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The Structure and Growth of Microenterprises in Southern and Eastern Africa:

**Evidence from Recent** Surveys

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## The Structure and Growth of Microenterprises in Southern and Eastern Africa: **Evidence from Recent Surveys**

by

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#### **EXECUTIVE SUMMARY**

The findings from baseline surveys of micro- and small-scale enterprises (MSEs) conducted in seven countries — Botswana, Kenya, Lesotho, Malawi, South Africa, Swaziland, and Zimbabwe — provide new insights into the current structure and past patterns of growth among these enterprises in Southern and Eastern Africa. With regard to the current structure of MSEs, it is clear that the magnitude of employment in MSEs in the region is large, providing work for substantially more people than the formal sectors in most of these countries. Most MSEs are in rural areas, more so than in other parts of the world. Employment densities — MSE employment per thousand persons in the population — appear to be unusually high in rural areas, particularly in Zimbabwe and Swaziland. The sectoral breakdown of employment indicates that about two-thirds of all MSE workers in rural areas are in manufacturing activities. In urban areas, by contrast, only a third or less are in manufacturing in each of the surveyed countries except Zimbabwe, where the proportion is close to two-thirds. Within manufacturing, an overwhelming majority of MSE workers are concentrated in three sectors: textiles and garments, food and beverages, and wood products. The relative importance of these three sectors varies widely from one country to another.

MSEs are generally very small; in most countries, two-thirds of all enterprises consist of only one person, with few engaging more than five people. The labor force is made up overwhelmingly of proprietors and unpaid family members. The negligible share of trainees and apprentices sets this region apart from small enterprises in West Africa, where this group can constitute as much as half of the total labor force. Women play a major role, constituting a clear majority of both proprietors and workers in all the countries studied except Kenya and Malawi.

With respect to dynamic issues, a key finding is the high growth rate of employment among existing MSEs in the region. This growth rate, which is similar to that found elsewhere in the developing world, is usually more than double the growth rate of gross domestic product in these countries. The national averages, however, hide wide variations in several dimensions. Urban enterprises grow substantially more rapidly than rural ones. Some sectors of the economy grow more rapidly than others, although no clear pattern emerges across countries in this regard. Enterprises owned by males grow more rapidly than those with female proprietors, reflecting in part the concentration of males in more rapidly growing sectors. Finally, the majority of MSEs do not grow at all; the high average growth rates reflect the fact that less than half of all enterprises grow at high rates.

Net expansion in employment among MSEs comes not only from growth among existing firms, but also from the establishment of new enterprises, adjusted for losses caused by firms going out of business. Although little information was collected in these surveys concerning firm births, a supplementary questionnaire permits us to say some things about firm disappearances. The likelihood of disappearance is highest in the first three years of a firm's existence, declining substantially thereafter; analysis suggests that about half of all new enterprises disappear before the end of their third year. Only half of firm closures can be considered as failures as a result of bad business conditions; other explanations include a move to better opportunities, personal reasons of the entrepreneur (including old age or sickness), or government interventions. Hazard analysis reveals that the firm's location, sector, and past growth rate are all statistically significant determinants of its chances of survival.

In asking entrepreneurs about problems and constraints that they face, some clear patterns emerge. About a third of the respondents indicated that they face no serious problems. Among those listing problems, two categories predominated in the responses: problems of finance, particularly of working capital, and problems of markets. Other problems received attention in particular countries or

at particular stages in the enterprise life cycle. It is striking that the respondents made little mention of problems with taxes and governmental regulations.

#### INTRODUCTION

The countries of Southern and Eastern Africa face an urgent challenge of providing jobs for a rapidly expanding labor force. Employment in the modern sector - large manufacturing firms, commercial enterprises, the government - is relatively small, and has not kept pace with the growth of population. Employment among micro- and small-scale enterprises (MSEs), by contrast, appears to be larger in the aggregate, and to be creating substantially more new jobs. Yet our understanding of the current size, structure, and patterns of growth among MSEs has been hampered by a severe shortage of reliable information. Most of these enterprises are unregistered and unrecognized by the government, escaping official statistical nets. They do not keep books, and often operate as secondary activities in the household. The result is that it is not easy to get a meaningful measure of their significance in the economy.

To address these problems, a series of seven surveys of MSEs was undertaken in Southern and Eastern Africa in 1990-1992. This paper reports on the findings of these surveys. Two of the surveys were done in urban locations, involving complete enumerations of all MSEs in the Kibera slum of Nairobi and in two townships of South Africa. The other five studies, in Lesotho, Swaziland, Zimbabwe, Botswana, and Malawi, were national in coverage. For the national surveys, the studies were based on a random selection of enumeration areas, stratified by degree of urbanization and other key characteristics. In the selected localities, each house or business was visited to determine whether any of the residents was engaged in MSE activity; if so, a simple questionnaire was completed for each enterprise found. In the seven surveys discussed here, questionnaires were completed for more than 43,000 enterprises.

Enterprises were included in the study if they provide employment for 50 or fewer workers (including unpaid family members) and if at least half of the output is sold. The surveys covered enterprises engaged in the processing of agricultural products (such as grain mills), but not agriculture, forestry, hunting, fishing, or mining per se. The surveys excluded public sector employment, but included all types of manufacturing activities as well as commerce, transport, and other services. More details of the approach and coverage are provided in the seven documents reporting on the individual survey results (see bibliography).

