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Women in the BPD and Unit Desa Financial Services Programs:

Lessons from Two Impact Studies in Indonesia

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Women in the BPD and Unit Desa Financial Services Programs:

Lessons from Two Impact Studies in Indonesia

by

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EXECUTIVE SUMMARY

This paper discusses the central lessons learned on gender issues from two impact studies conducted on two Indonesian financial services programs — the Unit Desa network of the Bank Rakyat Indonesia (BRI) and the village financial institutions supervised by government provincial banks, the Bank Pembangunan Daerahs (BPDs).

After presenting background information on the two programs and factors affecting women's demand for and access to financial services in Indonesia, the paper discusses the surveys' findings on female clients. This data is presented in discussions of women's participation, loan sizes and terms, women as financial clients, women as savers, female businesses, sources of credit, and client income levels:

Women's participation. Female participation rates are higher in the BPD systems, which have the greatest outreach into the villages where women tend to live and work. In the highly decentralized BKK and KURK systems, which are part of the BPD network, women comprise 55 and 72 percent of the clients, respectively. These programs have simple processing procedures and no collateral requirements, which makes them easy for women to gain access to and use. In contrast, at the BRI Unit Desa and the BPD programs in West Java, which are typically located in the subdistrict towns, women comprise only 24 and 30 percent of the clients, respectively. The Unit Desa's collateral requirements probably also constrain women's participation, but this appears to be less of a constraint to women than the proximity of the financial services to women's homes and work places.

Loan sizes and terms. The two surveys demonstrate that women's loans tend to be smaller than those of men. Across the BPD systems, average loan size for men is $87 compared to only $59 for women. Further, the programs with larger average loans typically reach fewer women. The BRI and West Java programs, which serve relatively few women clients, have larger average loans outstanding ($437 and $77 respectively) than the BKK and KURK, both of which have a majority of female clients and average loans outstanding of only $26. The programs with smaller loans (and more female customers) also have shorter average maturities. The effect of the smaller loans is that women pay more for their credit. Effective rates of interest at BKK and KURK are approximately 85 percent compared to 35 percent in West Java and only 32 percent at BRI.

These findings strongly suggest that financial institutions that offer small loans at the village level and that charge market interest rates are more likely to reach women than cheaper, more centralized programs. In other words, the surveys confirm that the noninterest costs of borrowing are more constraining to women than interest rates.

Women as financial clients. The studies demonstrate that women can be strong financial clients. This is an important lesson for financial institutions that have ignored small clients (and particularly women) because they assume they are risky customers. Although repayment rates appear to be lower in the BPD programs (which serve more women) than at the BRI Unit Desa (which serves more men), the arrears position of the financial institution is tied more to the effectiveness of the management of the institution than it is to the gender or income level of its clients. The BRI Unit Desa has lower arrears because it operates like a well-run commercial bank.

Women savers. Women are savers. Again, although savings levels are currently low in the programs that have a majority of women customers, savings levels appear to be less a function of client

income (or gender) than of institutional structures and savings instruments. For example, BKK has had low levels of voluntary savings because it adopted a savings instrument (a certificate of deposit) that was unpopular with customers. The fact that the KURK system just introduced a pilot passbook savings scheme in 1990 explains its low savings level. However, the extraordinary success of the pilot initiative has made KURK optimistic about becoming a largely savings-financed institutions after passbooks are introduced throughout the province. Again, this is an important lesson for financial institutions interested in mobilizing savings.

Savings information from the BPD survey indicate that loan sizes of financial institutions tend to grow with saving levels. Over time, this could have negative consequences for women seeking small loans. This trend should be monitored to ensure that women (and men) borrowers can continue to get small loans at the same time deposit facilities are expanding.

Female businesses. Although neither study provides gender-disaggregated data on businesses, indirect evidence suggests that women are concentrated in commerce, and benefit both as employers and employees. However, female businesses are probably smaller then those of men and their wages lower. At the BRI Unit Desa, where men comprise over three quarters of clients, the average number of workers employed in BRI Unit Desa enterprises is 3.4 compared to only 2.2 for BPD enterprises (which are more likely to be run by women).

Sources of credit. BRI borrowers (mostly men) are more likely to have access to alternative sources of credit such as family and friends or raw material suppliers than BPD borrowers (mostly women). This suggests that women have fewer options to get credit than men.

Client income levels. There has been considerable debate over whether the BRI and BPD systems serve the same type of clients. The resolution to this question has important policy implications for the direction of program expansion, competition between government programs, and the need for (or allocation of) donor or government support. The surveys suggest that in some regions, particularly Central and East Java (the BKK and KURK programs), BPD clients are significantly poorer than BRI customers and that they are predominantly female in contrast to those at BRI. These differences appear to be much less pronounced in West Java and West Sumatra where fewer clients have incomes below the poverty line and average loans sizes are higher. Since the Unit Desas have cheaper loans, the BPD programs may have a more difficult time competing. This suggests a financial as well as a social justification for reorienting the two BPD programs to focus more on poor clients, especially women.

The paper also reviews the two studies' assessment of program impact. The studies come to opposite conclusions regarding the effect on clients of increased access to financial services. The BRI study appears to illustrate that increased access to credit has led to increases in client (primarily male) household income, enterprise employment levels, profits, and standards of living. In contrast, the BPD study found that although client (primarily female) income and businesses grew, this increase does not appear to be significantly different from increases experienced by members of the surrounding population.

In an effort to understand and analyze these conflicting results, the paper reviews the differing survey methodologies of the studies. This exercise suggests that the BRI study is probably overestimating the effect of increased access to credit while the BPD study is probably underestimating the impact. The main factors affecting the ability of the studies to assess impact are threefold:

First, neither study had baseline data nor did they construct a nonborrowing control group. To compensate, the Unit Desa study compared client income to national survey data, which meant it was difficult to determine whether the increases in household and business income experienced by Unit Desa clients differed from those of the surrounding, nonborrowing population. The BPD survey used a "comparison" group. But the comparison sample was flawed because it contained many clients who had access to formal credit and few women. Further, the absence of baseline data meant that the studies had to rely on typically unreliable recall data (for example, client memory of changes in profits).

Second, the studies are hampered by limitations in their borrower sampling techniques and data collection. The BRI study only looked at three-time borrowers, which probably skewed the sample in favor of the program's stronger clients. BPD surveyors could not explain a large gap in their income and expenditure data, which calls into question the reliability of the data.

Third, the studies did not test indicators of improved economic status other than enterprise income. For example, productivity changes are especially important for small-scale female businesses. As experience from other countries has demonstrated, because of the dual household and income generating responsibilities of women, they may prefer to work fewer hours instead of increasing their profits.

INTRODUCTION

This paper discusses the central findings regarding gender issues from two impact studies conducted on two Indonesian financial services programs, the Unit Desa network of the Bank Rakyat Indonesia (BRI) and the village-level financial institution systems supervised by government provincial banks, the Bank Pembangunan Daerahs (BPDs).[1] The discussion is related not only to the conclusions suggested by the studies but also to the way in which the studies were conceived and conducted.

