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**Dynamics of
Small- and
Micro-Scale
Enterprises
and the Evolving
Role of Finance**

GEMINI Working Paper No. 26

GEMINI

**GROWTH and EQUITY through MICROENTERPRISE INVESTMENTS and INSTITUTIONS
7250 Woodmont Avenue, Suite 200, Bethesda, Maryland 20814**

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Dynamics of Small- and Micro-Scale Enterprises and the Evolving Role of Finance

by

**Carl Liedholm
Professor of Economics
Michigan State University**

December 1991

**Prepared for Donor's Conference on Small and
Micro Enterprise Promotion in a
Changing Environment: A Focus on Africa
September 30-October 2, 1991, The Hague**

This paper reports on work supported by the Growth and Equity through Microenterprise Investments and Institutions (GEMINI) Project of the U.S. Agency for International Development, Office of Small, Micro, and Informal Enterprise Development, under contract number DHR-5448-C-00-9080-00. The paper builds on the author's earlier paper, "Small Scale Enterprise Dynamics and the Evolving Role of Informal Finance," which will appear as a chapter in *Informal Finance in Low Income Countries*, Dale Adams and Del Fitchett, eds., 1991.

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SECTION ONE

INTRODUCTION

This paper examines the dynamics of small- and micro-scale manufacturing enterprises in developing countries, particularly in Africa, and the evolving role of finance in that process.¹ Topics that fall within the purview of firm dynamics include the creation, evolution, and disappearance of firms and how these patterns vary by country, stage of development, industrial sector, and policy environment.

Studies of small-firm dynamics are important because they provide insight into the feasible and desirable patterns of growth in manufacturing output and employment. Since small firms dominate the industrial scene in most developing countries, a deeper understanding of how these firms evolve may make it possible to pursue an industrialization path that builds on these enterprises, thereby leading to results that are potentially more equitable and efficient than alternatives stressing only large-scale firms. Such studies can also uncover ways that policies and programs can facilitate, or at least not impede, this evolutionary process. There is increasing evidence that finance plays an important role in this process.² Yet, most scholars have not placed finance in a dynamic context. McCleod (1986) is a conspicuous exception.

The dynamic themes for both small enterprises and finance will be brought together in this paper. Section Two reviews the macro and micro evidence on small firm dynamics. Section Three examines the evolving demand for finance on the part of these firms, while Section Four examines the evolving sources of this finance, particularly informal ones. The policy implications for these findings are examined in Section Five.

¹"Small scale" is defined in this paper in terms of employment and generally refers to those firms with 50 workers or less. The term "microenterprise," which is defined in this paper as a firm with 10 or less workers, is used to depict the lower end of the size spectrum. "Modern" small firms are defined to have more than 10 employees. The establishments examined in this study include those specifically engaged in the production and repair of manufactured goods (ISIC codes 31-39 and 95). Excluded are establishments engaged in mining, construction, trading, transport, and financial, social, and personal services.

²See, for example, World Bank, 1989; and Adams and Fitchett, 1991.

SECTION TWO

SMALL-ENTERPRISE DYNAMICS

The limited number of dynamic analyses on small enterprises in developing countries can usefully be classified as either macro studies, which examine aggregate changes in the size, location, and sector of such firms, or micro studies, which focus on the birth, growth, and disappearance (death) of individual firms. The salient findings from the dynamic studies will be briefly reviewed.³

The macro studies indicate that the absolute number of small- and micro-scale enterprises is increasing in virtually all developing countries. Growth in numbers of firms appears to be highest in enterprises with 2-9 and 10-49 workers, and lowest in one-person enterprises. In some countries, in fact, the number of one-person firms is declining in absolute terms. In over half of the countries for which data are available, employment in small- and micro-scale firms is growing more slowly than medium and large firm employment, shifting the relative balance of employment toward larger enterprises. This is one facet of the structural transformation that normally accompanies rises in per capita income. In particular, there is a secular shift toward somewhat larger firms, based in larger localities, and producing more modern products.