Table 1 presents the basic parameters for the seven countries that are the focus of this report. As the table shows, these countries are extraordinarily diverse in size, with South Africa's aggregate gross domestic product (GDP) more than 10 times that of Kenya or Zimbabwe, economies that in turn are 10 times as large as Lesotho or Swaziland. The range in population is almost as wide and the ranking is nearly the same; the result is that income per capita varies within the region by a factor of 12:1, a smaller dispersion than for GDP or population. These national averages of GDP per capita can be seriously misleading, however, as a result of the racial dualism that characterizes most of these countries. We shall have more to say in subsequent sections about the ways in which the national context affects the structure and growth patterns of MSEs.

For the Botswana study, the published report was limited to enterprises with 10 or less people engaged, although the field work covered larger enterprises as well. In Malawi, the survey and report covered all enterprises with 100 or fewer workers. For the purposes of this report, all data were reprocessed to cover all enterprises with 50 or fewer workers.

TABLE 1

BASIC INDICATORS FOR COUNTRIES SURVEYED

	Botswana	Kenya	Lesotho	Malawi	South Africa	Swaziland	Zimbabwe
GDP (1990, US# billions)	2.7	• 7.5	0.3	1.6	90.7	0.6	5.3
Population (1990, millione)	1.3	24.2	1.8	8.5	35.9	0.8	9.8
GNP/cap. (US\$, 1990)*	2,040	370	530	200	2,530	810	64.0
Annual average growth rate, GNP/capits, 1965-1980	8.4	1.9	4.9	0.9	1.3	2.2	0.7
Area (thousands of sq. km.)	582	580	30	118	1,221	17	391
Population density (persons/sq.km)	2.2	43.4	60.0	72.0	29.4	46.9	25.1
Annual growth rate of population, 1980-1990	3.3	3.8	2.7	3.4	2.4	3.4	3.4

Source: World Bank, World Development Report, 1992.

After this introduction, Chapter One presents the survey findings as they relate to the current structure of MSEs. Chapter Two explores dynamic questions relating to patterns of change among these enterprises. Chapter Three draws on the surveys to examine problems and constraints faced by the producers at various stages in their evolution. Chapter Four presents the summary and conclusions.

<sup>•</sup> The International Comparisons Project, which aimed at using purchasing power comparisons to examine real income levels, includes three of these countries: Kenya, at 5.2; Zimbabwe, at 8.8; and Botswana, at 20.1 (1990 data); in each case, USA = 100 is the basis of comparison. For Kenya and Zimbabwe, the ICP figure for 1985 was somewhat higher than for 1990.

<sup>&</sup>lt;sup>b</sup> World Bank, 1989, p. 269; data for 1980-87.

#### CHAPTER ONE

#### THE CURRENT STRUCTURE OF MICROENTERPRISES

#### **MAGNITUDE**

We start with a look at the magnitude of the MSE sector: the number of enterprises and the amount of employment they provide. The figures, along with data on the size of the potential labor force and the level of employment in formal sector activities, are shown in Table 2.

The distinction between formal and informal activities is imprecise conceptually as well as empirically. The defining characteristic used in the surveys under examination here is simply one of size: the surveys included all enterprises with 50 or less workers. Some of these are formal in that they are registered, pay all relevant taxes, and comply with other rules and regulations. Most micro- and small-scale enterprises are partly formal and partly informal in this sense: for example, they obey some rules and not others or pay some taxes but not others.<sup>2</sup> In the official statistics of Table 2, on the other hand, reported formal sector employment is generally restricted to large-scale enterprises and the public sector.

These figures make clear that estimated employment in MSEs is substantially larger than reported employment in the formal sector. In Lesotho, MSE employment is more than twice the level of employment in the formal sector outside of agriculture and mining; in Swaziland and Zimbabwe, MSE employment may be some 50 percent above formal sector employment. In the South African townships and in Kibera (Nairobi), formal sector employment within the study areas appears to be minimal, although there are no data on this; but people living in these areas are engaged extensively in wage employment outside of these localities.

The last line of the table provides an indication of the "employment densities" of microenterprises: employment in MSEs per thousand persons in the population. These figures indicate that Zimbabwe has approximately twice the level of MSE employment per capita of Lesotho or Botswana; the other countries occupy intermediate positions. We will examine these figures in more detail below, when the data are disaggregated by extent of urbanization.

For a detailed analysis building on this data set of the extent to which small enterprises are registered, pay taxes, and operate in accordance with other regulations in Swaziland and Niger, see Journard et al., 1992.

TABLE 2

MSE AND LABOR FORCE MAGNITUDES

(all figures in thousands)

	Botswana	Kenya: Kibera	Lesothc	Malawi	South Africa: 2 townships	Swaziland	Zimbabwe
Survey results:							
No. of MSEs	49	7	103	753	8	51	845
Employment in MSEs	107	12	161	1,044	16	101	1,568
National statistics:							
Population age 15 or more*	634	n.a	925	4,836	n.a.	424	5,425
Formal sector employment excl. ag and mining	161	n.a.	74 <sup>b</sup>	550	n.a.	68*	9074
Employment in MSEs per 1,000 people in population in survey area	71	109	69	95	81	126	139

Sources for survey results: Botswana: Daniels and Fisseha, 1992; Kenya: Parker and Aleke Dondo, 1991; Lesotho: Fisseha, 1991; Malawi: Daniels and Ngwira, 1992; South Africa: Liedholm and McPherson, 1991; Swaziland: Fisseha and McPherson, 1991; and Zimbabwe: McPherson, 1991.