The rationale for studying women's participation in these projects is threefold. First, women typically comprise only a very small percentage of clients of government-owned financial institutions. Yet they make up a significant proportion of the clientele in the BRI Unit Desa and BPD programs. The reasons for their higher participation rates in these programs deserves examination.

Second, the presence of two financial institutions with slightly different service delivery methodologies (for example, BRI Unit Desas require a form of collateral while the BPD systems do not) offers the potential for identifying with some specificity the factors that constrain, or facilitate, women's participation in financial services programs. Third, the lessons from the different survey methodologies employed by the BRI and BPD studies will help demonstrate what methods are the most effective at determining gender-differentiated impacts.

The paper is divided into five parts. First, it provides background information on the two programs and studies. Second, it discusses the role of women in Indonesia's rural financial sector and identifies factors that affect their demand for and access to formal financial services. Third, it summarizes the descriptive "client profile" information identified by the two studies and points out the similarities and differences between the two system's clients. This includes a discussion of women's participation level in the projects, their loan use, and the various sources of credit for women. Fourth, the paper turns to the validity of the methodologies used to assess impact, particularly as they relate to gender issues. Finally, conclusions are presented on gender issues in financial services programs and on survey methodology.

[1] Although seven provincial financial institutions are associated with the BPDs systems, only five are included in the A.I.D. evaluation. These include the Badan Kredit Kecamatan (BKK) in Central Java, the Kredit Usha Rakyat Kecil (KURK) in East Java, the Bank Produksi Desa (BKPD) in West Java, the Lembanga Perkeditan Kecamata (LPK) system in West Java, and the Lumbung Pitih Negari (LPN) system in West Sumatra.

SECTION ONE

BACKGROUND INFORMATION ON PROJECTS AND STUDIES

The BPD systems and the BRI Unit Desa system are the main sources of funds for many small firms and microentrepreneurs throughout Indonesia. Moreover, these systems are strong financial institutions that have generated profits and are growing rapidly, especially in savings.

The Bank Pembangunan Daerah systems consist of seven separate institutions operating in each of seven provinces. With this distribution, the BPD systems are serving more than 800,000 borrowers across Indonesia (Rhyne 1990:4). Because two of the seven programs are new and have only recently received funding from the United States Agency for International Development, they were excluded from the impact studies.

The BPD programs are typically owned by the provincial and district governments and supervised by the provincial development banks (the BPDs). Most are highly decentralized and conduct much of their operations at the village level. The programs charge market (or near-market) rates of interest. Average loans outstanding (an approximation of average loan size) in the BPD programs are generally quite small and range from a low of $26 at the BKK and KURK systems to a high of $109 in West Java.

Despite these similarities, each BPD institution differs in its structure and maturity (Gadway et al., 1991). The LPN of West Java has existed since the turn of the century. Like credit unions, LPN organizations are member-owned institutions that pool savings and make loans within a closed membership. By contrast, the KURK system of East Java is a relatively new system that has a structure of 185 subdistrict banking units serving 1,320 village posts. The KURK program does not have a closed membership. It serves any clients it deems creditworthy.

The BKK of Central Java is similar to the KURK system, although older and larger. With over 500 subdistrict branches, BKK services about 2,860 village posts. The BKPD of West Java was established in the 1960s as a system of production banks and is owned by the district government. It introduced voluntary savings early on, before the banking reforms of 1983. The LPK of West Java started operation in 1972 as a nonbank financial institution. It was developed to serve western West Java's villages, which had no prior village-level financial services programs. As will be illustrated, the different sizes and structures of the BPD systems affect the clients they serve.

The BRI Unit Desa system was established in 1984 out of a nationwide system of 3,600 rural bank branches (Boomgard and Angell 1990). Until 1983, these branches were highly subsidized conduits for agricultural credit. In 1984, the BRI Unit Desa system was successfully transformed into a profit-making network through the introduction of new lending (KUPEDES) and then savings (SIMPEDES) products that carried market interest rates and were delivered through the existing network of subdistrict branches. By 1989, the system earned more than $25 million in profits, up from a deficit of more than $24 million in 1984. Between 1984 and the first quarter of 1990, approximately 7.9 million loans were made by the Unit Desas. In 1990, the average loan size was $437. Savings are no less impressive; the BRI Unit Desa now registers over $646 million in deposits and 6.7 million savings accounts.

A.I.D. has supported these programs through its $38-million Financial Institutions Development (FID) Project. Phase I of the project ($22 million) supported the BPDs with technical assistance, training, commodities (for example, computers), and system capitalization. Phase II ($16 million) has provided support for the BRI Unit Desas. The assistance for the BRI has been similar to that for the BPD, although it has included construction costs and excluded system capitalization.

As part of USAID/Indonesia's FID project, evaluations were undertaken on the financial and institutional aspects of both programs.[1] To complement these studies, A.I.D. also supported two impact studies on the clients of the programs. The goals of both impact studies were (1) to obtain demographic information on BRI Unit Desa and BPD system clients (including, for example, the economic sectors in which they operate and the different uses of loans); and (2) to assess changes in client household income, enterprise income and employment, and overall quality of life.

Unfortunately, neither study had baseline data on borrowers' income to draw from. Therefore, they could not simply demonstrate how client income had changed over time — before and after they had access to BRI Unit Desa or BPD system loans. The two impact studies compensated for this lack of data differently, which is reflected in their divergent approacnes to data collection and analysis.

The evaluation of the BPD (FID I) institutions, directed by Hageboeck and Rerimassie (1990), included formal surveys of 977 borrowers and 527 comparison households, and semistructured interviews with village heads and staff of subdistrict units. The impact study adopted three different strategies to assess income change in the absence of baseline data. It relied on (1) recall data (in other words, borrowers' memory of how their income and enterprise status had changed over time); (2) data on comparison households that were meant to represent the general population to which the income of the BPD system borrowers could be compared; and (3) comparisons of waves in project participants (in other words, early borrowers who had loans prior to 1990 were compared to new clients who did not have access to BPD loans before 1990).

The FID II evaluation of the Unit Desa system, carried out under the direction of Sutoro and Haryanto (1990), consisted of two separate borrower-only surveys. Neither control nor comparison groups were used. One encompassed a sample of 1,404 borrowers whose loans were realized in the months of April and October 1988. The other was a subsample of 192 borrowers selected through a combination of random and stratified sampling techniques for in-depth interviews. The BRI study attempted to assess impact by relying on recollection by clients of changes in their income (recall data), which was cross-checked for accuracy, and by comparing borrower income (before and after access to BRI loans) to the income position of the general population. In addition, only borrowers who had at least three years of program participation were selected for the study.

[1] See Boomgard and Angell 1990, and Gadway, et al. 1991.

SECTION TWO

FACTORS AFFECTING WOMEN'S DEMAND FOR AND ACCESS TO FINANCIAL SERVICES

This section discusses the role of women in the financial sector in Indonesia. This discussion serves two purposes. By pointing out patterns in the demand by women for financial services and the constraints they face in getting access to formal credit, this discussion helps to demonstrate why a focus on gender issues is important. Also, the discussion will help to develop hypotheses that can be tested against the results of the BRI and BPD system impact studies. The information is categorized into demand and supply factors that affect women's access to financial services, especially credit.

