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The Dynamics of Micro and Small Enterprises in Developing Countries

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Summary. — The number of people engaged in micro and small enterprises increases as a result of new enterprises being started and through an expansion of existing activities. As a partial offset to these increases, employment declines when existing businesses cease operations. This article draws on recent survey work to examine the magnitude and determinants of enterprise births, closures and expansions. It explores the ways in which these different sources of change are influenced by the state of the macroeconomy, and examines policy and project implications. © 1998 Elsevier Science Ltd. All rights reserved

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1. INTRODUCTION

Micro and small enterprises (MSEs) have been recognized as a major source of employment and income in many countries of the Third World. Detailed surveys in a number of countries suggest that as many as a quarter of all people of working age are engaged in MSE activities. There is reason to believe that the share of the total population engaged in such activities is growing over time. While the broad magnitudes of MSE structure are reasonably clear, there has been much less understanding of the process through which employment in MSEs grows.

The contribution of small enterprises to the creation of new jobs has been a controversial issue around the world. Even in the United States, some have argued that eight out of every 10 new jobs in recent years have come from small businesses. Others have attacked this finding as reflecting flawed statistical analysis, focusing on gross changes without taking account of offsetting factors that make the net figures substantially more modest (Nasar, 1994).

Employment in MSEs expands as a result of new enterprises starting up in business, and through an expansion of existing enterprises. These positive forces are offset by the contraction or closure of other enterprises. These different components of change are subject to different forces and determinants.

Many MSE promotion projects around the world seek to influence one or another of these different components of change. Some projects aim to promote new business starts by addressing the constraints that make it difficult for people to establish new enterprises. Other projects provide assistance aimed at countering the forces that cause existing enterprises to fail, while still others seek to help existing businesses to improve their performance and to expand.[1]

Studies have recently been conducted in a number of countries that provide new insights concerning patterns of enterprise births, survival or closures, and growth, and the determinants of these various components of change. This paper reports on these findings.[2]

Among the approaches used in these new studies are panel surveys, returning to particular enterprises or locations to follow the evolution of a sample of enterprises over time; "tracer" surveys, that search out and re-interview MSEs covered in earlier studies; surveys of MSEs that had previously been operated by members of a household but are now no longer in operation; and modified baseline surveys, using one-shot surveys to provide retrospective information concerning past patterns of growth of currently existing enterprises since their start-up.

Baseline surveys with retrospective information as well as surveys of closed enterprises were conducted in the Dominican Republic and in five countries of Eastern and Southern Africa (Botswana, Kenya, Malawi, Swaziland, and Zimbabwe). All of these were national in coverage and were based on a complete enumeration of all small enterprises in a

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random sample of locations, where the areas to be enumerated were stratified by degree of urbanization and other key characteristics. Panel surveys were conducted in the Dominican Republic, in Jamaica, in Kenya and in Zimbabwe. Tracer surveys were undertaken in Nigeria, in Kenya, and (in a somewhat earlier time period) in Sierra Leone.[3]

The universe of activities examined in these surveys includes all enterprises engaged in non-primary activities (i.e. excluding agriculture, forestry, hunting and fishing, mining and quarrying, but including manufacturing and services as well as the transformation, transport and marketing of primary products), where at least 50% of the output is sold (i.e. excluding products used primarily for home consumption), and engaging up to 50 workers (including unpaid family members, working proprietors, apprentices and part-time workers). This means that the surveys examine the dynamics of a set of enterprises defined to include establishments consisting of one person weaving baskets for sale in the market as well as factories with 40 or 50 workers, using complex machinery.[4]

The outline of this paper is as follows. A brief, static picture of MSEs is presented in Section 2. An examination of the dynamics of MSEs follows in Section 3, highlighting new evidence on the turbulent processes of MSE creation, closure and expansion. The impact of the macroeconomy on MSE dynamics is then examined. Section 4 explores policy and assistance implications.

2. STATIC DESCRIPTIVE PROFILE

The overall structure of MSEs provides the context for examining dynamic issues. Since many aspects of this overview have by now become familiar, this background review can be brief, highlighting aspects that are relevant to the following discussion of enterprise dynamics.[5]

(a) *Magnitude*

House-to-house baseline surveys make clear that the number of micro and small enterprises is far larger than what is reported in most official statistics, which often cover only registered firms. Survey results indicate that 17–27% of the population of working age are employed in MSEs (see Table 1, for all the aspects of this static overview). Employment densities — the number of people engaged in MSE activities per 1,000 persons in the population — ranged from 70–90 in Botswana, Kenya, Lesotho and Malawi to well over 100 in the Dominican Republic, Zimbabwe and Swaziland. In the five African countries surveyed, the estimated total number of people engaged in micro and small enterprises is nearly twice the level of employment in registered, large-scale enterprises and in the public sector.[6]

(b) *Size distribution of MSEs*

Most activities categorized as MSEs are very small; the majority of MSEs consist of only one person working alone. Self-employment is thus a central element in these economies. If one defines the MSE universe as those firms with 1–50 workers, the upper end of the tail — those with 10–50 workers — constitute less than 2% of the businesses in virtually all the surveyed countries in Africa. Only the Dominican Republic is an outlier in this comparison, with their substantially smaller share of one-person enterprises and larger number at the upper end of the small enterprise spectrum.[7]

(c) *Labor force characteristics*

With most enterprises operating as one-person undertakings, it is not surprising that the largest employment category is working proprietors, a group that comprises more than half the MSE work force in most countries. When unpaid family members are added, the numbers reach three-fourths of the workers in most places. Only in a few countries do hired workers comprise as much as 20% of the MSE labor force; Botswana and the Dominican Republic stand out in this regard, with over a third of the labor force made up of hired workers. Trainees and apprentices add a significant share of workers in some locations, particularly in West Africa; in Southern Africa, as in other parts of the third world, apprentices constitute under 10% of the MSE labor force.

