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HOW LENDING OFFICERS CONSTRUE ASSESSMENTS OF SMALL AND MEDIUM-SIZED ENTERPRISE LOAN APPLICATIONS:

A REPERTORY GRID STUDY

Alexander Rad , Darush Yazdanfar , Peter Öhman

Abstract

Repertory grid technique and principal component analysis were used to map and analyze how 75 lending officers (LOs) view their assessments of small and medium-sized enterprises' loan applications in one bank and region. A standard set of elements and constructs, derived during pre- and pilot studies, was used. Analysis of individual grids demonstrated that the principal components indicate the existence of similarities in LOs construing at an aggregated level. Analysis of the mean grid of all respondents indicated that the LOs are encouraged by the bank's lending strategy and supporting system to perform "procedural lending" with a focus on hard and future-oriented information. At the same time, the LOs de-emphasize relationship lending, and in particular personal relationships.

Keywords: Lending officers, SME loan assessments, Repertory grid technique
Construing, Aggregated level.

Introduction

Lending officers (LOs) gather various kinds of information to reduce the information asymmetry and risk involved in small-and medium-sized enterprise (SME) lending (Deakins, Whittam, & Wyper, 2010). Based on the gathered information, they conduct assessments and formulate arguments that are forwarded to credit committees that decide whether or not to grant loans (Deakins & Hussain, 1994a). When assessing loan applications, LOs have room for discretion within the scope of banking industry regulations and the banks' lending strategies (Fletcher, 1995). Recent findings confirm that such room for discretion still exists, although it has been reduced by calls for more regulation and new lending strategies in the wake of the financial crisis (Ivashina & Scharfstein, 2010; Wahlström, 2009).

Based on the information asymmetry concept, there are two main streams of SME lending literature. One draws on the importance of financial information (e.g., Berry & Robertson, 2006; Deakins & Hussain, 1994b; Fletcher, 1995), which is basic for loan assessments and is normally conveyed by banks' supporting systems (Kumra, Stein, & Assersohn, 2006; Liberti & Mian, 2009). The other stream draws on relationship lending, or relationship banking, which is seen as complementing basic lending procedures (e.g., Berger & Udell, 1995; Binks & Ennew, 1997; Degryse & Van Cayseele, 2000; Udell, 2008; Vos, Yeh, Carter, & Tagg, 2007). This concept is generally not very clearly defined. However, Boot (2000, p. 10) defines relationship banking as the provision of financial services by a financial intermediary that invests in obtaining customer-specific information, often proprietary in nature, and evaluates the profitability of these investments in light of multiple interactions with the same customer over time and/or across products. The LO is such a financial intermediary that may practice relationship lending/banking.

Previous research into SME lending (e.g., Berry & Robertson, 2006; Bruns & Fletcher, 2008; Deakins & Hussain, 1994a; Deakins et al., 2010) suggests that LOs consider several criteria (such as collateral, cash flow, and the business plan) when assessing loan applications. These studies have primarily examined the criteria in terms of their relative importance. In addition to relative importance, the literature mentions other perceptions of the criteria, such as the degree of intuition involved (Jankowicz & Hisrich, 1987; Lipshitz & Shulimovitz, 2007). However, criteria have seldom been examined in light of various perceptions of them to explore the complex phenomenon of loan assessment.

This study expands on previous studies of SME lending. To capture LOs' perceptions when assessing loan applications, we draw on Kelly's (1955/1991) personal construct theory (PCT) and use repertory grid technique (RGT). Key assumptions underlying PCT are that how a person construes an act, person, place, or thing determines how he or she behaves in relation to that act, person, place, or thing (Fransella, 1972, p. 69), and that a person uses bipolar constructs to provide meaning to elements, i.e., acts, persons, places, or things (Kelly, 1955/1991). In the present study, criteria are used as elements, and the perceptions of the criteria are transformed into bipolar constructs.

In the banking context, a number of studies have used the RGT at the individual LO level (Hisrich and Jankowicz, 1990; Jankowicz and Hisrich, 1987; Wilson, Carter, Tagg, Shaw, and Wing, 2007). In other contexts, RGT has also been used to map aggregated cognitions (e.g., Bell, 2000; Easterby-Smith, 1980; Feixas, Geldschlager, & Neimeyer, 2002; Senior, 1996; Wright, 2004, 2006; Wright & Lam, 2002; Öhman, Häckner, Jansson, & Tschudi, 2006).

The research question addressed in this paper is how LOs construe the assessment of SME loan applications. The purpose is to map mental representations of how LOs view loan assessments, and to analyze the resulting maps with reference to the principal components and

to the clustering of elements and constructs. It also seeks to conduct the same analysis at an aggregated level to investigate how LOs working in the same context view loan assessments.

The study should help bank managers, who gain bottom–up insight, to determine how LOs and banks can improve loan assessments. SME managers may benefit from the same insight when applying for bank loans. Furthermore, the study highlights how RGT can be used to explore assessment procedures in the bank lending area, and bolsters our understanding of cognitions at both the individual and aggregated levels.