DEMAND FACTORS

In her study of the participation of women in the rural financial sector in Indonesia, Berger (1987) identified a number of important factors affecting women's demand for financial services, particularly credit. First, women's demand for savings and credit is likely to fill both consumptive and productive purposes in the household. Women's dominant role in household and child care decisions may affect their demand for loans and savings behavior. Women may save for (or invest their profits in) children's education or emergencies such as family illnesses.[1]

Second, Indonesian women also demand financial services for their income generating activities, particularly in the trading sector. Women constitute one-third of Indonesia's rural labor force. Although agriculture is still the major source of employment for rural women, by 1980 only 51 percent of working women had agriculture as their primary activity compared to 61 percent in 1971. This decrease has accompanied a rise in women working in the trade and, to a lesser extent, service sectors. Women now constitute 42 percent of the rural self-employed in trade and services.

Third, women may require smaller loans than men since women tend to be concentrated in smaller, less profitable enterprises. For example, a study of West Javanese villages estimated that, on an hourly basis, women traders earned only one-third to two-thirds of what their male counterparts earned with the same level of capital (White, cited in Berger 1987).

Fourth, the transaction costs associated with dealing with financial institutions and, to a much lesser extent, interest rates also affect women's demand for financial services.[2] Client's transaction costs — such as those related to transportation, paper work expenses, special fees and bribes, and the

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[1] Although little hard data exists on the savings behavior of Indonesian women, anecdotal evidence indicates that women constitute a significant proportion of the savers in both formal and informal institutions (Berger 1987; interviews with BPD and BRI clients and staff 1990).

[2] A large body of literature supports the position that demand for credit by small borrowers is relatively interest-inelastic, because transaction costs often represent a greater proportion of borrowing costs on small loans (USAID 1983; Von Pischke, et al. 1983; Christian 1989). This result has also been supported by studies in Indonesia (Gonzalez-Vega 1983).

opportunity costs associated with time lost dealing with these demands — affect low-income men and women alike. But some of these constraints affect women more severely. In particular, opportunity costs of forgone labor have different implications for women (Berger 1987, Hossain and Afsar 1989, and King and Evenson 1983). The opportunity costs of a women's lost time involves lost income, displacement of household labor, and the substitution of child labor for female labor within the household.

Additional factors that constrain women's demand for financial services include collateral requirements, social and cultural factors, and the lack of education of women relative to men (Lycette and White 1989, Berger 1989, and Holt and Ribe 1990). But these factors appear to be relatively less restrictive in Indonesia than they are in other developing countries (Berger 1987). In Indonesia, for example, property acquired prior to marriage continues to be individually owned, and any property acquired during the marriage is jointly owned, so women should have access to land title to use as collateral. It is still more common for land title to be registered in a man's name, however, even when the property is jointly owned. Also, although illiteracy is less pronounced in Indonesia than it is in other countries and has declined over time, literacy rates for older women remain low. All this suggests that women will prefer financial systems that have simple procedures for loan processing or depositing savings and that do not require collateral and time-consuming travel.

SUPPLY FACTORS

Lending institutions' procedures and policies — the supply side of the provision of financial services — have traditionally contributed to limited access to formal financial services by poor people, and especially poor women. Lenders typically have little incentive to meet the financial needs of low-income people because of the higher unit costs of offering small loans and the increased risks associated with lending to people with little or no collateral or formal lending history. But institutions can be designed to compensate for these problems and decrease borrower transaction costs as long as these institutions are allowed to adjust their prices — that is, interest rates — to accurately reflect costs. But most countries have imposed interest rate restrictions that remove incentives and prevent financial institutions from experimenting with different methods of reaching poor clients. In contrast, Indonesia liberalized its financial sector in 1983 and has allowed financial institutions to charge market interest rates and experiment with different service delivery methodologies that allow them to reach low-income clients.

The BPD and BRI systems differ in their delivery of services in two important respects. First, the BPD systems have established a village post system that allows them to reach deeper into rural areas than the BRI Unit Desa network, which operates primarily in larger, subdistrict towns, called kecamatans. The more decentralized BPD systems, therefore, decrease transportation costs for rural borrowers. Second, although both the BRI Unit Desa and BDP systems have adopted what has been termed a minimalist credit service delivery methodology, the BRI system uses slightly more complicated banking procedures (Rhyne 1990). The Unit Desas require, for example, some collateral, and use stricter loan assessing and processing procedures. These dissimilarities suggest that the two systems should attract slightly different clienteles in terms of income level and gender.

HYPOTHESES CONCERNING THE PARTICIPATION OF WOMEN IN BRI AND BPD PROGRAMS

The above assessment of the demand and supply factors that affect women's demand for and access to financial services suggests five main hypotheses that can be tested regarding women's role in the BPD and BRI programs.

- Women will have higher participation rates in simpler, more decentralized financial institutions.
- Women will demand smaller loans than men because women are concentrated in smaller, less profitable businesses. Therefore, they will also have to pay higher interest rates (since the unit cost of smaller loans is higher).
- Women may be perceived by financial institutions as greater credit risks.
- Women will participate as both **borrowers** and **savers** in financial services programs.
- Female enterprises will be concentrated in the trade and, to a lesser extent, service sectors. This also suggests they may have a high demand for short-term, working capital loans since these types of loans are required for trading activities.

In light of these hypotheses, the section below will examine the survey data to demonstrate the different characteristics and participation levels of male and female borrowers and their businesses.

SECTION THREE

DESCRIPTIVE PROFILE OF CLIENTS

The two impact studies provided considerable descriptive information on the BRI and BPD clients, including female customers. This data is analyzed in a discussion of women's participation, loan size and terms, women as financial clients, women as savers, female businesses, alternative sources of credit, and client income levels.

WOMEN'S PARTICIPATION

Overall, the hypotheses regarding women's participation in the two programs are supported by the data collected by the two impact studies. Women comprise only 24 percent of the borrowers in the more complex and centralized BRI Unit Desa program, compared to the BPD system in which women comprise 53 percent of borrowers. (Table 1).

TABLE 1

PERCENTAGE FEMALE, GEOGRAPHICAL FOCUS, AND AVERAGE LOAN SIZE IN THE BRI AND BPD SYSTEMS, 1989

System	Region	Ratio of Village Posts to Town Units	Total No. Borrowers	Percentage Female	Ave. Loan Outstanding (in dollars)[a]
BRI	Nationwide	0.2:1	1,800,000	24[b]	437
BPD	Provinces	NA	761,329	53[c]	40
BKK	Cen. Java	5.9:1	509,584	55	26
LPN	W. Sumatra	NA	15,054	59	109
KURK	E. Java	7.6:1	113,742	72	26
BKPD	W. Java	NA	NA	41	NA
LPK	W. Java	NA	NA	30	NA
BKPD and LPK		0.1:1	122,949	40	77

[a] Information on average loans outstanding for individual BPD systems are calculated from sample size of 10 villages in Central Java, 6 villages in West Java, and 3 in East Java and West Sumatra
[b] Based on sample of 1,404 borrowers
[c] Based on sample of 977 borrowers

SOURCES: Rhyne 1990, Hageboeck and Rerimassie 1990, Sutoro and Haryanto 1989.