(d) *Location*

In all of these countries, the majority of MSEs operate in rural areas. The share of all enterprises in urban locations — cities and towns with at least 20,000 inhabitants — reaches as high as 46% in the Dominican Republic and 30% in Zimbabwe, but was 25% or less in all other countries. Even adding enterprises in rural towns — concentrations with 2,000–20,000 persons — still generally leaves well over half the enterprises in most countries in rural areas.

(e) *Composition of activities*

It is a common perception that micro and small enterprises are primarily vendors and small traders.

Table 1. *Characteristics of microenterprises*

	Botswana	Kenya	Lesotho	Malawi	Swaziland	Zimbabwe	South Africa	Dominican Republic
MSE employment/population age 15–64 (%)	17%	18%	17%	23%	26%	27%	NAv[a]	19%
MSE employment per 1,000 persons in the population	71	83	84	92	118	127	81	109
Share of all MSEs that are one-person enterprises (%)	65	47	79	61	69	69	47	22
Share of all MSEs with 10–50 workers (%)	3	2	1	1	2	2	1	18
Share of hired workers (%)	39	24	10	18	15	16	19	36
Locational breakdown of MSE employment (%)								
Urban areas	24	15	18	12	25	30	NAp[b]	46
Rural towns	28	7	10	4	10	6	NAp	18
Rural areas	48	78	72	84	65	64	NAp	36
Sectoral breakdown of enterprises: Urban areas only (%)								
Manufacturing	15	18	35	29	33	64	17	21
Commerce	71	74	41	62	56	30	70	63
Sectoral breakdown of enterprises: Rural areas only (%)								
Manufacturing	34	27	62	36	70	75	NAp	15
Commerce	64	66	27	60	24	16	NAp	75
Share of enterprises owned by females (%)	75	46	73	46	84	66	62	46
Share of all workers that are females (%)	67	40	76	40	78	57	78	38

Source: Survey data: Cabal (1992, 1993), Daniels (1994), Daniels and Fisseha (1992), Daniels *et al.* (1995), Daniels and Ngwira (1993), Fisseha (1991), Fisseha and McPherson (1991), Liedholm and McPherson (1991), McPherson (1991) and Parker (1994). Population data in the first line, which are taken from United Nations Development Program and World Bank (1992). Note that, in the sectoral breakdown, the remainder of the enterprises are in services.
[a]NAv = not available
[b]NAp = not applicable

There is some truth to this perception, since in several countries the majority of enterprises are engaged in commerce. It is important to recognize, however, that, in all countries, small manufacturing activities are also an important component of the MSE sector. Manufacturing activities are particularly significant in rural areas, where they constitute a substantially higher share of enterprises than in urban areas in each of the African countries with the relevant data. Only in the Dominican Republic was manufacturing more prevalent in urban than in rural areas.

Among micro and small manufacturing enterprises, three types of activities have consistently been identified as the most important categories: textiles and wearing apparel, food and beverages, and wood and forest products. Survey results suggest that these three sectors comprise about 75% of manufacturing enterprises in urban areas, and nearly 90% of manufacturing enterprises in rural areas. Yet these apparent regularities hide wide variations from country to country and between urban and rural areas as to which activity is most prevalent, as well as the nature of the dominant activities within each of these three broadly-defined sectoral groupings. These country-specific differences appear to reflect differing raw material endowments (e.g., the availability of wood, or of cotton), as well as tastes and consumption patterns.

(f) *Gender*

In most countries, the majority of MSEs are owned and operated by women. Furthermore, since working proprietors are the single largest category of the labor force, the great majority of the workers are also women. MSEs headed by women tend to be concentrated in a relatively narrow range of activities: beer brewing, knitting, dressmaking, crocheting, cane work, and retail trading. MSE's headed by women are more likely than their male counterparts to operate from the home. Since it is the home-based MSEs that tend to be overlooked, women owners of MSEs are particularly likely to be the "invisible entrepreneurs."

(g) *Efficiency*

Earlier studies based on detailed analysis of data concerning production costs in four developing countries suggest substantial differences in economic efficiency by enterprise size. In particular, the data indicate that returns per hour of family labor are significantly higher for enterprises with 2–5 workers, compared to those with only one person working alone.[8] This increase in economic efficiency continues for the next higher size group, those with 6–9 workers; thereafter, the number of observations in these studies is small and the results more ambiguous. Similar results were found in a recent survey of MSEs in Kenya.[9] In all of these studies, the data suggest that one-person enterprises generate the lowest returns; even a small increase in size is associated with substantial increases in economic efficiency, which for these small establishments is closely associated with the levels of income earned by those who work in the enterprise.

3. THE DYNAMICS OF MSES: CHURNING AND GROWTH

Micro and small enterprises are in a constant state of flux. During any given period, new firms are being created (new starts, or enterprise births), while others are closing; at the same time, some existing firms are expanding and others are contracting in size. Since these individual components of change can move in opposite directions, figures on net change mask the magnitude of the churning that takes place. These are the components that we seek to disentangle in the discussion that follows.

(a) *New MSE starts*

Empirical evidence on new business starts in developing countries, summarized in Table 2, makes clear that new MSEs are being established at a substantial rate. The annual rate at which new MSEs are started in these survey countries averaged over 20%, ranging from just below 20% in Kenya to over 30% in Botswana. Although the figures should be viewed as approximations rather than as very precise estimates, they are broadly indicative; given the techniques used, they provide lower-bound estimates of the orders of magnitude involved.[10] These surprisingly high figures are substantially above the 10% rates typically reported for small enterprises in industrialized countries.[11]

The vast majority of new firms being created are one-person establishments. Not only do most new enterprises consist of one person working alone, but as Table 2 shows, the birth rates of one-person enterprises are substantially above those for larger establishments.