The remainder of the paper is structured as follows: The next section presents the 13 elements and 13 constructs used in this study, together with their support in the SME lending literature. The data collection and analysis methods, including the pre- and pilot studies, are then described. After that, the findings are presented, followed by a concluding discussion.

The Elements and Constructs

In this section, we present the standard set of elements and constructs identified in this study as relevant to SME loan assessments (see the Method section for a description of how we arrived at these elements and constructs). In the Appendix, the elements and constructs are shown as they were presented to the respondents in the main study. In the following description, the elements are assigned letters and the constructs numbers in accordance with the presentation in the Appendix.

The Elements

Since LOs assess loans on the assumption that they will generate revenue for the bank, they have to consider both *the bank's earning opportunities* (Bruns & Fletcher, 2008) and *the bank's risk of losing money* (Berger & Udell, 2006). These two elements are labeled elements

G and M in the Appendix. In general terms, the literature can identify two assessment errors that cause a loss to the bank (Dietsch & Petey, 2002): revenue loss, a Type I error, and credit loss, a Type II error. Part of the assessment process is to strike a balance between these two possible errors. However, Deakins and Hussain (1994a) claim that LOs normally focus more on avoiding Type II errors because of more visible financial consequences, i.e., credit losses.

Collateral (element A) represents a bank's legal right to take property from the borrower if the borrower defaults on his or her loan. It is held that collateral signals the borrower's commitment to repay the loan (Berger & Udell, 2006; Bruns & Fletcher, 2008; Deakins et al., 2010). To reduce the risk of losing money, the bank can also require co-financiers to finance a *share of the investment* (Fletcher, 1995) and consider the *industry risk* of the borrowing firm (Deakins et al., 2010), elements B and H in the Appendix. To reduce the degree of information asymmetry, the LOs request information on an applicant's financial condition, including budgets, balance sheets, income statements, and/or cash flow statements. *Presented financial conditions* (element F) and *anticipated financial conditions* (element J) are assumed to be relevant to the loan assessment procedure (Berger & Udell, 2006; Berry & Robertson, 2006; Bruns & Fletcher, 2008; Deakins et al., 2010).

A company's business strategy represents the joint consideration of *market conditions* (element K) and the company's own resources (Barney, 1991), and may be reflected in LOs' assessments of the *business concept* (element C) (Mason & Stark, 2004). According to Bruns and Fletcher (2008), LOs also consider the capabilities of company management, i.e., *the management and the board* (element I). Furthermore, the quality of *company documents* (element D) presented to LOs, in terms of their comprehensiveness and presentation format, affects the reliability of the information conveyed and the trustworthiness of the applicant (Sargent & Young, 1991).

As mentioned, relationship lending can be seen as complementing more basic lending procedures (Berger & Udell, 2002; Degryse & Van Cayseele, 2000; Vos et al., 2007). It is suggested that information asymmetry is reduced in an enduring *business relationship* (element E), in which a track record of a borrowing company's repayment history is built up (cf. Deakins et al., 2010; Elsas, 2005; Ergungor, 2005). This also allows LOs to gain knowledge of the business and management performance (Behr & Güttler, 2007). Uzzi (1999) also claims that *personal relationships* (element L) can include social activities outside purely business contexts, and Elyasiani and Goldberg (2004) suggest that LOs' personal contacts with borrowers outside business contexts, and with borrowers' families and friends, might provide useful information for the assessments.

The Constructs

An example of a bipolar construct used when assessing loan applications is importance, where "unimportant" is one pole and "very important" is the other. This importance construct was further developed in the pilot study, since the literature argues that the impact of various elements is contingent on the type of loan applied for (cf. Bruns & Fletcher, 2008; Deakins et al., 2010). Existing borrowers are held to be treated differently from first-time borrowers (Fletcher, 1995; McNamara & Bromiley, 1997) due to the lack of relevant information on prior behavior when a first-time application is being assessed, and the lack of time to develop mutual trust and commitment (Behr & Güttler, 2007; Ferrary, 2002). When a borrower is new to a bank, or when the business operation underlying the loan application is new, LOs have no financial track record on which to rely. This means, for example, that management quality (cf. Deakins & Hussain, 1994b; Fletcher, 1995) could have an *impact on first-time applications* (construct number 4), i.e., when the business operations and management are previously

unknown to the bank. The assessment of loan applications may also vary depending on whether the loan is intended to finance or even rescue current operations by injecting more capital into a business that has underperformed, or to finance operations experiencing growing demand. This suggests that LOs may perceive the elements differently in these two cases, leading to a potential difference between the *impact on additional loans* (construct 8) and the *impact on expansion loans* (construct 12).