Several factors complicate this seemingly clear-cut outcome, however. First, in her study of BRI borrowers, Sutoro finds that although women accounted for only 25 percent of the bank branch borrowers, the percentage of loans actually used by women was considerably higher, 32 percent. Second, although women are a majority of borrowers for the BPD system as a whole, their participation rates vary considerably across programs and regions. In East Java they represent 72 percent of the clients, compared to 59 percent in West Sumatra, 55 percent in Central Java, and only 30-41 percent in West Java (see Table 1). Consequently, if one narrowly compared loans used by women in the Unit Desa program to the participation of women in the LPK program in West Java, women would actually constitute a higher proportion of Unit Desa beneficiaries.

What explains these variances? The differences in women's participation in the two BRI samples points up one of the major problems of collecting gender data in credit programs. The fungibility of money makes it easy for loans to be shifted from one person to another and, therefore, difficult to identify the actual user of the loan. For example, husbands take out loans for their wives in the BRI system (wives are typically the co-signers on BRI loans) (Sutoro, and interviews with women and BRI and BPD system staff). The fungibility of money and the fact that men sometimes take out loans for their wives suggests that women may be undercounted as loan recipients unless special efforts are made to identify the actual end user of the loan.

The regional differences in women's participation rates can be explained, in part, by the varying degrees of decentralization of the systems. Decentralized programs reduce borrower transactions costs. Systems with greater outreach to smaller villages appear to be the ones that are the most effective at reaching women (see Table 1). The majority female systems, KURK and BKK, have between 7.6 and 5.9 village posts to every town unit. In contrast, the systems with fewer female clients (BRI and West Java) have lower ratios, 0.2 and 0.1-1, respectively.

Also, the simplicity of the BPD system reduces transaction cost and, therefore, facilitates women's participation. It is simple for customers (literate or not) to apply for loans from BPD units. Staff members fill out the half-page loan application and applicants sign or leave a thumbprint on the form. No collateral is required. Instead, bank personnel ask for a signature from the local village leader, the Kepala Desa, as a confirmation of good character.

At the Unit Desa branches, procedures are only slightly more complicated. Bank staff also assist applicants in filling out forms. But collateral is required in addition to a reference from the Kepala Desa. Although collateral requirements are not stringent — many applicants use houseplots (but not necessarily formal land titles) or motorcycles as collateral — these additional requirements probably dissuade some women from participating (BRI 1989:5).[1] However, this is probably less of a constraint to women's participation than the issue of proximity.

In sum, the hypothesis that women will have higher participation rates in the simpler, more decentralized financial institutions (like BKK and KURK) is confirmed by the two impact studies. However, the BRI's relatively loose collateral requirements do not appear to be as big a constraint to women as the distance of the bank from the village.

[1] Collateral requirements are only semiformal because BRI staff are willing to accept evidence of land ownership like tax receipts or receipts from motorcycle purchases as substitutes for formal land titles.

LOAN SIZES AND TERMS

The hypothesis that women's loan sizes will be smaller than men's is, for the most part, also confirmed by the two studies. Across the BPD systems, men's average loan size was $87 compared to that of women, which was only $59. Further, programs with larger average loans typically reach fewer women. The BRI and West Java programs, which serve relatively few women clients, have larger average loans outstanding ($437 and $77, respectively) than BKK and KURK, which have a majority of female customers. Both BKK and KURK have average outstanding loans of $26 (see Table 1).

But the evidence on women's smaller loans is not totally conclusive. West Sumatra has higher loan sizes ($109 average loans outstanding) and a large percentage of women clients (59 percent).[2] Two factors combine to help explain this regional outlier. First, West Sumatra is a considerably wealthier province than the others, which helps to explain why its average loan size is higher.[3] It also highlights the potentially powerful impact of sociocultural factors. In contrast to Java, parts of Sumatra were dominated by matrilineal societies. In such societies women frequently play a much more active role in the formal economy because there are fewer cultural restrictions limiting their participation.

The BRI study does not have gender disaggregated data on average loan sizes. It does, however, offer information on the percentage of funds going to men and women. Women account for 24 percent of the participants and 25 percent of the funds. This finding contradicts the results of the BPD study and the hypothesis regarding the smallness of women's loans. If women were concentrated in the lower loan levels, they should be using a smaller percentage of the funds. Without information on the distribution of the loan size by gender, it is difficult to explain this outcome. Clearly, more in-depth analysis of the survey data is required.

Programs with smaller loans and a higher proportion of women clients have shorter loan maturities. At the BKK and KURK, the average loan has a maturity of three months. In addition to the shorter maturities, the BKK and KURK programs require weekly installments payments. By contrast, at the West Java program and the Unit Desas, loans sizes are larger and maturities are generally for one year and are repaid in monthly (not weekly) installments.

The results of the above analysis have important implications for policy makers trying to reach women and for the women borrowers themselves. As long as women demand small loans with short maturities from local organizations, they will have to pay more for their credit. Table 2 compares the loan terms of the different systems and illustrates clearly that offering village-level credit in small amounts costs substantially more — effective interest rates in the BKK and KURK systems are 85 percent compared to the much lower 35 percent in West Java.

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[2] In their 1988 evaluation of the FID I project, Goldmark and Lucock (1988:30) illustrate increases in average loans sizes in West Sumatra from Rp. 131,000 to Rp.158,000 between December 1985 and June 1987.

[3] A World Bank study of poverty in Indonesia found Sumatra to be a considerably wealthier island than the others (World Bank 1990).

TABLE 2

LOANS TERMS IN BPD AND BRI SYSTEMS

Terms	W. Java	C. Java	E. Java	BRI
Minimum size	$5	$5	$5	$15
Maximum Size	$1,100	$550	$550	$2,700
Maturity	1 year	3 months	3 months	1 year
Repayment Freq.	monthly	weekly	weekly	monthly
Effective interest	35%	84%	84%	32%

SOURCE: Rhyne, 1990:16.

It also demonstrates that women are willing to pay these rates, which appears to confirm the position that the noninterest costs of borrowing greatly exceed the cost of interest rates for poor people, particularly poor women. This is an important lesson for policy makers interested in increasing women's access to credit. Financial institutions that offer small loans and charge market interest rates that cover the costs of these loans are more likely to reach women than subsidized, centralized programs. Further, it suggests that women earn a steady stream of income that allows them to repay their loans in weekly installments.

WOMEN AS FINANCIAL CLIENTS

The BPD systems have high arrears rates compared to the BRI-Unit Desa system, which at first seems to confirm the position that women are higher credit risks than men. The BPD impact study found that 28 percent of the borrowers were in arrears and that 60 percent of those late in their payments were women. The Unit Desa, by contrast, had only 5.1 percent of its funds in arrears as of March 1990 (Boomgard and Angell 1990:26-27).