It should also be noted that the new start rates for female-headed MSEs are substantially higher than those of male-headed enterprises. In the countries of Eastern and Southern Africa covered by these surveys, the female rate was over five percentage points higher than the male rate, a pattern that held in each country as well.[12]

Relatively little is known about the forces driving the MSE new start rates. A recent study

Table 2. *Annual MSE birth rates, by initial size (new starts during the year, as percent of number existing at start of year)*

Country	Year	Enterprise size (number of workers) 1	2 – 9	10+	Overall
Botswana	91	41.3%	11.5%	4.6%	32.0%
Kenya	92	22.0%	8.8%	1.7%	19.7%
Malawi	91	26.6%	14.8%	15.5%	24.6%
Swaziland	90	26.1%	10.1%	2.0%	22.0%
Zimbabwe	90	24.4%	11.3%	16.4%	23.5%
Dominican Republic	91	33.1%	8.6%	2.8%	27.1%
Average		24.9%	10.6%	7.9%	22.7%

Source: Computed from individual country survey data. Averages are weighted by numbers of enterprises in the size category in the country.

focusing on MSEs in Zimbabwe indicates that the determinants of new starts differ between high and low return activities (Daniels, 1995). For high return activities, initial capital requirements, experience of the entrepreneur, and the level of regulation are all inversely related to new start rates. For low return activities, the rate of new starts is related (inversely) only to the aggregate level of economic activity; for these firms, the lower the level of aggregate economic activity, the higher the rate of new starts.

A key implication of these findings is that there is no overall scarcity of entrepreneurs, in the Schumpeterian sense of individuals willing to incur the risk of establishing a new venture. Most of these new starts are one-person firms, which are typically the least efficient and least remunerative of the MSEs; they tend to start up in greater numbers, particularly in low-return activities with minimal barriers to entry, when the overall economy is languishing.

(b) *MSE closures*

Information on business closures, while more limited than that on enterprise births, is available from two types of surveys. The most accurate figures come from the Dominican Republic, where analysts returned to the same locations at regular intervals to identify changes in enterprise activity. This approach provided estimates of closure rates that exceeded 20% per year in the early 1990s.[13]

A second approach involved questioning all householders in a sample of locations about enterprises that they previously ran but that are no longer in operation. This approach is less accurate than one that returns to the same locations to document enterprise changes, since people may forget to tell — or may choose not to tell — about enterprises that failed in the past. For five countries where this approach was applied, the average calculated closure rate was 12.9% per year.[14]

It is important to recognize that only a portion of MSE closures can be described as traditional "business failures," where the firm was not financially or economically viable. Somewhat less than half of the MSE closures were in this category; lack of demand and shortage of working capital were the two most frequently mentioned underlying causes of these closures due to bad business conditions. For the others, approximately one-quarter of the MSEs closed for personal reasons such as illness or retirement, while the remainder closed because the entrepreneur was able to move on to better options or because the government forced them to close.

More detailed, follow-up information from Kenya indicates that those who closed their business for demand reasons were more likely to start a new enterprise than those who closed because of a lack of working capital. Indeed, overall, of those who closed, 60% subsequently opened a new business, 15% subsequently worked in agriculture, 8% accepted paid employment, and 17 were no longer economically active (Parker, 1994).

Most closures occur in the early years of a firm's existence. In Botswana, Kenya, Swaziland, and Zimbabwe, of those MSEs that had closed, over 50% of the closures had taken place within the first three years of start-up.[15] MSE closures peaked before the end of the first year in Botswana and Swaziland, and between years one and two in Kenya and Zimbabwe. Clearly, MSEs are particularly vulnerable during the fragile initial years, when entrepreneurs are learning how to operate a new business.

Given the high rates of MSE closures, particularly in the initial years, it is helpful to know the characteristics of the MSEs that are most likely to survive. The results of systematic analyses of closure patterns of MSEs in four African countries (Botswana, Malawi, Swaziland and Zimbabwe) and in the Dominican Republic make it possible to provide some indication of the types of enterprise that are most likely to cease operating.[16] The findings of these studies are summarized in Table 3.[17]

The analysis shows that MSEs that had added workers were more likely to survive than those that had remained the same size since their start. Such findings are consistent with the notion that MSEs that have expanded are more efficient and are thus more able to stay in business.

One of the surprising results of this analysis is the direct relationship that was found between an MSE's initial size and its chance of survival.[18] Firms that started the smallest, other factors held constant, were more likely to survive than their counterparts that started larger. This finding is the opposite of what one might have expected and indicates that smallness, by itself, is not necessarily an impediment to survival.

MSE survival rates also varied significantly by sector. Retail trading MSEs faced the highest closure risks, in all five countries; such firms were almost 30% more likely to close during any given year than their counterparts in woodworking, for example. Real estate, wood processing, wholesale traders, and non-metallic metal enterprises were the least likely to close, while trading, transport, and chemical MSEs were the most likely to do so.[19]

Location also played a significant role in determining an MSE's chances of survival. Urban MSEs had an almost 25% greater chance of surviving the year, holding all other factors constant, compared to their counterparts in rural areas.[20] Moreover, MSEs located in commercial districts were more likely to survive than those that operated out of the home. Proximity to growing markets would thus seem to be an important determinant of the prospects for an enterprise to survive.

The gender of the entrepreneur is also a significant determinant of MSE survival rates. More specifically, female-headed MSEs were less likely to survive the year, all other factors constant, compared to their male-headed counterparts. But, a relatively high percentage of the closings of female-headed MSEs were due to personal and other non-business failure reasons. When only closings due to business failures were analyzed separately, there was no difference by gender in the likelihood of closure. Thus, in terms of closings due to business failures only, female-headed and male-headed MSEs were found to be equally likely to survive. The higher overall closure rates for female-owned businesses do not reflect a lower competence among female entrepreneurs but rather other forces at work that lead women to operate out of their own home, or in lower-return activities, factors that are associated — among men as well as women — with higher closure rates.