Since meaning is not simply a result of the perceived degree of importance of various elements, a number of additional constructs were identified. A study of auditors' view of their work (Öhman et al., 2006) identified various constructs that imbue auditing issues with meaning. Since both LOs and auditors conduct assessments by considering financial and other business-related information, we propose that the relevant constructs in the two assessment contexts may be similar. These constructs include the degree of difficulty, time consumption, and future orientation; applied to SME loan assessment; some elements may require more *time* to assess (construct 1) than others, some may be considered more *difficult* to assess (construct 7) than others (cf. Biggs, Bedard, Gaber, & Linsmeier, 1985; Bruns & Fletcher, 2008), and some may be more *future-oriented* (construct 9) than others (cf. Kumra et al., 2006).

The *Basel Accords* (construct 2) are an important regulation influencing bank credit policies and lending activities (Basel, 2004; Wahlström, 2009). These Accords require that all relevant information be incorporated into loan assessments. However, the influence of the Basel Accords may vary from one criterion to another. Related to the Basel Accords is *the bank's lending strategy* (construct 10). In essence, the lending strategy is an attempt by bank managers to manage and structure the assessments conducted by LOs (Kumra et al., 2006). As part of a bank's lending strategy, and to facilitate assessments, LOs use *supporting systems* (construct 6) as aids, including bank-specific computer applications and internal specialists.

Kumra et al. (2006) claim that supporting systems can be used to identify data, provide assistance through asset valuation, and predict bankruptcy risk, and Udell (2008) reports that these systems facilitate information transmission within a bank's organizational hierarchy. In addition, every LO normally has the option of turning to colleagues in the bank for a *second opinion* (construct 11) on loan-related issues, to validate or invalidate his or her own assessment (Fletcher, 1995).

Some elements are regarded as demanding more subjectively based assessments than do other elements (Bruns & Fletcher, 2008; Deakins & Hussain, 1994a; Fletcher, 1995). For example, Kumra et al. (2006) state that the assessment of management quality is based largely on subjective grounds. This *objectivity–subjectivity* dimension (construct 3) can be related to the *quantitative–qualitative* dimension (construct 5). According to Udell (2008), relationship lending requires a great deal of qualitative information followed by subjective assessments, while information on financial conditions is largely expressed as quantitative numbers and followed by assessments considered objective and often with little disagreement (Berger & Udell, 2006; Liberti & Mian, 2009). Furthermore, according to Jankowicz and Hisrich (1987) and Lipshitz and Shulimovitz (2007), the assessment of loan applications requires a greater or lesser degree of *intuition* (construct 13).

Method

Study Context and Sample

The study was confined to a single bank in a single region (Mid-Sweden). The main reason for selecting this bank was that it gave us permission to conduct the time-consuming study planned and to interview all available LOs in the chosen region. Due to the sensitivity

of the research, we collaborated with two regional bank managers who helped us access data and choose suitable respondents at various steps of the study.

At the time of the study, which took place in 2009, the bank was affected by the financial crisis and a demand for enhanced compliance with the Basel Accords. To manage and facilitate the loan assessment process, the bank's supporting system was assigned a more prominent role than before. As a result of the bank's credit losses, a new loan assessment strategy was formulated and presented in guidelines. Part of this strategy was that the LOs should focus even more on future repayment capability when assessing loan applications, i.e., a shift from historical to future-oriented information-based assessments. It was also emphasized that the bank preferred clients who conducted most of their financial affairs at the bank, i.e., a total client strategy.

In the bank under study, the LOs conduct the initial assessments of the loan applications. If the requested amount exceeds the LO's authority, the LO presents his or her assessment to the credit committee that decides whether or not to grant the loan. The credit committee includes regional bank managers with previous LO experience as well as experienced LOs.

On the advice of the two collaborating bank managers, LOs with fewer than six months' work experience in the bank and region were excluded. It was held that these LOs were "novices," i.e., still under training and not allowed to conduct assessments without guidance from more experienced colleagues. The total number of available LOs with the required experience and regional bank managers with previous LO experience was 79. Four of these LOs did not respond due to lack of time, leaving 75 to be interviewed in the main study. The respondents represented various LO categories with respect to the following background variables: position, location, gender, education, and experience (Table 1). For confidentiality reasons, other background variables were not examined.

Table 1 about here

The Repertory Grid Technique

The RGT is used to elicit and analyze cognitions of individuals through a structured interview technique (Fransella, Bell, & Bannister, 2004; Wright, 2006), showing how the elements within it are construed by the constructs in the grid. The first step when collecting data using RGT is to select elements, the second is to elicit constructs, and the third is to score the elements in terms of the constructs (Fransella et al., 2004; Jankowicz, 2004). A common method for analyzing the gathered data is principal component analysis (Bell, 2004). The main results of such an analysis can be presented quantitatively; they can also be illustrated using a two-dimensional map, in which correlations are translated into angles and distances.

Kelly (1955/1991) recognizes that persons with shared experiences may construe the world in a similar way (commonality corollary). This motivates the use of common elements and constructs, and to aggregate cognitive maps (Bell, 2000; Tschudi, 2000; Wright, 2004).