But two central factors mitigate against the conclusion that women are higher credit risks. First, the 28-percent arrears found in the BPD study may be misleading or overstated. For example, officially the BKK records show that their arrears account for 20 percent of the total outstanding loan portfolio. However, this high rate is due primarily to old arrears stretching over a 20-year history. When old past due loans are excluded from BKK's books, the actual current arrears rate would be around 3.8 percent (Yaron 1991). Consequently, if the BPD impact study reflects old arrears positions of clients, it may be overstating the systems' overall arrears.

Second, the stronger financial performance of the Unit Desa network can be attributed to its supervisory and ownership structure (Rhyne 1990). In her comparative study of the BRI and BPD systems, Rhyne concludes that contrary to conventional wisdom about BPD and BRI clients, the BRI system's advantage arises not because the Unit Desas serve better-off customers with larger loans. Rather, it is because they are all units of a single, well-run financial institution, namely a state-owned bank that functions largely as a private commercial bank.[4] In contrast, the BPDs face greater management problems related in part to the fact that they do not function as a single integrated financial institution. For example, the village-level programs (BKK, KURK, LPK, BKPD, and LPN) are all supervised by separate provincial banks (the Bank Pembangunan Daerahs) that generally do not have a direct financial interest in keeping the village programs operating smoothly.

In sum, the higher arrears rate among the projects with a majority of women clients cannot be shown to arise because women are especially risky clients. The arrears position of the financial institutions is probably tied more to the effectiveness of the management of the institutions than it is to the gender or income level of the clients. Poor women can be strong financial clients, which contradicts that hypothesis that they may be riskier because they are concentrated in less profitable, small businesses. These are important lessons for financial institutions interested in expanding their clientele and outreach.

At the same time however, the results of the BPD study do not support the position that women are necessarily more responsible financial clients than men as is sometimes posited in the women in development literature (Berger 1989). Women account for 60 percent of the borrowers and 60 percent of the clients in arrears in the BPD programs.

WOMEN AS SAVERS

Unfortunately the Unit Desa study did not collect information on savers. Therefore, this section focuses exclusively on the BPD system. The BPD survey found that 90 percent of the BPD borrowers are also savers, although savings levels differ substantially among regions.[5] The system in West Java is now almost primarily financed through savings, but at BKK savings levels remain low (the average deposit per saver is only $3.8 compared to $55.2 in West Java).

At first glance, the data presented in Table 3, which compares savings levels with average loans outstanding, seem to suggest that those taking out smaller loans — presumably the poorer clients — save much less than those with larger loans — presumably better-off customers. This evidence appears to support the conventional wisdom that the propensity to save is a function of income and that, therefore, the poor do not save, or save very little. Because women are commonly concentrated in lower income groups, this would imply that women will not be an important group from which to mobilize savings.

But again, as with the case of arrears, savings levels appear to be less a function of client incomes (or gender) than of institutional structures and instruments. The low level of savings at the BKK can be explained by the fact that they adopted a saving instrument, a certificate of deposit, that was unpopular both with staff and customers (Rhyne 1990:16-17). The KURK system's low level of savings ($6.2 average deposit) can be accounted for by the fact that it just began a pilot voluntary savings project in one district in 1990. Since that time, the passbook savings scheme they adopted has grown so rapidly that KURK is optimistic about becoming a largely saving-financed institution after it introduces the scheme throughout the province (Rhyne 1990:17).

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[4] The advantages of this structure are outlined in Rhyne 1990:22.

[5] The BPD systems require mandatory savings. But this section is concerned with voluntary savings and particularly the propensity of poor women to save.

TABLE 3

BPD AVERAGE DEPOSIT AND LOAN LEVELS AND PERCENTAGE FEMALE
(in dollars)

System	Average Deposit Level	Average Loans Outstanding	Percentage Women Borrowers
BPD Systems	20.2	40	53
Central Java	3.8	26	55
West Java	55.2	77	40
East Java	6.2	26	72
West Sumatra	16.3	109	59

SOURCE: Hageboeck and Rerimassie 1990:II-29

The correlation between larger loan size and higher levels of savings is, however, indicative of what can happen to financial institutions when they must pay interest on savings. Savings mobilized from clients must be placed into income-earning assets quickly to cover the costs of generating and paying interest on these funds. Consequently, as savings levels rise so does the pressure to provide larger — less costly, but potentially riskier — loans (Rhyne 1990:18). This may lead savings-based institutions to move away from serving small-scale borrowers, the majority of whom are women. At the same time, however, they may increase their number of women savers.

In sum, the hypothesis that women will save when offered the appropriate savings instrument is confirmed by the BPD study. Again, this is important news for financial institutions attempting to collect more capital for lending. However, evidence suggests that as financial institutions increase their savings, there is pressure on the institution to increase its loan sizes. The result would be that women who are net savers would gain at the expense of women borrowers who are seeking small loans. These trends should be tracked to ensure that BPD village institutions maintain their emphasis on lending to poor clients, while at the same time broadening their base of saving mobilization. This calls for continued government supervision of the financial soundness of these institutions (Rhyne 1990).

FEMALE BUSINESSES

The hypotheses regarding female enterprises emphasized the concentration of women in small-scale trade and lower-paying jobs. Unfortunately, neither study provides information on the gender of the different types of entrepreneurs. However, if one uses the programs as a proxy for gender — in other words, BRI clients are more typically men and BPD clients are more typically women — it is possible to make general statements about female businesses. Using this imprecise proxy, the surveys appear to confirm the expectation that women (and men) are concentrated in trade. Both the BRI and BPD systems lend primarily to traders — 68 percent in BRI and 71 percent in BPD (Table 4).[6] The BPD figure is up considerably from 1983 when a survey of BKK borrowers found that only 53 percent of its customers took out loans for trade (Goldmark and Rosengard 1983).[7]

Among traders, the largest proportion (36 percent) of BRI borrowers operated a small grocery store, roadside stand, or food stall; 10 percent traded in textiles or yarn; and the remaining group traded assorted products ranging from bricks and building material to cash and staple crops. The majority of BPD traders (55 percent) were engaged in retailing of food/beverages/cigarettes in restaurants, grocery stores, or street stalls. These figures appear to indicate that traders that are BRI clients (and, therefore, probably men) are slightly more diversified than their BPD system counterparts (who are more likely to be women).[8]

After trading, manufacturing, services, and agriculture are less similar across the two systems. For BRI borrowers, manufacturing is the most common area for investment after trade, accounting for 13 percent, followed by services with 11 percent. Only 7 percent of Unit Desa customers borrowed for agriculture. And within agriculture, most loans went for livestock raising (7 percent), not crop production (1 percent).