Finally, at a macro level, survey results looking at the impact of the state of the macroeconomy on enterprise closings are limited and mixed. Daniels (1995) found closures among low-profit enterprises to be negatively related to GDP growth rates: when the economy is growing well, fewer lower-yielding enterprises close.[21] Statistics from the Dominican Republic discussed below suggest the opposite relationship: when aggregate growth rates are high, MSE closure rates are also high. For low-profit industries, Daniels did find a positive relationship between net new starts — birth rates minus closure rates — and rates of growth of GDP.

(c) *MSE expansion*

To this rapid churning in the universe of enterprises due to the entry of new firms and the closure of others must be added the changes that result from the net expansion over time of existing enterprises. This depicts the expansion less the contraction of those MSEs that manage to survive.

The indicator most frequently used to measure this expansion is the change in the number of workers in the enterprise. When compared to alternative indicators such as changes in sales, output, or assets, this measure is often favored because it is most easily and accurately remembered by entrepreneurs and because it does not need to be deflated.

Table 3. *Key determinants of MSE survival and growth*

	Survival likelihood (higher if MSE is:)	Growth likelihood (higher if MSE is:)
Age	Older	Younger
Past Growth	Grown in Past	—
Initial Size	Smaller	Smaller
Sector	Not in Trading	In Particular Sectors that Vary by Country
Location	Urban, Not in Home	Urban, Not in Home
Gender	Male — Owned	Male — Owned

Source: For econometric results relating to survival, see McPherson (1995) for Southern Africa and Cabal (1995) for the Dominican Republic. Econometric results relating to growth are taken from Liedholm and Mead (1993) and Cabal (1995).

What biases might arise from the use of employment as a measure of expansion? Although data on other possible indicators are sparse, some recent surveys provide information that shed light on this issue. An analysis of the growth of Kenyan MSEs found that net increases in real sales were almost double the growth in employment (Parker, 1995). A similar pattern was observed in a Jamaican quarterly panel survey of MSEs (Gustafson and Liedholm, 1995), where the change in real sales was twice the change in employment. Such findings highlight the lumpy nature of employment, which appears to increase with a lag after a sizeable growth in real sales. These indicators suggest that measures of growth in terms of employment provide a conservative, lower-bound estimate of net firm expansion.

One of the striking findings from the various surveys is the high overall growth rates achieved by those enterprises that survived. Table 4 shows that the average annual employment growth rate across these six countries since start-up was 13–16% per year.[22] The country variations around these averages are large, however, ranging from only about four percent in Swaziland to close to 30 percent in Kenya. In most cases, these growth rates are at least double the rate of growth in GDP in these countries in recent years.

These generally rapid growth rates are all the more striking when it is realized that the majority of the MSEs did not grow at all in terms of employment. In most countries, less than one-quarter of the MSEs added workers; after start-up, over three-quarters remained the same size or even contracted in terms of employment. MSE employment expansion was the exception rather than the rule; the substantial overall growth rates were thus being propelled by only a minority of the MSEs. Furthermore, of those MSEs that grew, most added only a few workers. Among those enterprises that started very small (with four or fewer workers), only about 1% "graduated" from the microenterprise seedbed and ended up with more than 10 workers. Thus, most of the expansion was due to a minority of enterprises, each adding only a few workers (Mead, 1994).

When an MSE expands by adding even one or two workers, we have suggested above that this is often associated with an increase in its economic efficiency. Most new MSEs start as one-person enterprises, the least efficient size category. If some of these one-person MSEs subsequently expand, they will be moving into a size category where their economic efficiency is likely to be significantly higher.[23] Moreover, the jobs created are more likely to survive and to generate higher incomes for those working there.

Given the economic significance of MSE expansion, as well as its important role in the creation of new jobs, it is helpful to know the characteristics of enterprises that are most likely to expand. A systematic analysis of the determinants of growth in five countries of Eastern and Southern Africa makes it possible to provide a profile of the types of MSEs that are most likely to expand.[24] The following are the highlights from that analysis, as summarized in Table 3 above.

An important result is the inverse relationship found between enterprise expansion and the age of the MSE. The analysis indicates that younger MSEs are likely to show higher rates of growth, compared to those that had been in existence for a longer period. Similar results were reported in the Dominican Republic (Cabal, 1995) and Kenya (Parker, 1995). Examining the growth and age performance of individual MSEs over time, however, Parker found that the inverse age and growth relationship

Table 4. *Annual employment growth among small enterprises: alternative measures*

	Average annual growth rate (simple averages, i.e. non-compound)[a]	Average annual growth rate (compound)[b]	Percentage that grew	Av. no. of workers added per enterprise per year
Botswana	8.4%	6.3%	20.1%	0.12
Kenya	29.0%	24.0%	34.8%	0.26
Malawi	10.5%	9.0%	22.8%	0.12
Swaziland	6.6%	4.1%	19.9%	0.08
Zimbabwe	7.4%	5.6%	19.3%	0.08
Dominican Republic	15.1%	12.6%	29.1%	0.08
Overall Average[c]	16.7%	13.7%	26.7%	0.14

Sources: see Table 1.
[a]Simple average growth rates are calculated as follows:[(current employment − initial employment)/initial employment]/enterprise age.
[b]Compound growth rates are calculated as follows:[(current employment/initial employment)$^{(1/\text{firm age})}$] − 1.
[c]Overall averages in each case are weighted averages, based on the number of enterprises in the category and country.

held only for MSEs that started with one worker, or those with more educated entrepreneurs. Furthermore, much of the expansion occurred in the first two years. After the eighth year, she found a common pattern of downsizing among MSEs of all types and sizes.