Design of the Study

In the loan assessment context, Jankowicz and Hisrich (1987) and Hisrich and Jankowicz (1990) used the RGT to investigate LO perceptions of intuition in SME lending decisions using short case studies as elements, and Wilson et al. (2007) investigated LO perceptions of male and female business owners and the impact of these perceptions on lending decisions using business owners as elements. The latter study found heterogeneity in the constructs elicited by individual LOs, and that the LOs focused mainly on the applicants' personal qualities, rather than on other key areas. This seems quite natural considering the use of

business owners as elements, and is a reason for not focusing on people as elements in the present study (cf. Wright & Lam, 2002).

As far as we know, no loan assessment studies have combined analyses at the individual and aggregated levels as done in the study of auditors by Öhman et al. (2006). Following the research design used in that study, data were collected and analyzed in three consecutive steps. First, three pre-studies and a pilot study were conducted in February 2009. Second, a main study including 75 LOs was conducted from May to August 2009. Third, six retests were conducted five months after the interviews in the main study, and a focus group interview was held in December 2009.

Design of the Interview Form through Pre- and Pilot Studies

On the advice of the two collaborating bank managers, pre-studies were conducted with senior LOs not included in the main study. The aim of this step was to obtain qualified feedback regarding our prior knowledge and assumptions, to determine what standard set of elements and constructs make sense to the LOs in the chosen bank and region, and to determine how to design the interview form (the grid form).

Each of the three participants in the pre-studies was asked to consider five credit assessment cases, and to think about how these cases differed from one another (cf. Jankowicz & Hisrich, 1987). This resulted in three lists of criteria considered in the assessment process (e.g., collateral, budgets, cash flows, industry classification, management and board, and relationship to the representatives of borrowing companies). All individually elicited elements were number-coded and, except for the exact wording, a relatively large number of criteria were found to be the same in the three participants' lists. This indicates that

these elicited criteria are shared by LOs in this bank, i.e., in a group embedded in a particular social structure and involved in shared social processes.

Each list was then compared with a collection of criteria cited in the literature as relevant (cf. Stewart & Stewart, 1981; Wright, 2004), and the participants were allowed to add criteria from this collection to their own lists if the criteria were perceived to be relevant. The next step for the three participants was to score each of their five selected credit assessment cases (the elements) in terms of the listed criteria on a scale ranging from “unimportant” to “very important.” They scored each element using a seven-point scale extending between the two anchor points of each construct.

Based on examination of the data gathered from each of the pre-studies, 16 criteria were identified as important to all three LOs (e.g., collateral, bank earning opportunities, and business relationships). When these criteria were identified, all disagreements were discussed in the research team until agreement was reached (cf. Wright, 2004, p. 353).

In designing the final grid form, the 16 identified criteria were used as elements. To elicit appropriate constructs, such as “easy (1)–difficult (7) to assess,” we turned to another participant in the subsequent pilot study, and discussed similarities and differences between the 16 elements (cf. Stewart and Stewart, 1981). In addition, we double-checked the elicited constructs against the literature, and asked the participant to add constructs cited in the literature if they made sense to him (cf. Wright, 2004). The resulting grid form included 16 constructs, and the pilot study participant was asked to score each element on a seven-point scale to indicate his perception of its position between the two poles of each construct.

The final grid form was determined on the basis of statistical analysis, interpretations of the map showing the pilot study participant’s construing, and discussions with the pilot study participant and each of the three respondents who participated in the pre-studies. This resulted in a reduction of the number of elements and constructs to 13 predetermined elements and 13

predetermined constructs (see the Appendix). The three elements and the three constructs deleted were placed near the middle of the map generated by the pilot study participant, or very close to a similar element or construct. One example of a deleted element is cash flow statements, which was considered part of anticipated financial conditions.

To strengthen the validity, the respondents in the main study were allowed to add missing elements and constructs to the grid form. However, only four respondents used this option and added elements and/or constructs to the grid form, making it not particularly meaningful to analyze these additional elements and constructs.

In the pre- and pilot studies, we tested the interview manual for the main data collection process. This manual emphasized that the respondents should relate their answers to SME loan applications when they completed the grid form, and think of assessments that they would present to the credit committee. The respondents in the main study were also provided with information on what was meant by each element and construct, for example, that collateral includes personal financial assets, securities, and mortgages. In addition to the grid form, questions on background variables were included in order to categorize the LOs.

Data Collection and Analysis

In the main study, data were gathered from the 75 respondents in the bank's own facilities. Most respondents took just under 60 minutes (the respondents' time limit) to complete the grid form and answer the background questions. The Flexigrid software program (Tschudi, 1998) was used to perform principal component analyses for each respondent. These analyses were compared, especially with respect to the principal components, to see whether it would be meaningful to conduct analyses at an aggregated level and to create a mean grid.