#### n.a. = not available

Note: Kenya and Scuth Africa data are for urban areas covered by the survey only; for the other three countries, the figures refer to the whole country.

- 1990-91 estimates, derived from most recent population censuses, updated using World Bank estimates for the rate of growth of total population (see Table 1 above).
- TIPCO (no date), p. 18. This source estimates employment in the "wages sector" in 1986 at 65,000. These figures apparently do not include wage employment in agriculture. For manufacturing, the Bureau of Statistics reports 1990 employment in registered enterprises of 18,693, of which more than 80 percent was in enterprises with 50 or more workers (Lesotho, Bureau of Statistics, 1991, p. 3).
- Source: Capricorn Africa, 1989, pp. 13 and 15, based on Employment and Wages Survey. This source estimates employment in the formal sector, excluding agriculture, forestry and mining, in 1987 at 59,266. These figures indicate that, although formal sector employment rose by an average of 5.8 percent p.a. over the period 1969-71 to 1979-81, since the early 1980s the growth rate has averaged only about 1.1 percent p.a.
- Nonagricultural, formal sector employment, 1986/87 (790,000), from Labor Force Survey, as reported in Saito (1990), p. 8.

#### LOCATION

Tables 3 and 4 make clear that the majority of microenterprises as well as the employment that they generate are located in rural areas. This finding is consistent with earlier studies in other parts of the world. A review of data from 13 developing countries found an average of 63 percent of all manufacturing employment to be in rural areas (Liedholm and Mead, 1987, p. 21). That earlier study used a standard United Nations definition of rural (localities with less than 20,000 inhabitants); when the data are grouped in that way (recognizing that the areas listed here as secondary towns are rural according to the U.N. definition as well as in many of their basic characteristics), the rural concentration of employment in the countries under study here is even higher (68-89 percent of all MSE employment). This fact needs to be emphasized since a disproportionate share of attention to MSEs — studies and analyses, policy and project support — has been concentrated on enterprises in the major towns, although in these countries the urban producers account for less than a quarter of total small enterprise employment. Even in Zimbabwe, which is somewhat more urbanized, more than two-thirds of all MSE employment is outside the major urban areas.

TABLE 3

LOCATIONAL BREAKDOWN OF MSE ENTERPRISES\*

(% of all MSEs)

	Botswana	Lesotho	Malawi	Swaziland	Zimbabwe	
Major city/cities	10.2	12.0	9.0	15.5	32.0	
Secondary towns	21.2	8.4	1.5	8.9	10.2	
Rural areas	68.6	79.6	89.5	76.6	57.8	

Sources: survey results; see Table 2.

In Kenya and South Africa, the survey was restricted to major urban areas. In Botswana, the first line is restricted to Gaborone, which was stratified into residential, commercial, and industrial areas. There were two strata for secondary towns: medium and small. Rural areas consisted of large villages, small villages, and rural areas. In Lesotho, the survey distinguished between small towns (6.8 percent of all employment) and rural towns (1.6 percent), both considered here as secondary towns; and between four categories of rural areas: lowlands (29.7 percent), foothills (28.4 percent), mountains (9.7 percent), and the Senqu River Valley (11.8 percent). In Swaziland, the sampling in the two major towns distinguished between high-income (4.0 percent), medium-income (3.7 percent), and low-income (7.8 percent) areas. The secondary towns included smaller towns (3.6 percent), and company towns (5.3 percent). In Zimbabwe, there were four urban strata for the major cities: high and low density areas (21.9 percent and 6.1 percent, respectively); commercial districts (2.8 percent); and industrial areas (1.5 percent). Secondary towns included smaller towns (7.8 percent) and growth points (3.5 percent). Rural areas were subdivided between district councils (45.2 percent) and rural councils (11.2 percent).

TABLE 4

LOCATIONAL BREAKDOWN OF MSE EMPLOYMENT
(% of all MSE employment)

	Botswana	Lesotho	Malawi	Swaziland	Zimbabw e
Major city/cities	12.6	17.8	10.7	25.0	32.3
Secondary towns	20.0	10.0	1.5	10.0	11.3
Rural areas	67.4	72.2	87.8	65.0	56.4

Sources: survey results; see Table 2.

#### MSE DENSITIES, BY LOCATION

An important indicator of the importance of MSEs in the economy concerns the number of people engaged in such activities, compared with the total number of people in the population. Table 5 presents this information, broken down by region of the country.

Several things are noteworthy about this table. Looking first at the nationwide averages, employment densities are highest in Zimbabwe, where they reach levels that are nearly double those in Botswana and Lesotho and 10 percent higher than those in Swaziland. This is particularly striking in that the extent of microenterprises had been reported to be lower in Zimbabwe than elsewhere in the region (see, for example, Saito, 1990, p. 9).