An inverse relationship was also found between the rate of growth of an MSE and its initial size. The MSEs that were smaller at start-up tended to grow more rapidly than did their larger counterparts, a powerful finding for those concerned with employment creation. Again, parallel findings have been reported by other researchers (Parker, 1995; McPherson, 1995), although a positive relationship between initial size and growth was found in the Dominican Republic (Cabal, 1995).[25]

The rate of growth of an MSE is also influenced by the sector in which it operates. At the highest level of aggregation, MSEs in manufacturing and services were more likely to expand than those in trading. At a more disaggregated level, the specific sectors that were most likely to generate new jobs through expansion varied from country to country. In Swaziland, for example, MSEs in non-metallic minerals expanded substantially less rapidly than those in retail trading, while in Kenya all sectors, including non-metallic minerals, expanded more rapidly than retail trading. What these findings suggest is that sectoral differences are significant at the country level in explaining MSE expansion, reflecting perhaps each country's comparative advantage — its unique fingerprint. At the same time, no universal sectoral growth patterns emerged from the analysis, a significant finding in itself.

Another important set of factors identified by the analysis as a determinant of MSE expansion was location. MSEs located in rural towns and villages were less likely to grow than their urban counterparts. Moreover, MSEs operating in commercial districts or even alongside the road showed a markedly stronger tendency to expand than those operating in the home. Other studies have yielded similar results, but with a few differences. McPherson (1992) found that, in four countries of Southern Africa, MSEs operating in traditional markets were more likely to expand than home-based firms.

The analysis suggested that male-headed MSEs are likely to expand more rapidly than ones operated by females. The survey results indicated that female-headed MSEs generally grew at an average rate of only about 7% per year, while those headed by males grew at approximately 11% per year. One of the explanations for this difference is that enterprises owned by women are often concentrated in more slowly growing sectors. Even when controlling for other variables such as sector and location, however, enterprises owned by women grew at a significantly slower rate.

Possible explanations for these gender differences include such factors as the dual domestic and productive responsibilities of women, or possible differences in the business objectives of females and males. Females may also be more risk-averse than their male counterparts, reflecting their responsibilities for maintaining the welfare and perhaps even the survival of the household. This may lead them to use any available funds for diversification into new activities rather than for an expansion of existing ones (Downing and Daniels, 1992).

Although data limitations precluded the inclusion of "human capital" in the formal statistical analysis, related studies provide evidence that this set of factors does significantly affect MSE expansion. McPherson (1992) found that entrepreneurs who had received some vocational training expanded their MSEs 9% faster than those without such training. In Kenya, Parker (1995) reported that entrepreneurs who had at least seven years of experience were likely to expand their business more rapidly than those without such experience. Entrepreneurs who had completed secondary school were also found to be more likely to expand in Kenya (Parker, 1995) and Zimbabwe (McPherson, 1992).[26] Completion of primary school by the entrepreneur was found to have no significant effect on MSE expansion in any of these countries.

4. MICRO AND SMALL ENTERPRISES AND THE MACRO ECONOMY

We have seen that new jobs come into being in micro and small enterprises in two different ways: through the net creation of new businesses; and through the expansion of existing enterprises. It appears that the balance between these two sources of new jobs is influenced by the state of the macroeconomy. When the economy itself is growing well, MSEs also thrive, expanding by engaging additional workers for their work force. In such circumstances, on the other hand, it may be that more people are in a position to close existing MSEs and move on to other, more rewarding activities. When the economy is stagnant, on the other hand, MSEs also face hard times; few of them are expanding their employment levels, and in fact many may be laying off workers. But new people are still entering the labor force. This means that there is increased pressure for people to start new businesses, even if these yield only marginal returns. With fewer options available, more existing enterprises continue in business, no matter how low the incomes they generate.

This view of patterns of MSE expansion is supported by data from three recent surveys. In the Dominican Republic, Cabal (1995) followed patterns of change in microenterprises in several specific locations over two years. The first year was a period of dynamic growth in the economy; the second was a year of stagnation. The resulting patterns of employment growth are shown in Table 5.

The impact of the macroeconomy on patterns of employment growth is obvious. During good times, expanding employment in existing enterprises made a major contribution to employment growth, while more jobs were lost from firm closings than from new enterprises being started. The following year, when the economy was stagnant, in the aggregate, existing enterprises were reducing their employment levels. Employment growth from net new starts, by contrast, switched from negative to positive. The largest part of this change was not from differences in birth rates but rather from closure rates, which were much higher in good times than in the bad year.

A recent survey from Kenya throws further light on this topic (see Daniels *et al.*, 1995). Table 6 tells the story. First, it illustrates the magnitude of the "churning" that takes place among MSEs. During 1994, employment in MSEs grew by nearly 100,000 people; but this figure is the net result of over 250,000 people starting to work in such activities (227,000 in new enterprises started that year, plus 27,000 taken on through the expansion of existing enterprises), partially offset by 157,000 people who stopped working in the sector when their enterprise ceased operation.

In terms of the subject matter of this section, the point to notice here is that, in 1994, about 70% of the net new jobs came into existence as a result of net new starts, with only 30% coming from expansions. In 1995, these figures were reversed; only about 30% came from net new starts, while close to 70% came from an expansion of new enterprises. It appears that 1994 was a year when real GDP per capita was approximately constant in Kenya; the economy was just pulling out of a serious recession. 1995, with its good rains and some improvements in the business climate, was substantially more favorable to an increase in the number of productive jobs through an expansion of MSEs.[27]

This survey also collected information on income earned in MSEs. The analysis was done in terms of net returns per month to owners and other unpaid workers in the enterprise. These figures indicate that, in those enterprises that expanded their employment, incomes earned were more than twice the level in those enterprises that were newly established during this period. "Expansion jobs" appear to be substantially more productive, compared to those that result from new business starts. These findings suggest that these "expansion jobs" that predominate among new MSE employment openings when the economy is strong also generate relatively good returns, compared to the "net new start-up jobs" that provide the majority of new openings when the economy is doing less well (Daniels *et al.*, 1995).