The mean scores of the elements in terms of the constructs assigned by the 75 respondents served as input to the Multigrid software program (Tschudi, 2000) to create the mean grid (as if it were a single person's grid), illustrating LOs construing at an aggregated level (cf. Tschudi, 2000; Wright, 2004). The mean grid was first analyzed quantitatively to determine the degrees of homogeneity and complexity. High correlations between respondents or between the mean values for categories of respondents indicate a high degree of homogeneity, while low correlations indicate a high degree of heterogeneity (cf. O'Higgins, 2002). The degree of complexity is indicated by the variance described by the principal components, i.e., the first and second components. If a high percentage of the variance is explained by the two components, this indicates low complexity and vice versa (cf. Öhman et al., 2006).

The next step was to conduct qualitative analyses. The elements and constructs were conceived of as embedded in a map, and we interpreted the principal components of the respondents' individual and aggregated grids based on the location of the elements and the constructs in respective maps. To facilitate interpretation of the principal components, we rotated the axes (varimax) representing these components (cf. Tschudi, 1998, 2000).

Retests and Focus Group Interview

A relatively long time between test and retest is required when checking for stability in the respondents' construing and for data collection reliability (cf. Smith, 2000; Sperlinger, 1976; Öhman et al., 2006). In this study, the retests were conducted after five months, following the procedures used by Öhman et al. (2006). The six respondents were presented with the same elements and constructs, this time arranged in a different order in the grid form. The respondents were also asked about possible explanations for any differences between the

first test and the retest, and about possible omissions or suitability concerning the choice of elements and constructs.

These respondents, as well as the five focus group participants, were chosen with respect to the various categories presented in Table 1. Selection was conducted repeatedly until respondents and participants with different background variables according to Table 1 were found. For cross-validation purposes, the focus group participants were asked to comment on and discuss the findings, including interpretations of the mean grid. The findings presented and discussed in the following sections were validated in the focus group session.

Findings

The mean grid

Analyses of each individual grid indicate that the clusters of poles of constructs identified in the grids were fairly easy to recognize in almost all grids. Furthermore, the interpretations of the principal components in each respondent's grid indicate few significant differences between LOs, implying the existence of similarities in LOs construing at an aggregated level. Figure 1 shows the varimax-rotated mean grid for the 75 respondents (the mean scores for all cells in the grid form are noted in the Appendix). In the mean grid, the elements are indicated by a letter, while each pole of each construct is indicated by a number.

Figure 1 about here

The two axes in the map represent the principal components of LOs construing at the aggregated level. In the cluster on the right-hand side of the horizontal dimension we find the poles of three of the constructs: “difficult to assess” (7), “requires future-oriented information

to a great extent” (9), and “requires much time to assess” (1). Thus, the right-hand side of this dimension is interpreted as about *future-oriented information* and *demanding assessments*, and the element “anticipated financial conditions” (J) is perceived by the LOs as requiring particular effort. The left-hand side of the horizontal dimension is characterized as *historical information* and *easy assessments*, indicating that the element “industry classification” (H) is perceived as fairly unproblematic.

Distributed at the bottom of the map we find the poles of four constructs: “predominantly objective assessments” (5), “predominantly quantitative information” (3), “large aid from supporting systems” (6), and “large influence of Basel Accords” (2). As a result of this clustering, the lower end of the vertical dimension is interpreted as *hard information* and *structured assessments*. “Collateral” (A) and “presented financial conditions” (F) are two hard information-based elements, suitable for regulation and supporting systems. The elements in the upper half of the map, such as “the management and the board” (I) and “business concept” (C), are of a different character. Thus, the upper end of this dimension is about *soft information* and *unstructured assessments*. Such assessments are perceived as involving “much intuition” (13).

The findings indicate that the LOs construing at an aggregated level is not particularly complex. The first (horizontal) component explains 51% of the variance, while the first and second (vertical) components together explain 86%.

Procedural Lending Focus

The position of “large influence of the lending strategy of the bank” (10) in the lower right quadrant in the map suggests that the LOs are encouraged to focus simultaneously on future-oriented and hard information. This is in line with the bank’s pronounced shift from

historical to future-oriented information-based assessments, and also indicates that the use of hard information is in line with the guidelines provided by the bank's lending strategy (based on the Basel Accords) and the supporting systems. The cluster to the right in this quadrant includes the poles of three constructs: "large impact on first-time loans" (4), "large impact on expansion loans" (12), and "large impact on additional loans" (8). This indicates that the LOs' assessments of different types of loans are based on similar information (i.e., future-oriented and hard) and treated similarly. We label this kind of assessment "procedural lending." Note also that the assessments of all three types of loans are perceived as "requiring much second opinions" (11).

The upper part of the vertical dimension and the left-hand part of the horizontal dimension are not paid the same attention by the LOs. Historical and soft information is perceived as having a relatively weak connection to the bank's lending strategy. In particular, "personal relationship" (L) is perceived to be of little importance to loan assessments, independent of type of loan, and also unrelated to regulations and existing supporting systems.