Micro studies can provide important additional insights into the process through which this transformation is taking place as well as the paths of individual enterprises over time. Such information has been relatively rare; however, several recent studies, particularly in Africa, have begun to shed light on enterprise dynamics at the firm level.⁴

One of the striking findings is that the aggregate figures understate the magnitude of the changes taking place at the individual enterprise level. Not only are existing firms expanding and contracting, but many new firms are being created (births) while others are disappearing (deaths or closures). This great churning among firms is masked by the macro data. The vast majority of new firms are microenterprises (10 workers or less), and preliminary evidence from Africa indicates that the annual birth rate of such firms is typically close to 10 percent (Parker and Liedholm, 1989).

Disappearance rates are also high for micro firms. Recent findings from studies in Kenya (Parker and Aleke Dondo, 1991) and Swaziland (Fisseha and McPherson, 1991) are

³For details and further elaboration, see Liedholm and Parker, 1989; and Liedholm and Mead, 1991.

⁴See, for example, Chuta (1989) for Nigeria; Steel and Webster (1990) for Ghana; Parker and Aleke Dondo (1991) for Kenya; Liedholm and McPherson (1991) for South Africa; and Fisseha and McPherson (1991) for Swaziland. A general overview of the empirical evidence on enterprise dynamics is found in Liedholm and Mead (1991).

providing new insight on this neglected aspect of enterprise dynamics. Only about half of the microenterprise deaths in those countries, for example, occur because the activity is not financially profitable (business failure); other prominent causes of closure include personal reasons (for example, the entrepreneur may be in ill health or die), government intervention, and better economic options. Approximately half the entrepreneurs of closed firms eventually started new enterprises, while less than 20 percent accepted paid employment elsewhere. These closure rates are highest in the initial three years; indeed, over half the enterprise deaths in Kenya and Swaziland took place during this period. After three years, however, the enterprises' chance of surviving increase markedly.

The growth rates for the surviving manufacturing microenterprises are extremely high. Recent findings from studies in six African countries reveal that the average per firm growth rate of such enterprises in the urban areas of these countries is 15 percent per year (see Table 1). Although there are variations by country (from 4.5 percent in Lesotho to 24.8 percent in Kenya), by location within each country (urban growth rates are often twice the rural ones), by gender of entrepreneur (male-headed enterprises grow approximately twice as fast as female-headed ones), and by subsector, the contribution of microenterprises to the growth process in these countries cannot be overlooked. What is particularly striking is that these rapid growth rates are found even though the majority of surviving enterprises in most countries do not grow at all. In Swaziland (Fisseha and McPherson, 1991), for example, about two-thirds of the surviving firms remained the same size. If firms expand, however, they tend to do so in growth spurts, which tend to occur after the third or fourth year of the firm's life.

The following picture of the life cycle of a typical microenterprise thus begins to emerge. The firm originates as a tiny enterprise — typically a one-person operation — with three years of struggle, a high probability of failure, and little growth. If it survives these first three years, however, it is likely to experience a sudden spurt of growth that will typically project it into one of the larger size categories of microenterprises.

Relatively few of these microenterprises, however, ultimately graduate or transform themselves into more complex modern small and medium enterprises. Approached from the other end of the process, one may ask how many of the existing modern small and medium firms originated as larger firms rather than emerging out of the huge pool of even smaller microenterprises? A summary of the empirical evidence is presented in Table 2.

One important finding is that in six of the seven countries the majority of modern small and medium manufacturing firms did not graduate from the micro seedbed, but rather started with more than 10 employees. Moreover, the graduation rates in African countries are found to be substantially smaller than those found in Asia and Latin America. In Asia and Latin America, half or more of the modern small and medium firms had expanded through the size structure, while in no African country did even half graduate. The percentage of small and medium firms that originated as micro firms, however, is higher in West than in East and Central Africa. An important issue is to what extent inadequate access to finance, informal or formal, may have impeded this graduation process.

TABLE 1
ANNUAL MICRO MANUFACTURING ENTERPRISE GROWTH RATES PER FIRM:^a
AFRICA
(in percent)

Country	Annual Growth Rates(%)		
	Urban	Rural	All Areas
South Africa	21.1%	-	-
Swaziland	15.6	4.6	6.6
Lesotho ^b	4.5	2.8	4.1
Kenya	24.8	-	-
Nigeria	15.6	-	-
Ghana	11.9	-	-
AFRICA - URBAN - OVERALL	15.5%		

Sources:

South Africa - Liedholm and McPherson, 1991
 Swaziland - Fisseha and McPherson, 1991
 Lesotho - Fisseha, 1991
 Kenya - Parker and Aleke Dondo, 1991
 Nigeria - Chuta, 1989
 Ghana - Steel and Webster, 1990

Notes:

^a Average annual growth rate is in terms of employment and is defined as follows: $(A-B/B) / C$ where: A = number of workers now; B = number of workers when enterprise started; and C = number of years firm has been in existence.