A recent study of patterns of change in employment and sales in Jamaica provides further insights into these patterns (Gustafson and Liedholm, 1995). The period covered by this study — from mid-1993 through the end of 1994 — was one of macroeconomic stagnation in Jamaica, with real GDP per capita constant or even declining. The survey results, looking at a panel of existing enterprises to examine their changes over time, found an average decline in employment of nearly 20%, while average real sales per month dropped in these enterprises by an average of 35%. Although the survey did not cover other periods of buoyant growth, its findings are consistent with the idea that, in periods of general economic decline, existing micro and small enterprises share in the general recession through a contraction in their employment and sales.

In sum, these data suggest that, when the economy is more buoyant, a significant number of new employment openings in MSEs come from an expansion of existing enterprises, resulting in jobs that produce better incomes for those working in the enterprises. In times of national stagnation, by contrast, existing MSEs tend to cut back on their employment; a larger percentage of new jobs result from new enterprises being started, often in product lines that yield substantially lower returns.

5. POLICY AND PROJECT IMPLICATIONS

A number of policy and project implications follow from these findings. At the most general level, broad-based macroeconomic policy reforms

Table 5. *Employment change in MSEs in The Dominican Republic (all figures in percentage per year)*

		Percentage change per annum in employment in MSEs		
	Growth rate, GDP/ cap (% per year)	from net new start-ups	from expansion of existing enterprises	Total: net overall change in MSE employment
March 1992–March 1993	+5.5%	−1.7%	+12.4%	+10.8%
March 1993–March 1994	+0.5%	+1.7%	−3.2%	−1.5%

Source: Cabal (1995).

Table 6. *Employment change in MSEs in Kenya (all figures in thousands of people)*

	1994	1995 (first half)
New enterprises started during year: employment at start	227	166
Less: Enterprises that closed during year: employment at closure	157	125
Equals: Net change in employment from net new starts	70	41
Plus: Net change in employment due to expansion of existing enterprises	27	89
Equals: Total employment growth during year	97	130

Source: Daniels *et al.* (1995).

aimed at creating a more dynamic economy can be an effective vehicle for fostering the growth of productive employment in MSEs. Conversely, when the overall economy is stagnant, total employment among MSEs may expand just as rapidly, but a much higher share of these jobs appear to be more fragile and less rewarding new start-up activities. These relationships between enterprise performance and the state of the economy are easy to miss in enterprise-level surveys, since respondents are not likely to identify the state of the macroeconomy as a key determinant of their own success.

In the same way, although MSEs rarely mention direct governmental controls or regulations among their principal problems or constraints, the indirect effects of such regulations can be both subtle and pervasive. Governmental policies frequently discriminate against MSEs relative to their larger counterparts, particularly in terms of their access to inputs and the prices they must pay for these inputs. Eliminating such distortions "with the stroke of a pen" through changes in policies or regulations can do much to foster an expansion of the more productive MSEs.[28]

Still at a macro level, it is important to recognize that the context in which MSE assistance projects operate has a strong influence on their potential contributions. When the overall economy is stagnant, it may be unrealistic to expect that even the most effective projects can succeed in helping many MSEs to expand. Conversely, when the economy itself is thriving, many dynamic micro entrepreneurs will find ways of sharing in that general prosperity. While good projects can facilitate that participation, it would be easy under such circumstances to exaggerate the contribution of such projects to MSE growth.

Focusing more specifically at a project level, one of the most important implications of the survey findings is the recognition that the clients of MSE assistance programs, the entrepreneurs who operate these enterprises, are diverse and heterogeneous. Among the universe of micro and small enterprises, there are various possible target groups, each with different contributions to make to the country's welfare and with different support needs. Those designing MSE assistance programs need to recognize these differences, determine which group corresponds most closely with their own priorities and then craft interventions that are most appropriate to the needs of that particular group.

Enterprises that are just getting under way face problems and constraints that are different from those of existing firms seeking to expand. In view of the large number of new enterprises that are already started each year, the high attrition rates in the early years of a new enterprise's life and the multiple needs of these new entrants, one might ask how many scarce developmental resources should be devoted to helping more new enterprises get established. If there is a strong pressure to support this process, it would be important to build on any existing skills or experience of these nascent entrepreneurs.

The analysis of this paper suggests that the first two years can be particularly crucial in the life of new, very small enterprises. We have seen that a significant number of these new enterprises do not survive this early period. Of those that do survive, many will not grow, either then or later. But of those that turn out to be growers, a significant number will have shown their capacity to expand already by the end of the second year, making it possible to identify fairly early in the life of the enterprise those that appear to have this potential.

Different categories of micro and small enterprises have different contributions to make to the dual objectives of poverty alleviation and growth. Many new and very small MSEs that do not expand in terms of employment are primarily survival-type activities and thus are particularly appropriate target groups for those concerned with poverty alleviation. These enterprises can be extremely important in helping a large number of very poor people become a little less poor. Such enterprises are subject to a particular set of dynamic forces, since they increase in numbers primarily through net new start-ups.

Programs aimed at this group can increase the likelihood that these enterprises can survive and can earn somewhat higher and more reliable levels of income. For this group, a small amount of a single missing ingredient, working capital, is often all that is required to sustain the enterprise and to enable it to improve its performance. New and innovative approaches have recently been developed for the provision of savings and credit facilities for such enterprises, demonstrating that it is possible to reach relatively large numbers of MSEs with safe places to save or with very small loans. The more successful of these savings and credit schemes are at least operationally self-sufficient, can generate borrower repayment rates exceeding 95% and can be of considerable help to this target group of enterprises, specially to those that have been in existence for some time but have shown little interest in or capacity to grow in terms of employment (Otero and Rhyne, 1994). It seems likely that helping more of these enterprises survive can make a greater contribution to MSE employment and income than equal efforts aimed at the promotion of new starts.

