financial history	8,659	5.8	1,404	0.6
		About applicant's finances	7,639	5.1		
		About the lease	7,621	5.1	484	0.2
		General information / applicant	7,206	4.8	569	0.2
		About staffing	5,703	3.8	3,143	1.3
		General information / business	5,116	3.4		
Survey existing business		1,738	1.2			
About long hours		1,623	1.1	903	0.4	
About marketing plan		1,271	0.9			
About structure of the business		1,245	0.8			
About existing business bankers		878	0.6			
About financial projections				1,408	0.6	
About location		549	0.4			
About renovation		524	0.4			
About why business is being sold		392	0.3			
About security & marital status	291	0.2				
Additional comments	Positive comments	13,156	8.8	4,932	2.0	
	Need/like to meet applicant	10,875	7.3	45,204	18.6	
	The lending process			36,398	15.0	
	Relationship / introducers			34,953	14.4	
	Relationship / credit sanctioners			25,882	10.7	
	Gut instinct			10,462	4.3	
	Lender's experience			7,146	2.9	
	Refer to other department	2,120	1.4	1,857	0.7	
	Rapport with client			2,597	1.1	
	Negative comments	1,724	1.2	1,771	0.7	
	Lender's targets			1,671	0.7	
	Normally from introducers	1,122	0.8			
	External factors			1,502	0.6	
	TOTAL		149,460	100	242,893	100

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