^b Includes nonmanufacturing microenterprises.

TABLE 2
ORIGINS OF MODERN SMALL AND MEDIUM
PRIVATE MANUFACTURING FIRMS
 (with 11 employees or more)

<u>Region/ Country</u>	<u>Year</u>	<u># of Firms</u>	<u>Firm Size # of Workers</u>	<u>Percent w/Micro Origin - graduated^a</u>	<u>Percent w/no Micro Origins^b</u>
Africa					
Nigeria	1965	64	11-200	43.7	56.3
Northern Nigeria	1989	59	11-200	42.0	58.0
Sierra Leone	1975	42	11-200	30.1	69.9
Botswana	1982	20	11-200	20.0	80.0
Rwanda	1987	28	30-870	10.7	89.3
Asia					
India	1979	244	11-200	65.6	34.4
Philippines	1978	47	11-200	48.9	51.1
Latin America					
Colombia ^c	1978	76	11-200	50.0	50.0

Sources:

- Botswana - computed from data compiled by Government of Botswana, 1984.
- Nigeria - computed from data generated by Harris, 1967.
- Northern Nigeria - computed from data generated by Chuta, 1989.
- Rwanda - computed from data compiled by Ngirabatware, Murembya, and Mead, 1988.
- Sierra Leone - computed data compiled by Chuta and Liedholm, 1982.
- India - computed from data in Little et al., 1987.
- Philippines - computed from data in Anderson and Khambata, 1981.
- Colombia - computed from data generated by Cortes et al., 1987.

Notes:

- a Started with fewer than 11 employees.
- b Started with 11 employees or more.
- c Includes metal working establishments only.

SECTION THREE

EVOLVING DEMAND FOR FINANCE

The magnitude and composition of the effective demand for finance of small- and micro-scale enterprises varies as they evolve in a typical way. In particular, the relative importance of fixed and working capital as well as the overall magnitude of each kind of capital changes as the firms age and grow.

Most new firms are microenterprises. At their inception, the overall capital needs of microenterprises seem, at first glance, to be modest. This is reflected in the initial capital requirements reported in most studies of small manufacturing enterprises, with figures ranging from \$63 in Sierra Leone (Chuta and Liedholm, 1985), \$480 in Haiti (Haggblade, 1979), \$792 in Jamaica (Fisseha and Davies, 1981) and \$839 in Bangladesh (BIDS, 1981). Yet, in relation to average income, the significance of the initial capital barrier looms somewhat larger. In Bangladesh, the overall initial capital requirement amounted to almost six times the country's per capita income. Moreover, most surveys report that the proprietors themselves typically perceive lack of capital to be their most pressing initial constraint in establishing a small enterprise (Liedholm and Mead, 1987).

The majority of this initial investment is typically used for fixed rather than working capital. In Jamaica, for example, approximately two-thirds of the initial investment of microenterprises went for fixed assets (primarily machinery and tools), while one-third was for working capital (Fisseha and Davies, 1981). A similar pattern is reported in Colombia (Cortes et al., 1987). These proportions varied by size, type, and location of enterprise but, in most instances, the relative significance of fixed capital was maintained. This result does not obviate, however, the important complementary need for working capital, which tends to be underestimated, particularly at the firm's birth.

Once the micro firm begins to produce and eventually expand production, however, the demand for working capital typically increases both absolutely as well as relative to fixed capital. This follows because these initial output increases are accomplished primarily by adding variable inputs, which are largely financed by working capital; there is thus an increased utilization rather than an expansion of the initial fixed capital.