In the BPD systems, a significantly larger proportion of loans went to agriculture (19 percent), which is down slightly from the 22 percent recorded for BKK in 1983. Within the agricultural-borrower group, crop production appeared to be the most important (11 percent) followed by agricultural processing (4 percent) and livestock raising (3 percent). Service and manufacturing accounted for only 8 percent and 2 percent, respectively. These statistics suggest that BPD system clients (who are more likely to be women) are more agriculturally based and less likely to be involved in manufacturing than BRI customers (who are more likely to be men).

Because loans are concentrated in trade, the majority of loans in both system are for working capital investments. Working capital accounted for 80 percent of loans in the BPD system. Similarly, at the Unit Desa system, 78 percent of loans go for petty trade, cottage industries, and service occupations, which are also characterized by rapid turnover of working capital. This suggests that both men and women borrowers use most of their loans for working capital. Further, for nonagricultural occupations in the Unit Desa survey, working capital was turned over an average of once every 23 days. Every time capital was turned over, a net income of 5-25 percent was earned.

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[6] Loan use does not necessarily illustrate total household-income-generating activities. Sutoro's study illustrates that borrower households are characterized by occupational multiplicity: the BRI-Unit Desa borrower household is engaged in 1-12 income-generating activities with the average being 3.6. Household income levels were found to be positively correlated with the number of income-generating activities.

[7] This decline broadly suggests that the country continued its process of structural transformation from agriculture to other sectors in the 1980s. But it is difficult to draw many conclusion from these differences since the figures draw from different sample populations — one from Central Java and the other from across Java and including West Sumatra.

[8] Because the BPD survey used a smaller number of categories to categorize clients, the difference in diversity found by the studies may be overstated.

TABLE 4

PERCENTAGE OF BRI AND BPD BORROWERS IN VARIOUS ENTERPRISES

Enterprise	%BRI 1989	%BPD 1990	%BKK 1983
Agriculture[a]	7	19	22
Trade	68	71	53
Manufacturing	13	2	11
Services	11	8	13

[a] Includes agriculture and livestock production and agricultural processing. Figures do not add because of rounding.

SOURCES: Sutoro and Haryanto 1990, Hageboeck and Rerimassie 1990, Goldmark and Rosengard 1983.

The studies also provide some insight into the size of female businesses versus that of male business and differences in wage earnings. Again, if program is used as a proxy for gender (BRI-Unit Desa clients are more likely to be men and BPD clients are typically women), it appears that female businesses have fewer employees than those of men. The average number of workers employed in BRI Unit Desa enterprises was 3.4, but this figure increased to 5.6 after an average of three years of program participation. In contrast, BPD borrower enterprises had only 2.2 employees, which increased to around 3 after one year of participation.[9] Of the Unit Desa enterprise employees, 44 percent were women. But the average daily wages for women were only $0.98 compared to $1.30 for men.

In sum, the above data support the hypothesis that women will be concentrated in trade and in businesses that are smaller than those of men. The data also suggest that women benefit as both employers and employees under the two systems. Indeed, women probably benefit more as employees from BRI loans than they do as employers, given that they make up only 24 percent of loan recipients but 44 percent of Unit Desa enterprise employees.

SOURCES OF CREDIT

This paper has emphasized women's preference for convenience in selection a source of credit and the additional constraints they may face in getting access to formal financial services. Both factors suggest that women may rely disproportionately on informal financiers. The 1983 BKK survey seemed to confirm the position that women, and poor borrowers more generally, have difficulty getting access to credit. The study found that prior to their access to BKK, 66 percent of borrowers did not have access to financial services, formal or informal (Goldmark and Rosengard 1983).

The two more recent surveys gathered information on sources of credit, and the BPD study surveyed the reasons behind borrower preferences for certain systems. The BRI study found that 28 percent of borrowers had gotten credit from family and friends, 30 percent from suppliers of raw materials, and 16 percent from cooperatives and savings clubs (see Table 5). There is no gender

[9] The BPD survey did not collect wage or gender information on its enterprise employees.

TABLE 5

ALTERNATIVE SOURCES OF CREDIT FOR BRI BORROWERS

Credit Source	% of Borrowers who have used	Length of Loan in days	Average Monthly Interest (approx.)
Family/Friends	28	157	0.3
Supplier	30	44	6.0
Buyer of Finished Products	3	30	14.8
Cooperative and Savings Clubs	16	192	2.5
Private Bank	3	315	2.5
Other Govt Bank	2		
Moneylender	4	85	13.4
Local Store	6	29	0.2
Employer	2	45	3.7
Govt Program	2	480	1.7

SOURCE: Sutoro and Haryanto, 1990

breakdown of these data. Unfortunately, the BPD and BRI surveys cannot be easily compared since the BPD study focused on how frequently borrowers had used different sources of credit while the BRI study asked only which alternative sources BRI borrowers had used.

Nevertheless, the outcome of the BPD system survey (see Table 7, Section Four) suggests that friends and family, raw material suppliers, and savings and cooperative societies were not especially important to BPD borrowers. Only 9 percent of women and 8 percent of men cited informal sources as those used most frequently. Most borrowers relied primarily on the BPD institutions (83 percent of men and 88 percent of women).

Moreover, contrary to what might be anticipated, there do not appear to be any large discrepancies between women's and men's explanations of what service delivery features they liked most. Their explanations for why they are using certain loan sources are also similar. Reasons cited by women in order of popularity include close to my home (22 percent), loans are provided quickly (13 percent) — two factors that strongly reduce transaction costs — repayment terms are favorable (13 percent), know the lender (12 percent), and no collateral required (11 percent). For men, the order of preference is only marginally different (Table 6).

These data confirm the argument that proximity to home, collateral requirements, and the availability of small loans are important to female clients. But low-income male borrowers also appear to favor these attributes. This suggests that the preferences for service delivery of financial services of low-income men and women are relatively similar in rural Indonesia.

TABLE 6

REASONS CITED FOR BORROWING FROM THE SOURCE FROM WHICH LOANS ARE MOST FREQUENTLY TAKEN

	Male		Female	
Reasons for Using Loan Source	No. of Times Reasons Cited	Percent	No. of Times Reasons Cited	Percent
Close to home	147	20	181	22
Know the lender	96	13	97	12
Institution isn't formal	76	10	67	8
Loans provided quickly	112	15	104	13
Small loans available	42	6	66	8
Repayment terms favorable	81	11	107	13
Low interest	39	5	50	6
No collateral required	62	9	88	11
No penalty for late payment	19	3	17	2
Other	55	8	40	5
Total	729		817	

SOURCE: Hageboeck and Rerimassie 1990, II:18.

CLIENT INCOME LEVELS

There has been considerable debate over whether the BRI and BPD systems serve the same, or a very similar, class of customers. The resolution of this question has important policy implications for the direction of program expansion, competition among government programs, and the need for, or allocation of, continued government and donor support. Two factors seem to support the position that the clients are different — the gender disparities in program participation and the loan size levels. But other indicators, such as loan use, suggest they are similar.