Turning to the locational dimensions of employment density, previous studies led one to expect that MSE densities would be highest in major cities, declining as one moves to more rural areas (see, for example, Haggblade, Hazell, and Brown, 1989, pp. 1180-1201). The Lesotho and Malawi figures are a clear reflection of this pattern. The figures for Zimbabwe and Botswana follow a different pattern, peaking in the intermediate-sized localities, but with rural densities lower than those in the major city. For Swaziland, densities in secondary towns are lower than elsewhere, although again the rural areas had lower densities than the major towns, a pattern that is characteristic of all countries in the sample. Zimbabwe's high overall average density reflects high densities in secondary towns and rural areas; these more than outweigh levels in the major cities that are somewhat lower than those in Lesotho and Swaziland. The high levels in the secondary towns of Zimbabwe are strongly influenced by the heavy concentration of MSEs in growth points, where employment densities reach 268 per thousand in the population, an unusually high figure, perhaps reflecting the success of government programs for the promotion of small enterprises in these localities. Within rural areas of Zimbabwe, employment densities are nearly 20 percent higher in the district council areas than in the rural councils, reflecting the lower agricultural potential (in other words, fewer options in terms of income-earning alternatives in agriculture) and higher population densities in the district council areas.

TABLE 5

EMPLOYMENT DENSITIES\*
(MSE employment per 1,000 inhabitants)

	Botswana	Kenya	Lesotho	Malawi	South Africa	Swaziland	Zimbabwe
Major city/cities	85	109	177	126	81	156	152
Secondary towns	99		123	123		93	200
Rural areas	64		57	92		123	134
Whole area surveyed	71		69	95		126	139

Sources: see Table 2.

• For all countries, these data refer only to primary enterprises, as reported in the survey; second enterprises in a particular household are excluded. For Kenya, the original data are presented in terms of households; of 18,883 households interviewed, 6,535 have small enterprises. This figure is converted to a population basis using the survey finding that the average household consists of 5.8 persons. For Malawi, population estimates based on 1987 data were updated using World Development Report estimates that urban population grew at 6.2 percent p.a. while the total increased at 3.4 percent p.a, implying a growth in secondary towns and rural areas of 3.1 percent p.a. For South Africa, the figures are for Kwazakhele only; total population figures are available on a comparable basis only for this township. In Swaziland, the most recent population estimates are from the 1986 census. Estimates for 1991 are made as follows: the World Bank has estimated that the urban population in Swaziland grew at 13.9 percent over the period 1980-87 (World Bank, 1989, p. 278). This relatively high figure is used for the major city category. Population in rural areas is assumed not to have changed over the period 1986-91. Given the overall rate of population growth (3.3 percent p.a.), this implies a rate of growth of population in secondary towns of 10.6 percent. Since the assumed population growth rate in towns is high (an upper bound estimate) while that assumed for rural areas is low (a lower bound estimate), the implied density figures for urban areas could be viewed as a minimum and those in rural areas a maximum. In Zimbabwe, data from the 1982 population census are updated based on tentative estimates of rates of growth of population in different strata. These will need to be checked with the results of the 1992 census, when these become available.

A recent study reviewing data from 14 countries in Sub-Saharan Africa provides a basis for comparison (Haggblade and Hazel, 1989, p. 347). That review found continent-wide average employment densities of 50 per thousand in rural areas; the comparable figure in secondary towns is 187 per thousand. By these standards, the extent of MSE employment in rural areas of Southern Africa is above average, particularly in Zimbabwe and Swaziland. In secondary towns, it is close to average in Zimbabwe, but below normal in the other countries studied. Since the continent-wide figures are taken from population censuses and hence are not strictly comparable with our figures, such comparisons need to be treated with caution. A baseline survey similar to the one discussed here in two provinces of Niger found employment densities in secondary towns to be in the same range as those presented here (95-168), while rural densities in Niger were higher (112 and 216, in the two provinces; see Mead et al, 1990, p. 7).

The low employment densities in the low income urban areas of Kenya and South Africa covered by the survey also invite special comment. In South Africa, the explanation lies primarily with a combination of two things: official regulations, which until recently have impeded or even forbidden certain types of economic activities in the townships; and the heavy involvement of the township population in wage labor outside the township, the key motivation for the establishment of the townships themselves in the eyes of the apartheid government. In Nairobi, the low densities (although not as low as those in South Africa) may again reflect a hostile government attitude toward these informal sector activities, and also relatively easy access to a thriving urban market, which provides options in wage employment. In both South Africa and Kenya, these supply-side factors are reinforced by an important demand-side dimension: the easy availability to consumers in the study area of products made outside the study area. This feature operates more strongly for manufactured goods than for services, helping to explain the relatively low share of manufacturing activities and the high share of services in these two study areas. Two of these factors are also at work in Botswana: easier access to paid employment, on the one hand, and to manufactured goods made elsewhere, on the other. The result is low MSE employment density in Gaborone, the major city of Botswana, along with strikingly weak development of small manufacturing enterprises in that locality.

#### SECTORAL BREAKDOWN OF ENTERPRISES

The next issue to be addressed concerns the types of activities in which MSEs are engaged. Since there are substantial differences in sectoral breakdown between urban and rural areas, the information is presented separately for these two strata (Tables 6 and 7). In these tables, the more highly aggregated (1-digit) breakdowns are in bold print, with the more disaggregated (2-digit) breakdowns in normal print. National averages are relegated to Appendix Table A-3.

Several features stand out in these tables. Looking first at urban areas (Table 6) and at the more highly aggregated, one-digit level figures, the share of manufacturing enterprises ranges from 17-22 percent in South Africa, Botswana, and Kenya to 65 percent in Zimbabwe, with a converse pattern for trade, ranging from under 30 percent in Zimbabwe to about 70 percent in South Africa and Kenya. In rural areas (Table 7), a similar divergence appears, with manufacturing shares in Zimbabwe, Swaziland, and Lesotho about double those of Botswana and Malawi. Again, the converse pattern appears for trade: high in Botswana and Malawi, but low in the other three nations. In each country for which these data are available, manufacturing constitutes a larger share of enterprises in rural than in urban areas. Particularly in Zimbabwe, the dominant share of manufacturing in rural areas — 75 percent of all enterprises — is striking.