Available empirical evidence indicating that a substantial amount of excess capacity exists among small enterprises provides support for this view. Excess capacity measures are difficult to quantify precisely and studies in developing countries are particularly sparse.⁵ Surveys of small manufacturing firms conducted by Michigan State University and host

⁵See Pan-Thuy et al. (1981) for a discussion of the studies as well as a treatment of the distinction between "excess capacity" (in other words, how close to its desired, efficient level of output a firm is operating) and "capital utilization" (in other words, the proportion of the total time a productive capital stock is operated).

country researchers in five countries, however, have generated some information on many facets of their operation including excess capacity.⁶ On the basis of the responses of entrepreneurs to the question of how many additional hours they would operate their existing firms if there were no demand or materials constraints, the estimates of overall excess capacity ranged from 18 percent in Egypt, 24 percent in Honduras, 35 percent in Jamaica, 37 percent in Sierra Leone, and 42 percent for rural manufacturing firms in Bangladesh (Liedholm and Mead, 1987). In Ghana, Steel and Webster (1990) estimated that 86 percent of the enterprises were operating at 50 percent or less of capacity. Excess capacity did vary between industries and by location in each country, but rarely did it decline below 10 percent; no small firms in these countries operated on more than a single shift.

Additional evidence of the relative importance of working capital for microenterprises can be found in recent studies that have asked entrepreneurs what they perceived to be their most pressing constraints during their initial periods of growth.⁷ In South Africa (Liedholm and McPherson, 1991), for example, "lack of operating funds" was the most frequently cited primary business problem that microenterprises experienced when they expanded. In Swaziland (Fisseha and McPherson, 1991), "lack of operating funds," along with "bad debts of customers," another working capital component, were the two most frequently cited business problems faced by microenterprises at the time they were growing.

Lack of working capital would appear to be a relatively more important constraint for growing microenterprises than for the larger, growing modern small firms with more than 10 workers. An important finding from Chuta's study of 300 small- and micro-scale firms in Northern Nigeria (Chuta, 1989), for example, was that "obtaining adequate working capital" was more frequently cited as a problem for rapidly growing micro firms (41 percent), than for rapidly growing modern small firms with 11-50 workers (23 percent). Indeed, for firms growing with just one or two persons, working capital shortages were the most frequently cited constraint to growth. Steel and Webster (1990) also report that in Ghana "lack of credit for raw materials" was the most frequently cited constraint on expansion for enterprises with 4-9 workers (64 percent), but was only the second most frequently cited expansion constraint for those enterprises with 10-29 workers (54 percent).⁸

⁶A detailed discussion of these studies can be found in Liedholm and Mead (1987).

⁷The true need for finance and particularly working capital, however, is lower than the proprietor's perceived demand for it. This is because working capital shortages are often the symptom of some other problem. For instance, a raw material delivery bottleneck may force proprietors to keep their raw material inventories at unduly high levels. Similarly, managerial inefficiencies, such as those that slow throughput, waste material, or siphon off funds to nonbusiness activities, can appear as a working capital shortage. Consequently, one must distinguish valid needs for working capital from the specious demands that only serve to sustain temporarily a fatally ill enterprise or reflect some other underlying problem (Kilby et al., 1984).

⁸In answering this question, the enterprises were asked to describe the three most serious obstacles they would face when expanding, under the assumption that they could sell all they produce; thus demand constraints were not examined in this question. It should also be noted that for the firms with

Why should this demand for working capital be expected to increase as micro firms expand? First, the quantity of working capital demanded would be expected to vary directly with output or sales, since the principal use of working capital is to finance labor, raw materials, and other purchased inputs that go into goods produced for sale. Strong support for this hypothesis comes from an inventory demand study that used data on small enterprises in Sierra Leone (Kilby, et al., 1984). This study found that the relationship between the level of sales — indeed the square root of sales — and inventory was positive and significant at the 1 percent level.

Second, the quantity of working capital would be expected to increase with the lengthening of the production and marketing period for raw materials and finished goods that frequently accompanies the transformation of microenterprises into modern small- and medium-scale enterprises. Microenterprises in several industry subsectors, for example, produce to order and thus operate much like a job-shop, where customers may even provide the raw materials. This institutional arrangement keeps the marketing and production periods relatively short, the inventory-sales ratio small, and the corresponding demand for working capital relatively low. If these microenterprises not only expand but transform themselves into modern small and medium enterprises, however, these periods frequently lengthen as one facet of that transformation. Tailors and carpenters, for example, would no longer produce custom orders, but would begin to operate like a factory in which inventories of finished clothing or furniture would be maintained.