Enterprises that are seeking to expand and to add to their labor force can often make a major contribution in the area of growth. These enterprises can be an important mechanism for helping people move up and out of poverty. They are subject to a different set of dynamic forces, since employment in this group increases primarily through expansion, a process whereby existing enterprises take on additional workers.

For such enterprises, the simple provision of small amounts of working capital will generally be quite inadequate to their needs. Many other constraints loom large for these enterprises, including a range of nonfinancial constraints as well as a need for more substantial loans for the purchase of fixed capital. Many of these enterprises seeking more vigorous growth paths have reported that the most serious problems they face are in the area of markets: finding buyers for their products, and suppliers for needed inputs (Liedholm and Mead, 1995).

One of the most difficult challenges facing organizations seeking to provide assistance to the latter group of clients is the search for cost-effectiveness. Potential clients may be geographically dispersed; their needs are often relatively diverse, requiring distinct and often rather specialized skills. In a world of shrinking resources available for development assistance, it is unrealistic to think of establishing new institutions able to provide a wide array of different types of assistance to a limited and dispersed set of MSE clients.

There are three possible responses to this challenge. One involves a focus on enterprises in particular subsectors (e.g., furniture, garments, or food grains). The resulting concentration can make it possible for assistance agencies to develop a deeper understanding of the growth opportunities and needs of enterprises seeking to take advantage of those opportunities, and then to assemble the required expertise to help entrepreneurs meet those needs, for a specific set of producers, processors and related traders.[29] A second approach involves drawing on other existing assistance projects. In most countries, a number of institutions already provide credit, training and technical advice to small enterprises. Helping these existing institutions channel their assistance to places where it will do the most good can be beneficial to all. Third, it is important in this area to "go with the market." A major goal should be to reinforce and spread market-based solutions, which often replicate themselves as a result of normal competitive forces. A key contribution here may be an improvement in the information available to both buyers and sellers about market opportunities.[30]

Several gender implications also deserve special mention. We have seen that females are more likely than their male counterparts to be "invisible entrepreneurs," operating from inside their households. MSE programs must be aggressive in seeking them out, exploring and helping them address their needs. Women-owned enterprises are disproportionately concentrated in low-return activities, where growth prospects are bleak. Particular attention needs to be focused on increasing the supply of working capital, since such interventions have been found to be particularly appropriate for these MSEs. Special efforts are also needed to help a larger share of such enterprises to move into activities with better prospects for higher returns.

With all the coming and going that takes place among MSEs, the overall level of employment among such enterprises is clearly growing. It appears that, in many countries, at least a third of the new entrants to the labor force are finding work in micro and small enterprises. The discussion of this paper makes clear that this growth is a complex process, made up of diverse sets of currents and countercurrents. Policies and projects must take account of this diversity, focusing on the types of enterprises and on particular stages in the enterprise's life cycle where the interventions can do the most good. The more the design of policies and projects can be based on a firm grasp of this diversity, the more likely it will be that scarce developmental resources can contribute effectively to the dual goals of growth and poverty alleviation.

NOTES

1. For example, the credit programs operated around the world by ACCION generally require that an enterprise have been in operation for at least a year before it qualifies for help. The International Labor Organization, by contrast, has recently started a new program entitled "Start Your Business" (SYB) specifically aimed at encouraging new

business starts. This is a modification of another on-going initiative of theirs, designed to help existing entrepreneurs to "Improve Your Business" (IYB).

2. The focus of the discussion in this paper is on surveys undertaken as part of the GEMINI project, supported by USAID and under the overall supervision of staff from Michigan State University. Other similar studies have been done in Kenya by King (1996) and in Nigeria by Frishman (1980).

3. For details of these surveys, see the sources listed in the reference list. The surveys were all conducted between 1990 and 1995. The retrospective baseline surveys covered over 28,000 enterprises; the closed enterprise questionnaires were administered to about 6,800 enterprises.

4. The term microenterprise is normally used to refer to the smaller end of the MSE range: enterprises with 10 or fewer workers.

5. Liedholm and Mead (1987, 1995) and the individual country studies provide the basis for this summary.

6. These figures refer to Botswana, Kenya, Malawi, Swaziland and Zimbabwe. For details, see Mead (1994).

7. This means that the analysis of dynamic patterns in the following sections of this paper is heavily influenced by those at the small end of the size spectrum. At various points of the subsequent analysis, we examine the importance of size as a determinant of growth, as well as isolating different categories of enterprises from this heterogeneous universe of MSEs.

8. Liedholm and Mead (1987).

9. Daniels *et al.*, 1995

10. The new start rates are calculated by dividing all new firms appearing in a given year by the number of firms in existence at the beginning of that year. One important source of downward bias in these data is the omission of the short-lived firms that appear and then disappear within the year. A study of short-lived firms in the Dominican Republic indicates that, if these had been included in the analysis, the birthrate in the Dominican Republic would have increased by 6.5 percentage points. For more details, see Cabal (1995) and Liedholm and Mead (1993).

11. See Phillips and Kirchoff (1988).

12. See Liedholm and Mead (1995) for more details of these gender findings.

13. Specifically, on the basis of area-based panel surveys, the annual closure rate was estimated at 29% in 1992 and 22% in 1993 (Cabal, 1995). In Zimbabwe, a closure rate of 11.5% per year (over 1991–93) was reported from a similar area-based panel survey of MSEs (Daniels, 1995). In Zimbabwe, however, 42% of the firms could not be located in the resurvey, so this closure rate must be considered a lower-bound estimate of the rate at which enterprises closed. The area-based panel surveys, where all enterprises in selected (and unchanging) locations are surveyed on a repeating basis over time, generate more accurate closure rates than those generated from either tracer or closed enterprise surveys, both of which are subject to a severe selectivity bias that understates the true closure rates.