Significance of Elements and Constructs

One way to discern homogeneity in the LOs construing at an aggregated level is to compute a total mean inter-correlation for all categories. The mean correlation of such a computation is fairly high, at 0.85. For the six retest respondents, the mean inter-correlation between the first and second test is 0.58. Although this is not an impressive degree of stability, it is clearly greater than the mean inter-correlation of 0.36 between all individuals. Furthermore, the principal components of each of the retested respondents' grids could be recognized in both the original and follow-up grids. The six retested LOs and the five LOs participating in the focus group explained that they were satisfied with the supplied elements

and constructs, indicating commonality corollary among the LOs in the chosen bank and region. The focus group participants also confirmed that the interpretations of the mean grid made sense.

Discussion and Conclusions

Reliance on Procedural Lending and De-emphasizing of Relationship Lending

In a situation characterized by increased regulation, a new lending strategy, and a pronounced focus on the supporting system, the findings suggest that procedural lending (based on hard and future-oriented information) is perceived by the LOs to be emphasized in the wake of the financial crisis. The relative ease of transmitting hard information within the bank's organizational hierarchy (Liberti & Mian, 2009; Udell, 2008) provides further impetus to procedural lending when LOs forward their assessments to the credit committee. Furthermore, the clustering of the perceived importance of the Basel Accords and the bank's lending strategy and supporting systems in the mean grid, and the relative vicinity to collaterals and presented financial conditions, imply that the LOs are encouraged to avoid Type II errors, i.e., credit losses (cf. Deakins & Hussain, 1994a).

The finding that first-time loans, expansion loans, and additional loans are based primarily on future-oriented and hard information, and are assessed in roughly the same way, further indicate the impact of supporting systems on loan assessments (cf. Kumra et al., 2006). This relative similarity of the assessments of different types of loans stands in contrast to the idea that borrowing companies' track records and the gradual development of mutual trust and commitment significantly affect LOs' assessments (cf. Behr & Güttler, 2007; Boot, 2000; Ferrary, 2002).

The literature suggests that relationship-related criteria are crucial to SME lending (Behr & Güttler, 2007; Berger & Udell, 1995, 2002; Degryse & Van Cayseele, 2000; Elyasiani & Goldberg, 2004; Ergungor, 2005; Udell, 2008; Uzzi, 1999; Vos et al., 2007). LOs can be assumed to invest much time in establishing such relationships, and to consider them worth assessing, since information gathered in an established relationship can supplement other information about the borrowing company, thereby mitigating information asymmetry. Our findings do not support this assumption. On the contrary, relatively little time is perceived as spent on personal relationships. It could be argued that the de-emphasizing of the basic ideas of relationship lending is not in accordance with the bank's total client strategy. However, the lack of focus on personal relationships was explained in the focus group session as being outside the range of LO professionalism, since professionalism is held to emphasize the impersonal character of business relationships.

The focus group session stressed that assessments of soft information-based criteria such as business concepts and market conditions are orally presented to the credit committee rather than transmitted through the supporting systems (cf. Udell, 2008). With this in mind, it should be possible to modify Fletcher's (1995) conclusion that there is room for LO discretion; the discretion seems to primarily concerns soft information. However, our findings suggest that all kinds of soft information are paid relatively little attention in procedural lending, and that such lending seems to reduce the discretion on the part of LOs (cf. Ivashina & Scharfstein, 2010; Wahlström, 2009).

Managerial Implications

Previous studies (Berry & Robertson, 2006; Deakins et al., 2010; Elyasiani & Goldberg, 2004; Fletcher, 1995; Uzzi, 1999) have found that historical information is important when assessing loan applications from existing SMEs. Ignoring historical track records and/or

disregarding personal relationships reduce the amount of information about SMEs and may result in both Type I and Type II errors. Our findings imply that a reason for considering historical information relatively unimportant is a lack of such an emphasis in a bank's lending strategy. We therefore suggest that increased awareness of the benefits of historical information about the applicant may mitigate information asymmetry and the risks involved in SME lending (cf. Deakins et al., 2010). In line with the relationship lending literature, we also argue that the additional information obtained through personal knowledge of a borrower outside the business context may help LOs in their assessments. An emphasis on personal relationships would seem to be an essential part of bank lending strategy, particularly when a total client strategy is preferred.

In line with Fletcher (1995), our findings indicate that second opinions have an impact on LO assessments, and the discussion in the focus group suggested that second opinions are used by LOs to support assessments based on future-oriented and hard information rather than on historical and soft information. One way to expand LO discretion would be to include in the bank's lending strategy a requirement to consider second opinions, and to develop systematic procedures for generating such opinions. Case-based on-the-job training, in which real SME loan assessments are discussed, could form a more pronounced part of training professional LOs to deal with soft information not suitable for existing supporting systems. We therefore suggest that more attention be paid to soft information (cf. Udell, 2008) through greater recourse to second opinions. Another way to improve the use of soft information-based criteria was mentioned in the focus group session: develop supporting systems that allow for the more structured consideration of such information.