Evidence from enterprise surveys in Honduras and Sierra Leone provide support for the differing production and marketing periods between micro and modern small enterprises in at least some industry subsectors (see Table 3). In both countries, the inventory-sales ratios of small-scale clothing and furniture enterprises were significantly higher than those of their microenterprise counterparts. Thus, as firms in these industries grew, the demand for working capital increased — not just with sales but even more because of the increased inventory-sales ratio. The constancy of the ratio for small- and micro-scale baking establishments, however, reminds one that this increase is not ubiquitous and must be examined on an industrial subsector basis.⁹

Other characteristics associated with this enterprise transformation, however, might be expected to reduce somewhat the demand for working capital. First, small and medium firms may be able to realize some economies of material bulk purchases, particularly since the transaction cost of placing a raw material order is fixed irrespective of size (see Kilby et al., 1984).

0-3 workers, lack of credit for raw materials was also the most frequently cited constraint to expansion, but only 52 percent of respondents listed this constraint.

⁹The constancy of the inventory-sales ratio for bread is, no doubt, strongly related to the perishability of the commodity.

TABLE 3
INVENTORY-SALES RATIOS FOR
SMALL- AND MICRO-SCALE ENTERPRISES

<u>Clothing</u>	<u>Sierra Leone</u>	<u>Honduras</u>
Micro**	.02	.04
Small Scale	.10*	.10*
<u>Furniture</u>		
Micro	.05	.04
Small Scale	.15*	.10*
<u>Bread</u>		
Micro	.02	.01
Small Scale	.02	.01

Sources: Sierra Leone: data from Chuta and Liedholm, 1985.

Honduras: data collected during 1980 survey of 485 rural micro and small-scale industries.

Notes: * Significant difference at 1% level (Chi Square).
 ** Micro - 10 persons or less
 Small - more than 10 persons

Second, evidence exists that the capital intensity of modern small and medium enterprises typically exceeds those of microenterprises (Liedholm and Mead, 1987). Because the proportion of working capital demand will vary inversely with the capital intensity of production, this should tend to reduce the relative demand for working capital. These two countervailing factors may help explain why working capital shortages appear to become a less severe constraint for expanding modern small and medium enterprises, when compared with their micro counterparts. An abundance of other inputs including fixed capital is also required when a microenterprise is transformed into a more complex, modern small-scale enterprise (Liedholm, 1990, and Boomgard, 1989). Indeed, there is typically a sharp, discontinuous jump in the demand for fixed relative to working capital when the firm reaches this stage in its evolution. Unfortunately, data on the precise magnitude and mix of this demand for most countries are still limited.¹⁰ In Ghana, however, Steel and Webster (1990) report that "lack of credit for equipment" is the most frequently cited future expansion constraint for firms with 10-20 workers.

SECTION FOUR

EVOLVING SUPPLY OF FINANCE

The sources of finance available to a small- or micro-scale enterprise also change as the enterprise evolves. This evolution affects not only the relative importance of informal and formal sources of finance, but also the relative contribution of various types of informal finance.

Indeed, at the inception of the micro firm, neither formal nor informal sources of finance play any significant role. Rather, the initial investment of such a firm is obtained overwhelmingly from internal family sources, primarily personal savings and gifts from relatives or friends. The empirical evidence from Africa, for example, indicates that these sources consistently accounted for over 95 percent of the original capitalization of microenterprises, ranging from 98 percent in Nigeria (Aluko, 1972), to 97 percent in both Tanzania (Schadler, 1968) and Sierra Leone (Chuta and Liedholm, 1985). A remarkably similar pattern emerges from the evidence generated in other parts of the world. Personal financial sources represented 94 percent of the original capitalization of microenterprises in Jamaica (Fisseha and Davies, 1981), 91 percent in Haiti (Haggblade et al., 1979), and 89 percent in the Philippines (Anderson and Khambata, 1981). The paucity of funds obtained from either formal or informal external sources at start-up is striking.