Moving to the more disaggregated, two-digit breakdown of activities, and looking first at manufacturing activities in urban areas, textiles and garments are the most important manufacturing sector in each of the countries studied, constituting 85 percent of all enterprises in Zimbabwe and 35-50 percent in each of the other countries. Food and beverages come in a strong second place in Lesotho and a weak second place in South Africa, Malawi, and Botswana, but are of negligible importance in Zimbabwe, perhaps reflecting strong government controls over patterns of trade for agricultural products and differences in tastes. Furniture (in Kenya and Malawi) and mats, baskets, and other products of grasses (in Swaziland) are also important in those countries.

TABLE 6

SECTORAL BREAKDOWN OF ENTERPRISES: URBAN LOCATIONS ONLY (percentage of all enterprises)

	Botswana	Kenya	Malawi	Malawi	South Africa	Swaziland	Zimbabwe
Food, beverages (31)	3.3	2.9	13.9	7.0	3.6	5.0	0.5
	(18.8)	(13.0)	(38.9)	(24.6)	(21.3)	(15.1)	(0.8)
Textiles, apparel (32)	7.4	11.4	14.6	10.1	6.9	15.9	54.6
	(42.0)	(51.1)	(40.9)	(35.1)	(40.8)	(47.9)	(84.5)
Wood, grass	2.0	4.3	2.4	4.3	1.3	5.9	3.2
products (33)	(11.5)	(19.3)	(6.7)	(14.8)	(7.7)	(17.8)	(5.0)
Non-metallic	0.8	0.2	1.5	1.7	0.8	0.5	0.3
minerals (36)	(4.4)	(0.9)	(4.2)	(6.0)	(4.7)	(1.5)	(0.5)
Fabricated metal products (38)	0.5	1.2	1.3	3.4	1.2	1,2	1.5
	(3.1)	(5.4)	(3.6)	(11.7)	(7.1)	(3.6)	(2.3)
Other	3.5	2.3	2.0	2.2	3.2	4.7	4.6
manufacturing	(20.2)	(10.3)	(5.6)	(7.8)	(18.9)	(14.2)	(7.1)
Manufacturing, total (3)	17.6 (100)	<b>22.3</b> (100)	<b>35.7</b> (100)	28.7 (100)	<b>16.9</b> (100)	<b>33.2</b> (100)	<b>64.6</b> (100)
Construction (5)	1.0	0.1	2.9	0.6	0.6	0.5	1.4
Wholesale trade (61)	0.0	0.8	0.4	0.2	0.2	0.2	0.1
	(0.0)	(1.2)	(1.0)	(0.2)	(0.3)	(0.4)	(0.3)
Retail trade (62)	49.2	64.4	38.2	60.0	59.1	55.0	28.1
	(78.3)	(94.2)	(93.9)	(98.1)	(84.1)	(98.6)	(97.6)
Restaurants, hotels (63)	13.6	3.2	2.1	1.0	11.1	0.6	0.6
	(21.7)	(4.6)	(5.1)	(1.0)	(15.8)	(1.1)	(2.1)
Trade, total (6)	<b>62.8</b> (100)	<b>68.4</b> (100)	<b>40.7</b> (100)	<b>61.2</b> (100)	<b>70.3</b> (100)	<b>55.8</b> (100)	28.8 (100)
Transport (7)	2.3	0.2	0.8	1.4	2.7	1.3	0.5
Renting flats/rooms (83)	9.9	4.0	17.0	<b>6.7</b>	2.3	3.3	0.1
Other services	6.4	5.0	2.9	2.5	7.1	5.8	4.6

Sources: see Table 2.

Note: figures in parentheses are percentage shares of subcategories. They may not add to 100 due to rounding. The classification scheme used is the International Standard Industrial Classification (ISIC, shown in parentheses in the first column).

TABLE 7

SECTORAL BREAKDOWN OF ENTERPRISES

Rural locations only

(percentage of all enterprises)

	Botswana	Lesotho	Malawi	Swaziland	Zimbabwe
Food, beverages (31)	16.5	38.6	10.8	8.4	11.7
	(52.7)	(62.4)	(31.1)	(12.1)	(15.6)
Textiles, apparel (32)	10.8	16.2	6.0	17.3	20.5-
	(34.5)	(26.2)	(17.2)	(24.8)	(27.3)
Wood, grass products (33)	1.4	5.0	11.6	42.3	32.1
	(4.3)	(8.1)	(33.3)	(60.7)	(42.7)
Non-metallic	1.1	1.3	3.5	1.4	6.8
minerals (36)	(3.5)	(2.1)	(10.2)	(2.0)	(9.1)
Fabricated metal products (38)	0.7	0.3	1.7	0	2.6
	(2.3)	(0.5)	(4.9)	(0.0)	(3.5)
Other manufacturing	0.8	0.5	1.2	0.4	1.5
	(2.7)	(0.8)	(3.3)	(0.6)	(2.0)
Manufacturing, total (3)	<b>31.3</b> (100)	<b>61.9</b> (100)	<b>34.8</b> (100)	<b>69.7</b> (100)	<b>75.1</b> (100)
Construction (5)	0.0	5.3	0.4	1.1	6.2
Wholesale trade (61)	0.7	0.4	0.2	0	0
	(1.0)	(1.5)	(0.3)	(0.0)	(0.0)
Retail trade (62)	46.3	24.2	59.5	23.9	15.6
	(70.1)	(90.3)	(97.6)	(100)	(96.3)
Restaurants, hotels (63)	19.1	2.3	1.3	0	0.6
	(28.9)	(8.6)	(2.1)	(0.0)	(3.7)
Trade, total (6)	<b>66.1</b> (100)	<b>26.8</b> (100)	<b>61.0</b> (100)	<b>23.9</b> (100)	1 <b>6.2</b> (100)
Transport (7)	0.3	0.4	0.4	0	0
Renting flats/rooms (83)	0.5	3.0	0.6	0	0
Other services	1.8	2.6	2.8	5.3	2.5