Limitations and Suggestions for Further Research

On one hand, we are aware that mean grids at the aggregated level of the kind presented here may be problematic. Constructs are personal and, as such, one person's constructs differ from others'. The use of supplied elements and constructs and the aggregation of individual grids into a single mean grid reduce the individuality of LOs construing (cf. Fransella et al., 2004). An aggregated mean grid may also result in a representation that provides a false oversimplification of LO work. On the other hand, repertory grid studies focusing solely on the individual level limit our understanding of construing at the aggregated level (Wright, 2004). To improve our understanding of how a group of LOs perform assessments in given surroundings, we used Tschudi's software routine to create an aggregated mean grid in a bank environment characterized by commonality corollary.

In future studies, it would be productive to use RGT at an individual level to explore sophisticated differences in LOs' individual construing. For example, it might be interesting to know how LOs would rank the criteria in terms of their relative importance, to see whether the sampled LOs agree. We also believe that personal construct methods can be useful in elaborating the meaning of a rather vague concept such as "relationship lending" and exploring puzzling issues such as why there is a contradiction in our findings and the references saying that relationship lending issues are crucial for SME loan assessments.

In future studies, it would also be productive to further map and analyze how LOs view loan assessments at an aggregated level. To mitigate the problem of reduced variance it can be fruitful to use content analyze-based approaches as described in Honey (1979) and Jankowicz (2004). Studies of different banks, at different organizational levels, and in different regions and countries using RGT may reveal organizational and country-specific contingencies as

well as common patterns. Furthermore, our data do not allow the analysis of changes over time, or of the consequences of changing bank lending strategies. Although we conducted retests to capture the stability of the respondents' construing, the test–retest interval would have to be substantially longer than in this study to address possible changes over time. A suggestion for further research, therefore, is to conduct longitudinal studies and time series analyses to measure changes in conditions over time, and in that way derive causal relationships.

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How Lending Officers Construe Assessments

How Lending Officers Construe Assessments of Small and Medium-Sized Enterprise Loan Applications: A Repertory Grid Study

Table, Figure, and Appendix

Table 1

Total number of respondents with respect to position, location, gender, education, and experience

Position	Location			Gender		Education			Experience		
	County 1	County 2	County 3	Male	Female	Public school	High school	University	<6 years	6–19 years	>19 years
Lending officers and not members of the credit committee (47)	17	12	18	29	18	14	19	14	16	16	15
Lending officers and members of the credit committee (15)	7	6	2	9	6	8	3	4	1	7	7
Regional bank managers and members of the credit committee (13)	5	4	4	12	1	4	3	6	2	6	5
Total (75)	29	22	24	50	25	26	25	24	19	29	27