The two impact studies shed some light on this debate, but do not provide any definitive conclusions. According to the BRI study, 15.1 percent of borrowers in 1986 were below the poverty line prior to program participation. This compares to 16.4 percent of Indonesia's rural population in 1987, according to the Indonesian Bureau of Population Statistics (BPS).[10]

The BPD survey found substantial regional variation in borrower income levels. Using the same BPS data for comparison, the study found that West Java and Sumatra served better-off clients than the programs in Central and East Java. According to the survey's estimates, 31 percent of BKK (Central Java) borrowers and 18.2 percent of KURK (East Java) borrowers lived below the poverty line compared to only 2 and 3 percent in the West Java programs and 4.9 percent in West Sumatra. These findings should only be taken as general indicators, however, since the income and expenditure data they are based on are imprecise. Nevertheless, it suggests that the programs with the lower loan sizes are serving poorer clients. In other words, loan size can be used as a rough proxy for client income status. This suggests that the BPD systems are serving different (lower-income and predominantly female) clients in Central Java and East Java than the BRI Unit Desa network. But in West Java and West Sumatra these difference may not be so pronounced.

If West Java does not decentralize and continues to increase its average loan sizes — average loans went from Rp. 117,000 to Rp. 127,000 for LPKs and Rp. 163,000 to Rp. 200,000 for BKPDs between 1985 and 1987 — it is likely they will begin to compete with BRI for clients (Goldmark and Lecock 1988:30). Since the Unit Desas have a cheaper loan interest rate, the village institutions may be unable to compete effectively. This suggests a financial as well as a social justification for reorienting West Java and West Sumatra programs to focus more on poor customers, especially poor women.

[10] The Government of Indonesia poverty line is Rp. 10,295 (US$ 6.30) per capita per month.

SECTION FOUR

SURVEY METHODOLOGY AND IMPLICATIONS FOR IMPACT ANALYSIS

The two studies come to opposite conclusions regarding the effect of increased access to financial services on clients. The BRI Unit Desa study appears to illustrate that increased access to credit has had a strong positive impact on client (primarily male) household income, enterprise employment levels and profits, and standards of living. In contrast, the programs with a majority of female clients that provide smaller loans for smaller businesses show a less dramatic outcome. Although their household incomes and business employment levels increase, this increase does not appear to be significantly different from that of the surrounding population. This conclusion implies that increasing the access to financial services of poor people, and especially poor women, does little to improve their incomes and the profitability of their businesses. These discrepancies in results suggest that a careful review of the studies' methodologies and analyses is needed.

THE BPD SYSTEM IMPACT SURVEY

The BPD study attempted to assess impact primarily by collecting data on the system's borrowers and a comparison group that was meant to reflect the general surrounding population. This comparison group was not a control group comprised of non-BPD system borrowers. The survey team was unable to identify a nonborrower group that was sufficiently similar to the borrower group in terms of income level and business ownership to justify a valid comparison. Consequently, they collected data on what they hoped to be a useful substitute — a comparison group. There appear to be several problems with their approach given the Indonesian rural financial sector.

Rural Indonesia is filled with a plethora of formal credit programs, including the BPD systems, and these institutions are used by a substantial proportion of the rural population, including women. A significant percentage — 12.6 percent of the men and 40 percent of the women — in the comparison group used the BPD systems. In addition, 22 percent of the men and 7 percent of the women from the comparison group borrowed from BRI Unit Desas. Together, 35 percent of the men and 47 percent of the women in the comparison group had access to either BRI or BPD system loans. If other formal rural banking institutions are included, 51 percent of the men and 50 percent of the women in the comparison group had access to and used formal credit institutions (see Table 7).

Clearly, this type of overlap between financial users in the samples introduces significant problems for researchers attempting to assess the impact of increased access to formal financial services on poor clients. It is hardly surprising that significant differences were not found between the borrower and the comparison groups. The study was essentially comparing one set of borrowers to another. This is particularly pronounced for the women sampled.

An additional issue in sample selection complicates the study's ability to assess impact, especially for women. The comparison sample focused on male heads households — 83 percent of the comparison sample was male compared to only 47 percent of the borrower sample. The extremely small number of women in the comparison group — 17 percent translates into only 89 women in total — severely limits the potential for analyzing gender issues in the comparison sample. It also complicates the study's ability

TABLE 7

PERCENTAGE OF BPD SYSTEM BORROWERS CITING SOURCES AS THOSE MOST FREQUENTLY USED FOR CREDIT

	Men		Women	
Source of Loan	Borrower Sample	Comparison Sample	Borrower Sample	Comparison Sample
Relative	2.2	9.5	0.8	3.3
Friend or neighbor	1.7	15.3	2.1	3.3
Moneylender	2.1	4.7	3.1	6.7
Arisan (Rosca)	0.5	4.7	.6	6.7
Credit Provided by Supplier	1.4	4.7	1.2	6.7
Credit Provided by Buyer	0.0	0.5	0.0	0.0
Credit Provided by Employer	0.2	4.7	3.3	3.3
BPD System	83.3	12.6	87.7	40.0
BRI	4.1	22.1	1.7	6.7
Other Govt Program	0.2	4.2	0.0	0.0
BPR (rural bank)	0.0	0.0	0.2	0.0
Cooperative	2.7	11.6	1.0	3.3
Private Bank (non-BPR)	0.2	0.5	0.0	0.0
Other	1.4	4.9	1.0	10.6

SOURCE: Hageboeck and Rerimassie 1990, II:16.

to make meaningful comparisons between the borrower group and the "comparison" group since women comprise the majority of borrowers (53 percent) and a small minority of the comparators (17 percent) — see Table 8.

In addition, the surveyors had difficulties in collecting accurate income and expenditure data — they found a $27-per-month unexplained gap between the two, which is a major share of the total discussed previously — making it difficult not only to establish borrower income levels but also to assess changes in income. This unexplained gap probably results in part from the fact that the surveyor did not have panel data that tracked changes in borrower income between two time periods (for example, 1987 and 1990). To compensate, they had to rely on borrowers' memories of their profits over the years — in other words, on recall data, which is generally much less accurate, particularly when information is being gathered on businesses that do not keep formal written records of their profits.

TABLE 8

CHARACTERISTICS OF BORROWERS AND HOUSEHOLD SAMPLES

	Borrower Sample			Comparison Sample		
Region	No. of Borrowers	% Male	% Female	No of Compar.	% Male	% Female
BKK — Cen. Java	464	45	55	236	85	15
BKPD — W. Java	192	59	41	96	93	7
LPK — W. Java	96	70	30	48	79	21
LPN — W. Sumatra	82	41	59	48	62	38
KURK — E. Java	143	28	72	99	84	16
TOTAL SAMPLE	977	47	53	527	83	17

SOURCE: Hageboeck and Rerimassie 1990, II:3, II:4.

Moreover, although the study looked at income and expenditure, it did not examine the issue of enterprise productivity beyond looking at increases in profits. Impact studies of women's credit programs from other regions have demonstrated that although there may be no significant differences in income between those with and without access to formal credit, there can be marked differences in efficiency — measured as hours worked. In a study of the PRODEM project in Ecuador, women microentrepreneurs decreased the number of hours worked monthly by 14-17 percent, compared to only 4-7 percent for women nonborrowers (Buvinic, et al. 1989). Women's dual responsibility — in the work place and at home — may explain their preference for efficiency. The BPD study was not designed to assess these types of changes.