Sources: see Table 2.

Note: In both Tables 6 and 7, "urban" refers only to the major one or two urban locations, while "rural" refers only to the rural enumeration areas; intermediate urban localities (smaller towns) are not included in either table (although they are included in the national figures of Appendix Table A-3).

In rural areas, quite a different pattern appears. Textiles and garments drop to second or third position in each of the countries under examination, with only about a quarter of the rural enterprises engaged in this line of work, substantially lower than in urban areas. In Lesotho and Botswana, the most widespread rural manufacturing activity is in beer brewing, making up 62 percent (Lesotho) and 47 percent (Botswana) of all manufacturing activities. In both Swaziland and Zimbabwe, by contrast, the most prevalent rural manufacturing activities are in grass, bamboo, and cane processing, primarily in making baskets and mats. In Swaziland, these endeavors account for about 58 percent of rural manufacturing activities; the comparable figure for Zimbabwe is 27 percent. Malawi combines both of these product lines; baskets and mats (22 percent of rural manufacturing) and beer brewing (18 percent) are the two most prevalent rural manufacturing activities.

Around the world, three activities have consistently been identified as the most important categories among MSEs: textiles and wearing apparel, food and beverages, and wood and forest products. A review of data from earlier studies in other countries shows that these "big three" sectors provide an (unweighted) average of 78 percent of small manufacturing enterprise employment in 10 countries with relevant data (Liedholm and Mead, 1987, p. 19). The figures presented here suggest an even higher degree of concentration, with these three sectors accounting for an (unweighted) average of 80 percent of MSE manufacturing enterprises in urban areas, and more than 90 percent in rural areas. Yet, as we have seen, these regularities hide wide variations from country to country and between urban and rural areas.

The other major sector for which disaggregated information is presented in Tables 6 and 7 concerns trade. It is not surprising that wholesale traders constitute a negligible share of small enterprises in all countries under study. Of somewhat higher significance is the category of restaurants and hotels; particularly in South Africa, this group has attained some prominence, reflecting the restrictions placed on other types of activities in the townships. The low level of development of this category in Zimbabwe and Swaziland is striking, and again may reflect health regulations that discourage the growth of this type of activity in that country.

With rural data from only five countries and urban data reflecting major cities in five cases but urban slums or settlements in two others, the sample is too small to attempt an econometric analysis to explain the differences in structure by levels of development or rates of growth of income, the size of the economy, or other independent variables. Yet the structural picture presented here raises questions as to why a particular country is out of line: whether low points (for example, food and beverages in Kenya, Swaziland, and, particularly, Zimbabwe) reflect policy constraints that one might seek to eliminate, and whether high points (for example, knitters and crocheters in Zimbabwe or beer brewers in Lesotho) reflect a situation in which lack of alternatives has resulted in a flooding of easy-entry occupations, in spite of declining returns. Addressing such questions suggested by these cross-country comparisons of industrial structure will require a more detailed examination of particular subsectors. Work along these lines is under way.

#### SIZE BREAKDOWN OF ENTERPRISES

As indicated above, the domain of the surveys under review here included all enterprises with up to 50 workers (including proprietors and working family members as well as paid employees). Table 8 shows the size distribution of the enterprises covered by the questionnaire.

TABLE 8

SIZE BREAKDOWN OF ENTERPRISES (percentage of all enterprises)

Number of workers (including working proprietors):	Botswana	Kenya	Lesotho	Malawi	South Africa	Swaziland	Zimbabwe
1	65.0	55.1	79.5	59.5	46.6	68.8	69.6
2-5	28.1	42.7	18.0	38.4	50.1	28.4	26.9
6-10	5.1	1.9	1.6	1.3	2.8	1.4	2.3
11-19	1.0	0.2	0.5	0.5	0.4	0.9	0.7
20-50	0.9	0.1	0.4	0.3	0.1	0.5	0.5

Sources: see Table 2.

As the table makes clear, the largest share of MSEs is made up of one-person enterprises. Again, this pattern is familiar from other earlier studies; of the 10 countries for which similar data were presented in an earlier review, the share of one-person enterprises ranges from 57-68 percent in 8 of the 10 countries (Liedholm and Mead, 1987, p. 22).<sup>3</sup>

There has been considerable comment in the MSE literature on the phenomenon of the "missing middle" (see, for example, Kilby, 1988). In many third world countries, employment is concentrated in microenterprises (10 or less workers) or in very large enterprises (50 or more workers), with few in the 10-50-person range. This phenomenon, clearly evident in these data (particularly for Kenya and South Africa), raises questions as to whether policy or institutional constraints are hindering a process of evolution whereby the smallest enterprises grow into this middle category. Some of these questions are addressed in Chapter Three of this paper, focusing on patterns of growth of microenterprises.