How Lending Officers Construe Assessments

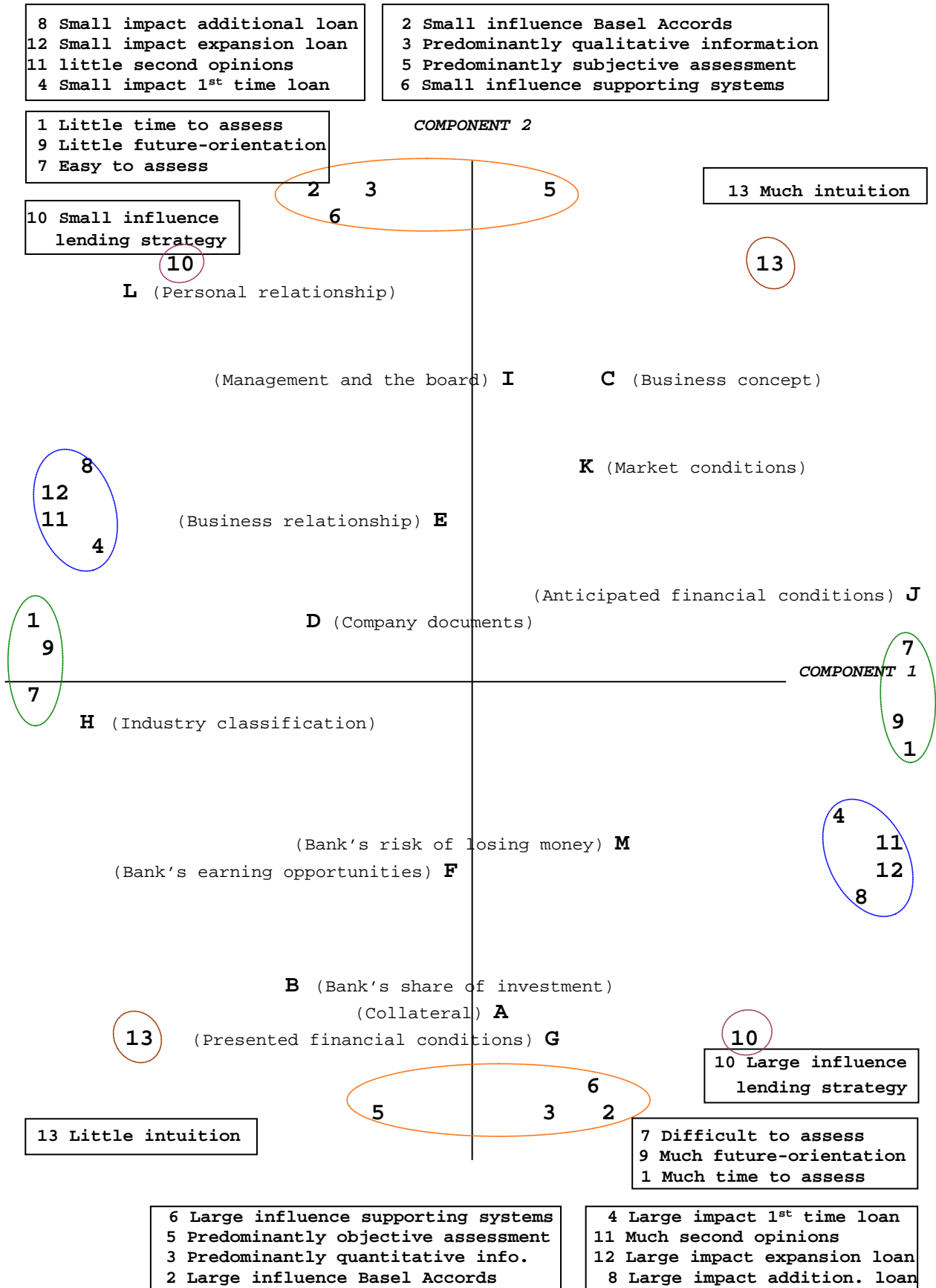


Figure 1: The mean grid.

How Lending Officers Construe Assessments

Appendix: The final grid form

Each row (1–13) in the grid form shows the set of ratings for a construct and each column (A–M) shows the set of ratings for an element. In each square, the mean ratings of the 75 respondents on the seven-point scale are noted.

Elements	A. Collateral	B. Bank's share of investment	C. Business concept	D. Company documents	E. Business relationship	F. Presented financial conditions	G. Bank's earning opportunities	H. Industry classification	I. Management and the board	J. Anticipated financial conditions	K. Market conditions	L. Personal relationships	M. Bank's risk of losing money
Constructs													
1 Requires little (1)–much (7) time to assess	4.2	3.1	4.5	4.0	3.0	3.7	5.0	2.3	3.9	6.2	4.5	2.0	4.0
2 Small (1)–large (7) influence of Basel Accords	6.3	5.0	2.8	2.7	2.9	5.1	6.0	2.9	2.7	4.2	2.9	1.5	6.0
3 Predominantly objective (1)–subjective (7) assessments	3.1	2.7	5.7	4.4	4.9	3.4	2.2	4.8	5.6	3.0	4.6	5.6	3.1
4 Small (1)–large (7) impact on 1 st time applications	5.6	4.9	5.4	4.7	4.1	5.2	5.1	3.4	5.7	5.7	4.6	3.1	5.2
5 Predominantly quantitative (1)–qualitative (7) information	2.9	2.7	4.5	3.6	4.6	3.6	2.8	2.5	4.8	4.5	4.2	5.4	3.9
6 Small (1)–large (7) aid from supporting systems	5.2	3.6	2.4	2.7	3.1	5.6	5.7	3.8	2.6	4.4	3.4	1.6	5.0
7 Easy (1)–difficult (7) to assess	3.9	2.7	4.5	3.3	3.1	3.2	3.5	2.2	3.7	5.8	5.0	2.3	4.9
8 Small (1)–large (7) impact on recurring applications for additional loans	5.4	4.4	4.6	4.2	5.0	4.6	6.1	2.7	4.6	6.1	4.5	3.2	5.9
9 Requires future-oriented information to a small (1)–great extent (7)	4.1	2.8	5.4	3.2	3.6	4.7	4.4	3.3	3.3	6.6	5.2	2.0	5.2
10 Small (1)–large (7) influence of the bank's lending strategy	5.7	5.4	4.1	3.1	4.0	5.2	5.6	3.6	3.5	5.5	4.2	2.1	6.0
11 Requires little (1)–much (7) second opinion support	4.4	3.3	4.0	2.6	2.9	3.2	4.1	2.9	3.3	5.0	4.2	2.1	4.3
12 Small (1)–large (7) impact on recurring applications for expansion loans	4.8	4.5	5.1	3.9	4.7	5.3	5.9	3.1	4.5	6.3	4.7	2.9	5.0
13. Requires little (1)–much (7) intuition	2.7	2.5	4.7	2.9	4.1	3.3	2.8	2.4	4.7	5.3	4.4	3.9	4.2