¹⁰Indirect evidence from lenders on the relative importance of fixed capital at this stage can be derived from the recent review of microenterprise support programs by A.I.D. In this review of 32 A.I.D. projects, the fixed capital component of loans comprised only 20 percent in microenterprise expansion schemes, but 45 percent in enterprise transformation schemes (Boomgard, 1989). Yet, small firms often attempt to minimize their demand for fixed capital by renting (leasing) or by buying used equipment (Chuta and Liedholm, 1985, and Cortes et al., 1987).

The micro firm's access to outside sources of finance, however, begins to widen as it ages and evolves over time. McCleod (1986) argues that these widened opportunities are directly linked to increases in the reputation and assets of the firm.

What pattern of financial evolution might be expected from our knowledge of microenterprise dynamics? During the typical microenterprise's first few years of struggle and initial growth, its assets and reputation would be limited and its outside sources of funds meager. Consequently, the firm's internal free cash flow from depreciation and retained profits provides the major source of capital during this period in its life cycle. Internal sources of finance thus continue to dominate. In Sierra Leone and Bangladesh, for example, 89 percent of the capital for expanding units came from this source, while in Haiti the figure was 81 percent (Liedholm and Mead, 1987).

Nevertheless, even during this early period, a few external sources of informal finance begin to emerge. One of the first and most overlooked of these is credit from the customer. Retail customers frequently supply the entrepreneur with either the raw materials or a cash down payment to purchase the raw materials (Kilby et al., 1984).¹¹ In rural Egypt (Davies et al., 1984), for example, 80 percent of the firms indicated that customers made advanced payments, either in cash or in kind. The relative importance of this form of credit varied by subsector, ranging from 100 percent for mat making to 43 percent for metal shops. The extent of this practice is often directly related to the reputation of the producer; consequently, as the product quality and delivery performance of the entrepreneur become better known to the consumers over time and as the firm's reputation in their eyes grows, customer prepayment should increase. Advance payments by customers represent a creative response to the obstacles arising in low income countries with limited financial intermediation. The customer provides resources and in return frequently receives implicit interest in the form of a price discount, which may range from 1-10 percent depending on the subsector concerned (McCleod, 1986).

Another form of informal consumer credit that also grows as the firm ages and is the subcontracting mechanism, in which the customer — typically, a much larger firm — supplies the micro firm with the raw materials required to produce the ordered goods. Subcontracting tends to be limited to a few subsectors, such as clothing, wood, and fabricated metal, and is more widespread in Asia than in Africa (Mead, 1985).

An additional external source of informal finance that becomes increasingly available as the firm evolves is trade credit from or accounts payable to suppliers of inputs. This source of credit tends to be less important than credit from final customers for most industries in low income countries; in Egypt, for example, less than 10 percent of the micro firms obtained inputs on credit. Accounts payable to input suppliers tend to grow in

¹¹The credit extended to other customers on delivery must be subtracted from this figure to arrive at the net supply of working capital by customers. In Jamaica, 34 percent of the sample entrepreneurs reported granting loans on sales, while in Haiti the comparable figure was 71 percent. In Egypt, less than 10 percent of the sales were on credit.

importance, however, as the firm evolves and improves its reputation. In Egypt, for example, it was the larger and older of the microenterprises that have the greatest amount of input credit (Davies et al., 1984).

Professional moneylenders are another source of informal finance for microenterprises. Microenterprises, however, typically do not make extensive use of this part of the informal financial market in most low income countries (Kilby et al., 1984, and Anderson, 1982). In most cases, recourse to moneylenders occurs at infrequent intervals, primarily for small working capital loans, for a few days, at interest rates not infrequently exceeding 100 percent; yet the loans are extended quickly and few transactions cost are involved. The access to moneylenders, however, grows as firms age and evolve. In both Haiti and Jamaica, for example, less than 1 percent of the microenterprises used moneylenders at start-up, but the percentage rose to 1.7 percent in Haiti and 3.9 percent in Sierra Leone when they expanded (Kilby et al., 1984). Once the reputation of the firm is established, it typically remains the client of that moneylender for a long period.

An expanding array of informal sources of finance thus becomes available to the microenterprise as it evolves. Initially, most of these sources provide short-term working capital, for which the microenterprise's effective demand tends to be relatively high. It is also this type of finance that the informal market is particularly well suited to provide.