In sum, five factors combine to severely limit the ability to make any meaningful analysis of impact from the BPD study. These factors include (a) the comparison group's access to formal financial services, including those of the BPD system; (b) the dominance of women in the borrower sample but men in the comparison one; (c) the lack of attention to productivity increases; (d) the large gap that remains unexplained between household income and expenditure data for both the borrower and household samples; and (e) the reliance on recall data.

Therefore, the main lessons from the BPD study are not about impact per se, but rather concern the importance of gathering data in a way that allows for useful interpretation. These lessons are fourfold. First, in the absence of baseline data, efforts must be made to collect samples of borrower and nonborrower groups. In rural Indonesia (and in countries with a similarly vibrant rural financial sector) this may prove to be a particularly difficult task and lengthen the process of data collection considerably. Second, borrower samples, especially when they comprise primarily women, must be compared to a sample of nonborrowers with a similar gender breakdown. Third, questionnaires should try to get at the issue of productivity and efficiency by looking at hours worked as well as income level.

Finally, where possible, attempts should be made to collect baseline survey data so that information on borrower income is available in at least two time periods. This will generate more precise indicators of how borrowers' incomes have changed and decrease the reliance on recall data and control or comparison groups. Panel data collection techniques should also reduce the incidence of large gaps in income and expenditure data like the one affecting the BPD study.

THE BRI UNIT DESA IMPACT SURVEY

The BRI Unit Desa impact study also suffers from several difficulties. No effort was made when the study was conducted to collect information on a nonborrower control group. Using recall data from Unit Desa customers who had an average of three years of program participation, the study illustrates how client household and enterprise incomes, business employment levels, and standards of living had increased between 1986 and 1989. The study compares these results to Indonesian nationwide data. It relies entirely on the Indonesian Bureau of Statistics poverty line data and illustrates that, prior to program participation, 15.1 percent of Unit Desa clients lived below the poverty line compared to only 5.1 after 1989. Without any data on how similar groups without access to BRI loans from the same geographic regions did over the same time period, it is difficult to determine what the impact of increased access to financial services actually was.

Indonesia has a dynamic economy that experienced an average annual growth rate of 5.1 percent between 1980 and 1988. Moreover, the World Bank poverty assessment on Indonesia found that the country achieved substantial reduction in the incidence of poverty particularly in Java. In aggregate during the 1976-1986 period, the percentage of the population in poverty declined by nearly 50 percent, and the absolute number of poor in Indonesia fell by almost 20 million people (World Bank 1990). Given these trends, it is difficult to say whether Unit Desa borrowers differed that much from the rest of the population.

Moreover, the study concentrated on clients with an average of three years of program participation. Although this makes sense for researchers attempting to assess the impact of the program over time, the sample of borrowers may not be typical. Indeed, three-time borrowers may be the program's stronger clients and, therefore, not representative. In addition, this study also relied on borrower recall data, although a number of cross-check techniques (such as price reference checks) were incorporated into the survey in an attempt to maintain the quality of the data.[1]

The BRI study suffers from the opposite problem of the BPD study. Instead of underestimating the impact of the financial services program, it is probably overestimating its effect. Because the study has no control group, it can not really say if the increases in income that its clients experienced were actually related to access to BRI credit or whether the income increases experienced by borrowers were similar to those experienced by nonborrowers in the same area. Also, the study is probably too narrowly focused on more stable clients and hindered by the fact that it had to rely on problematic recall data.

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[1] For example, all prices for inputs or goods sold were checked for accuracy against the Indonesian Consumer Price Index and large deviations were explained or eliminated. Interviews that contained conflicting data that could not be reconciled were considered waste samples and replacement interviews were conducted to maintain the sample size.

SECTION FIVE

CONCLUSIONS

Several important policy conclusions can be drawn from the BRI Unit Desa and BPD system impact studies. First, the two studies show that women's participation rates are higher in the simpler, more decentralized programs (BKK and KURK). The BRI's collateral requirements probably constrain women's access to the program, but collateral appears to be less a barrier to access than the distance of the bank from the female client's village. This suggests that financial services programs that have simple processing procedures and are decentralized to the village level will have a greater likelihood of reaching women.

Second, the studies also demonstrate that women demand smaller loans with shorter terms, which reflects the fact that they are concentrated in small trading activities. This has implications for loan pricing. Small loans with short maturities are more expensive than large loans. This finding leads to a third conclusion. Women are willing to pay higher interest rates for small, short-term loans that are available at the village level.

Fourth, the impact studies also provided insights into women as financial clients. In contrast to what may be anticipated about the riskiness of small clients, evidence from the impact studies illustrated that poor women can be strong financial clients, although they did not demonstrate themselves to be better clients than men. The weakness of the participating financial institution — as reflected by arrears rates — appeared to be related more to the structure and management of the financial institution than the program's average loan size or gender of its clients.

Fifth, the BPD study demonstrated that women can be important participants as savers. Low levels of savings have been associated with programs that have offered inappropriate savings instruments (nonpassbook), not with gender. Evidence on savings levels also showed that as savings levels rise so do average loan sizes as banks face pressure to meet interest obligations on their deposits. Over time, this could have negative consequences for women seeking small loans. This trend should be monitored and efforts should be made to ensure that women (and men) borrowers can continue to get small loans as deposit facilities are expanding.

Finally, the surveys offer a few more insights into the issue of overlap between BRI and BPD system clients for credit. The surveys suggest that in some regions, particularly Central and East Java, BPD clients are significantly poorer than BRI customers and that they are predominantly female in contrast to those at BRI. These differences appear to be much less pronounced in West Java and West Sumatra where fewer clients have incomes below the poverty line and average loan sizes are higher. In these provinces, there may well be competition between the two systems for clients.

Conclusions can also be drawn from the studies on the methodologies of the surveys.

First and foremost, the BRI and BPD studies demonstrate the importance of gathering information on a well-constructed, nonborrower control group. The Unit Desa study did not collect information on such a group, but used national survey data instead. Consequently, the study does not establish whether the increases in household and business income experienced by BRI Unit Desa clients result from increased access to financial service or improvements in general economic conditions. The BPD survey collected data on a comparison group. But the comparison was flawed because many of those sampled had access to formal financial services and women constituted a majority in the borrower sample, but only a small minority in the household one.

The studies are also hampered by limitations in their borrower sampling techniques and data collection. The BRI program concentrated on three-time borrowers, which probably skewed the sample in favor of the program's stronger clients. In the BPD survey, the gap of $27 per month in the household income and expenditure data for both the borrower and household samples is so large it calls into question the reliability of the data. In addition, both studies were forced to rely on recall data. Further, they could have benefited from a broader focus that included tests of productivity increases measured in hours worked. This is especially important in smaller-scale, majority-women programs where experience from other countries has demonstrated that, because of their dual household and income generating responsibilities, women may prefer to work fewer hours instead of increasing their profits substantially.

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