The size structures for South Africa and Kenya, the two urban-based surveys, bear special comment, since each is somewhat unusual. These countries stand out by virtue of their higher share of enterprises in the 2-5 person category, and lower share in the 10+ category. Although the middle seems to be missing even more than usual in these two urban contexts, the larger share in the 2-5 category (particularly for South Africa) raises questions as to the character of those lower-middle enterprises. About 80 percent of the labor force in these enterprises are proprietors and family members, virtually the same proportion as in the other countries represented here. Further analysis will be required to determine the extent to which this disproportionately large group of 2-5-person enterprises has evolved from 1-person firms, and the kinds of things that can be done to facilitate this type of evolution.

In the earlier study, the data were for manufacturing activities only.

#### EMPLOYMENT COMPOSITION

Table 9 below provides information about the composition of the labor force engaged in MSE activities.

TABLE 9

EMPLOYMENT COMPOSITION (percentage of all workers)

	Botswana	Kenya	Lesotho	Malawi	South Africa	Swaziland	Zimbabwe
Proprietors	43.8	60.4	85.5	58.1	50.0	65.9	68.5
Unpaid family members	9.1	17.9	3.7	22.9	29.7	16.2	13.6
Hired workers	39.4	22.2	9.6	17.9	18.9	15.1	16.8
Trainees	7.7	n.a.	1.2	1.1	1.4	2.8	1.6

Sources: see Table 2.

Two things stand out in this table. The first is the limited reliance on trainees in these enterprises. This result stands in sharp contrast to findings from similar studies in Anglophone West Africa, where 40-65 percent of the labor force was reported to be made up of apprentices (see Liedholm and Mead, 1987, p. 24). This arrangement whereby people learn the trade by working with more experienced entrepreneurs appears to be much less widely practiced in Southern and Eastern Africa.

A second thing to notice about the employment structure as revealed in Table 9 is the limited reliance in these enterprises on hired workers. In all countries except Botswana, at least three quarters of the labor force is made up of proprietors and unpaid family members. The role of hired workers is particularly insignificant in Lesotho, accounting for less than 10 percent of the labor force and less than half the share of paid workers in Kenya or South Africa. Botswana clearly stands out as a special case here, with a much higher reliance on hired workers and trainees than in the other countries under examination.

This categorization of the labor force is particularly important since previous work has suggested that enterprises that engage hired workers generate higher returns and lead to higher growth rates than enterprises that rely solely on family labor (see Liedholm and Mead, 1987, p. 85). Enterprises with paid labor force may be of special interest to those seeking target groups with more favorable prospects for growth of productive employment.

#### GENDER AND OTHER DIMENSIONS OF THE LABOR FORCE

The central role of women in MSEs is illustrated in two measures shown in Table 10: the preponderance of female-owned enterprises, and their major role in the labor force itself.

TABLE 10
PROPRIETORSHIP AND LABOR FORCE CHARACTERISTICS

	Botswana	Kenya	Lesotho	Malawi	South Africa	Swaziland	Zimbabwe
Gender of proprietors (% of all enterprises): Females	75.2	42.9	73.0	45.5	62.1	84.3	66.6
Males	18.6	52.7	25.2	51.9	31.5	11.6	31.7
Mixed	6.2	4.4	1.8	2.6	6.4	1.1	1.7
Labor force (% of all workers, including proprietors): Females	67.1	44.3	76.2	39.8	52.8	78.1	57.1
Children	2.6	n.a.	0.4	6.1	5.1	4.8	3.4
Part-time workers	4.5	10.8	2.0	2.7	7.3	2.1	2.8

Sources: see Table 2.

The major role of women in MSEs stands out clearly in this table. In terms of ownership, in all countries studied except Kenya, well over half of the proprietors of microenterprises are women. The role of women in the labor force is equally predominant, ranging from 44-53 percent of the workers in the low income urban areas of Nairobi and South Africa to more than 75 percent in Lesotho and Swaziland. In the latter cases, an important part of the explanation for the central role of women may be that significant numbers of men find paid work in neighboring South Africa. The converse may be an important part of the explanation for the relatively lower share of women in the MSE labor force in Nairobi and the two South African townships; since men migrate in larger numbers than women, they probably make up a larger share of the total population of these urban areas. Women in Kibera are probably no less active economically than their counterparts in Lesotho or Swaziland, but they constitute a smaller share of the total population under study. Unfortunately, we have no data on the gender breakdown of the target populations to enable us to test this hypothesis.

A comparison of growth rates in employment among firms owned by men and women is presented in Chapter Two. The discussion there indicates that employment in enterprises owned by women grew substantially less rapidly than in those owned by men. A companion paper explores in more

detail the characteristics of enterprises owned and operated by women, comparing these with enterprises owned by men (see Downing and Daniels), so these issues are not examined in detail here. The major role played by women, however, both as proprietors and as workers, means that microenterprise promotion provides an important avenue for channeling assistance to this target group. Furthermore, it means that one needs to be particularly careful to ensure that policies and programs are designed in such a way as to provide women with at least equal access to opportunities for advancement.

The limited role of children and of part-time workers in MSEs is also worth noting. Other information collected in the survey makes clear that most enterprises operate year-round (the average is over 11 months per year); in those countries where this question was asked, they work an average of well over 20 days per month. There is a tendency to think that microenterprises are largely part-time activities, relying heavily on children; these figures make clear that this is not the case.