Some fixed capital, however, is also supplied to micro firms by the informal financial market. Since the perceived risks of longer-term lending to microenterprises are deemed to be relatively high, not much term finance is provided by the informal sector (World Bank, 1989). The importance of establishing a reputation on the part of the microenterprise becomes even more crucial in this case and the availability of informally supplied fixed capital thus may come at a later stage in the typical firm's evolution.

There are two major informal sources of fixed capital: supplier credit and subcontracting. Supplier credit for fixed capital typically becomes available when a micro firm becomes well established and develops a good payment record (Kilby et al., 1984). The supplier has some incentive to offer such credit to boost sales and can use the equipment as security. Fixed capital is also sometimes provided to microenterprises by the larger parent firm as part of a subcontracting arrangement (Mead, 1985).

Finally, at a later stage in their evolution, microenterprises may begin to have access to the formal financial market. This frequently occurs once they have transformed themselves — graduated — into modern small and medium enterprises, although a few microenterprises have been able to obtain credit from regular financial institutions (Liedholm and Mead, 1987). Evidence that institutional or formal finance plays a bigger role as firms grow is revealed in enterprise surveys in Colombia (Cortes et al., 1987) and the Philippines (Anderson and Khambata, 1981). Unfortunately, for most countries, data on the graduation or even the evolution of firms from informal to formal financial sources are sparse and this phenomenon has rarely been examined (Meyer, 1988).

The following picture of the financial evolution of a typical microenterprise begins to emerge from these findings on the demand for and supply of finance. At its inception, the microenterprise's primary financial need is for fixed capital, which is almost entirely obtained from internal family sources, mainly personal savings. Once operations begin, the working capital needs typically predominate, and most of this is financed from the firm's internal free cash flow. As the firm ages and its reputation grows, external sources of informal finance begin to emerge. Credit from customers is frequently the first source to appear, followed by credit from suppliers, professional moneylenders, and others. These are primarily short-run sources of funds that are used to meet the working capital needs of the microenterprises. If the microenterprise grows larger and transforms itself into a modern small or medium enterprise, however, its need for both fixed and working capital greatly expands. At the point, the firm may now begin to have increased access to the formal financial market.

SECTION FIVE

IMPLICATIONS FOR FINANCIAL POLICY

What financial policy implications emerge from this dynamic perspective on small enterprise? Specifically what are some of the lessons learned that might lead to improvements in the way that both the formal and informal systems provide financial services to small- and micro-scale enterprises?

1. One important lesson emerging from the findings is that the magnitude and composition of microenterprise demand for finance as well as its access to the sources of that finance typically vary significantly over its life cycle. Consequently, one must be aware of these systematic variations when determining the appropriate volume and type of financial resources that might be provided to such enterprises.

Although a surprisingly wide variety of informal sources are available to meet many of the evolving needs of microenterprises, several limitations mark these informal financial arrangements. First, these informal sources are independent and generally segregated from one another. Consequently, there is little or no integration of disparate sources and uses of funds either between the informal institutions themselves or between them and the formal financial institutions. There is also relatively little integration within individual units of the multiple financial services that the microenterprise needs, such as savings, deposit, and checking account activities. When these services are integrated in one unit, additional information is generated for lenders on the entrepreneur's evolving financial management ability — one element that contributes to the entrepreneur's growing reputation.

2. Second, the success of several innovative pure financial service programs for microenterprises, often referred to as minimalist credit programs, such as the Grameen Bank in Bangladesh, the Badan Kredit Kecamatan in Indonesia, or the Get Ahead Foundation in

South Africa, provides an indication that even the effective working capital needs of evolving small- and micro-scale enterprises in these countries have not been adequately met by the existing financial system (Boomgard, 1989, and Biggs, Snodgrass, and Srivastava, 1990). Increased attention needs to be focused on how even these successful schemes can be scaled up to reach larger numbers of micro and modern small-scale enterprises in these countries. One promising path is a financial systems approach that aims for financial viability of the lending institutions and stresses the importance of savings (Rhyne and Otero, 1991). Among the institutional variations of such an approach are options that would link micro enterprise programs to formal sources of finance (for example, directly with commercial banks or through so-called second-level institutions), or that would transform microenterprise programs into specialized financial institutions themselves capable of providing both savings and credit services. Moreover, if such schemes are to be developed in other countries with similar financial gaps, these countries should become aware of the new lending technologies, many of which were borrowed from the informal financial system and have been developed to keep transaction costs and risks of default low. Elements of this new approach include character-based lending, group dynamics, the prospect of repeat working capital loans to motivate repayment, a savings component, and the charging of market (cost-covering) interest rates (Meyer and Cuevas, 1990, and Rhyne and Otero, 1991).