14. To be more precise, closure rates were as follows: Botswana (1991), 6.0%; Kenya (1992), 15.9%; Malawi (1991), 15.0%; Swaziland (1990), 10.5%; and Zimbabwe (1990), 7.0%. As indicated in the previous footnote, a later panel survey in Zimbabwe — which itself may have resulted in an underestimate due to an inability to relocate a sizeable number of enterprises — reported closure rates in that country of 11.5%. The timing of the two surveys is different, and closure rates appear to be sensitive to changes in the state of the macroeconomy; yet this comparison may give an indication of the magnitude of the downward bias in closure rates based on retrospective questions included in one-shot questionnaires.

15. More incomplete data from Malawi indicate that approximately one-third of the MSEs in that country had closed by three years after start-up.

16. For details, see McPherson (1992, 1995) for the African countries and Cabal (1995) for the Dominican Republic. These studies make use of recent developments in "hazard analysis" to provide an explanation of enterprise closure and survival. The dependent variable in the analysis is the enterprise "hazard rate": the probability that a firm will close during the year, given that it survived up to the start of that year. The independent variables used to explain the hazard rate are such determinants as the age, sector, and location of the enterprise. Econometric techniques are used to estimate the relationships (see Liedholm and Mead, 1993, for more details).

17. There is some discussion in the literature of the effects of access to credit on enterprise survival. McPherson's (1995) analysis of hazard rates in four countries of Southern Africa found that those enterprises in Malawi that had received credit from formal institutions had a higher survival rate than those that had not received credit. In other countries, the relationship between access to formal credit and survival was not statistically significant. With regard to informal credit sources, in two countries (Swaziland and Botswana), the relationship was statistically significant and the other way: those that had received credit were less likely to survive. McPherson concludes: "Apparently, having to resort to family, friends, or moneylenders for funds is the mark of a desperate enterprise" (p. 45). We have not included this relationship in our analysis since there are problems of endogeneity in such analysis; while there may be a significant statistical relationship, it is not clear in which direction the causation flows.

18. Results relating to *initial* size are available only for Swaziland and Zimbabwe (McPherson, 1992) and the Dominican Republic (Cabal, 1995). When *current* rather than initial size is used in the analysis, it is found not to be statistically significant for Swaziland or Botswana, positive for Zimbabwe, and negative for Malawi (McPherson, 1995).

19. The complete sector ranking of MSEs by survival probabilities from highest to lowest in Swaziland and Zimbabwe combined was as follows: real estate, wood processing, wholesale trade, non-metallic minerals, textiles, other services, food and beverage processing, construction, miscellaneous manufacturing, metal fabrication, hotels and restaurants, chemicals, retail trade, transport. The rank differences, however, were not always statistically significant (McPherson, 1992).

20. The rural-urban distinction however, was not statistically significant in the Dominican Republic (Cabal, 1995).

21. Using regression analysis, Daniels (1995) found an inverse relationship between the GDP growth rate over 1988–93 and the annual closure rate in Zimbabwe, but only for enterprises that generated low returns. For more profitable activities, the relationship was positive but not significant.

22. The compound growth measure provides a lower-bound estimate of the growth rate compared with the average growth rate measure, which uses initial employment in the base. An absolute measure, the annual change in jobs per firm, is also presented in Table 4; it can be particularly useful in assessing the contribution of the smallest firms to job creation. The data for all the growth measures were generated by asking entrepreneurs retrospective information (event histories) about their firms.

23. See Section 2 above as well as Liedholm and Mead (1987) for cross-sectional evidence. See Parker (1995) and Parker *et al.* (1995) for time-series evidence.

24. Following McPherson (1992), statistical techniques (linear ordinary least squares regression equations) were used to test whether various independent variables were significantly related to the dependent variable, which was enterprise growth since start-up measured in absolute terms. See Liedholm and Mead (1995) for details.

25. Parker (1995) has pointed out that this finding should be qualified with the recognition that an enterprise that started with one person cannot contract and still remain as an on-going enterprise. For larger enterprises, the fact that growth in some was offset by contraction in others may be a partial explanation for the lower average growth rates for enterprises starting at a larger size.

26. In Botswana and Swaziland, however, no significant relationship was found between secondary school education and MSE expansion (McPherson, 1996).

27. It is less clear in this case that the decrease in employment growth through net new starts resulted primarily from more closures rather than from fewer new starts.

28. See Haggblade *et al.* (1986) Liedholm and Mead (1987) and Joumard *et al.* (1992) for details of policy distortions that are not neutral by enterprise size. The differential effects of the import duty structure is one example. Large enterprises typically can import their capital equipment at low or zero import duty rates via investment promotion schemes. Small enterprises often do not qualify for such schemes; furthermore, they often find their capital equipment, such as sewing machines and outboard motors, classified in the tariff code as luxury consumer goods.

29. Subsector analysis examines the vertical marketing and production channels within a particular sector, identifying the links between large and small firms, analyzing the competitive forces between and within channels, and identifying those points that provide the greatest leverage for growth. Many times these leverage points act indirectly on the targeted MSEs. In Botswana, for example, one possible leverage point was the establishment of a commercial malting firm, which could lower the cost of malt to the small sorghum beer producers and thereby enable them to compete more effectively with the large scale beer producers. See Boomgard *et al.* (1992).

30. For an example of one approach here focusing on the promotion of linkages between large and small enterprises, see Grierson and Mead (1995).

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