3. Third, informal financial sources are not particularly well suited to meeting the evolving fixed capital needs of micro firms. As firms grow and perhaps attempt to transform themselves into modern small-scale enterprises, informal lenders become less able or inclined to provide the larger sums for the longer time periods that are now required (World Bank, 1989).

Enabling the firm to have access to formal sources of finance as it grows provides one viable alternative for increased funds. The transition, however, is not usually a simple or smooth one because usually an entirely new set of procedures and requirements, such as strict collateral, for obtaining loans must be mastered. Moreover, commercial banks and other formal financial sources are frequently reluctant to deal with unfamiliar small enterprises, because of the higher transaction costs and greater perceived risks of lending to them.

Several approaches have been proposed for facilitating this transition. One is to provide technical assistance to the firms themselves to teach them how to obtain loans from formal financial institutions (Meyer, 1988). A second approach is to provide technical assistance instead to the commercial banks and similar financial institutions on how they could lend more effectively to small- and micro-scale enterprises (Kilby et al., 1984). So far only a small number of commercial banks, such as the Bank Rakyat Indonesia, have been interested in making loans to microenterprises. With accumulation of experience and improved information by lenders, the risks of lending to these enterprises should decline. The judgments of loan appraisers and loan officers will improve with an increase in knowledge of specific trades and with the experience they gain by lending to this sector.

Lending institutions, however, are not going to willingly engage in this learning-by-doing process unless these initial high costs can be reduced. A loan-guarantee scheme is one such cost-absorbing mechanism, although the track record of such schemes to date has been poor (Levitsky and Prasad, 1987). Commercial banks would be more willing to provide unsecured short-term loans to such enterprises if the guaranteed portion of the loan were reasonably high and if all screening costs above those incurred for standard loans could be shifted to the guarantor. To help ensure that the guarantee subsidy is confined to learning, the banks should be given an incentive, such as a declining guarantee over time, to move new borrowers into a normal commercial relationship. A third approach would be to graduate or convert an entire microenterprise lending program or scheme into a financially self-sufficient institution providing a complete array of financial services to a larger and broader group of microenterprises as well as modern small-scale enterprises (Meyer, 1989, and Rhyne and Otero, 1991). These three approaches are not mutually exclusive, however, and indeed all may be needed to ensure that the financial system does not impede the evolution of small- and micro-scale firms in developing countries.

Several general financial policy implications stem from these considerations. First, interest rate deregulation looms as a high priority. If microenterprise lending programs are to be financially self-sufficient, they must be able to charge market (cost-covering) interest rates. Second, regulations concerning acceptance of deposits should be reviewed to permit, under certain conditions, microenterprise schemes to offer the savings services that have been shown to be so important to their viability. Finally, policies that contribute to a general extension of the formal financial system and the strengthening of its links with the informal system will be needed if the evolving financial requirements of small- and micro-scale enterprises are going to be adequately satisfied.

SECTION SIX

CONCLUSIONS

This examination of small- and micro-scale enterprise dynamics has focused attention on the evolving role of finance in that process. At different stages in the life cycle of the typical microenterprise, the needs of the firm, including its effective demand for finance, vary in a systematic fashion. A surprisingly large array of formal and informal sources of finance are available to the firm, but their relative contributions vary as the firm evolves.

Informal financial arrangements, in particular, have been shown to be responsive to this evolutionary pattern. Yet, the lack of integration of these diverse informal sources and services as well as the gaps in the availability of both short- and long-term funds at certain stages in the firm's evolution point to deficiencies in the existing financial system. It is only when the informal and formal financial markets become better integrated and more unfettered that the evolving financial requirements of small enterprise will be more completely met.

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