#### **CHAPTER TWO**

#### **DYNAMICS**

Before examining the empirical evidence on patterns of change in the level of economic activity among MSEs, it is important to discuss briefly alternative measures of this change as well as its components. Although sales (output), value added, assets, and number of workers are among the array of variables that might be employed to measure change, the one used most frequently is number of workers. This is because it is the indicator that is most easily and accurately remembered over time by entrepreneurs; in addition, it does not have to be deflated. Consequently, change in the number of workers is the primary measure used in the Southern and Eastern African enterprise surveys and is the one used in this study.

What biases might arise from the use of this measure? Joan Parker's (1991) recent analysis of growth in Kenyan enterprises finds that changes in real sales and employment are positively correlated, but that growth rates in real sales exceed those in employment. Her study suggests that the employment growth rate measures may provide lower bound estimates of the changes occurring among existing MSEs.

In analyzing changes in MSEs, it is also important to look beneath the aggregate figures and examine the individual components of this change. Not only are existing firms expanding and contracting, but new firms are being created (firm births) while other are disappearing (firm deaths).<sup>2</sup> There is a vast churning among firms, but these individual micro changes tend to offset each other and thus be masked if one focuses only on net changes in activity. Therefore, the discussion in the next section concentrates first on the evidence on the expansion and contraction (in other words, the net growth) among existing (surviving) firms; attention is then focused on the findings related to growth stemming from firm births and firm disappearances.

#### **NET GROWTH OF EXISTING (SURVIVING) FIRMS**

One of the most striking findings emerging from the recent empirical studies is the high growth rates exhibited by the existing (surviving) micro and small firms in the region. Table 11 reveals that the mean employment growth rate of such firms in the five countries with aggregate, countrywide figures —

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For a discussion of the accuracy with which variables are recalled by small-scale entrepreneurs, see Liedholm, 1991. Ideally, it would be desirable to generate other input as well as output measures of change, so that changes in productivity could be determined. Unfortunately, accurate measures of these variables over time are difficult to obtain using recall techniques.

In terms of employment changes or job creation, the net overall growth rate of employment can be expressed as the sum of net job creation from existing firms (percentage change from expansion less percentage change from contraction) and net job creation from the change in the net number of firms (percentage change from new firms less percentage change from closed firms).

Botswana, Lesotho, Malawi, Swaziland, and Zimbabwe — is 8.4 percent per year.<sup>3</sup> The country variation around this mean ranges from a low of 5.9 percent in Lesotho to a high of 11.4 percent in Botswana. These growth rates are impressive when it is recognized that, except for Botswana, they are at least double the growth rates of the GDPs of these countries during the 1980s.<sup>4</sup>

The aggregate firm growth rates of a larger array of countries can be compared, if urban firms only are considered. This is because dynamic studies in many countries have omitted rural firms. In the seven surveyed countries of Southern and Eastern Africa with urban data, the mean employment growth rate of existing firms, as indicated in Table 11, is approximately 16 percent per year. This mean the regional growth rate figure is remarkably similar to the urban growth rates reported in the limited number of dynamic studies that have been conducted elsewhere in Africa or in other parts of the world; indeed, the worldwide mean growth rate for micro and small firms located in urban areas is 15.1 percent per year (see Table 11).

This regional average figure masks wide variations from country to country in the urban growth rates. Indeed, annual urban firm growth rates range from a low of 9 percent in Zimbabwe to a high of 23.9 percent in South Africa, country differences that are statistically significant.

These rapid overall net growth rate figures are all the more impressive, however, when it is realized that the majority of MSEs in these countries do not grow at all. As revealed in Table 12, only slightly more than a quarter of the enterprises in the region expanded, while about two-thirds remained the same size, and less than 5 percent contracted since the time they were started. It is not just the young firms that have not grown. In Swaziland, for example, 46 percent of the firms that remained the same size have been in operation for five years or more. The longer the firm survives, however, the less likely

The employment growth rates presented in the tables in the body of the paper are defined as follows: (A-B/B) / C, where: A = number of workers now, B = number of workers when the enterprise started; and C = number years the firm has been in existence. It should be noted that these are average growth rate figures, with the origin year in the base, and thus yield an upper-bound limit of the growth rates, particularly given the large number of firms originating as one-person enterprises. To provide a comparative perspective, compound growth rate figures have also been computed, and these are presented in Appendix Table A-4. The compound growth rate figures are also quite substantial, but are about 25 percent smaller than the average, base year origin rates. The overall annual compound rate for the region is 6.8 percent, for example, while the urban and rural compound rates are 13.0 and 5.6 percent, respectively. The data for all these growth calculations were obtained by asking entrepreneurs retrospective information (event histories) about their firms.

During the period 1980-1987, the average annual increase in GDP for the five countries was as follows: Botswana, 13 percent; Swaziland, 3.3 percent; Lesotho, 2.3 percent; Malawi, 2.6 percent; and Zimbabwe, 2.4 percent (World Bank, 1989). In Swaziland, it should also be noted that formal sector employment grew at a rate of only 1.1 percent per year from 1979-81 until 1986-88 (Swaziland, 1989). In Zimbabwe, employment in formal sector nonagricultural activities was reported to have grown by only about 0.6 percent p.a. over the period 1982-86/7 (Saito, 1990, p. 8).

TABLE 11

# ANNUAL EMPLOYMENT GROWTH RATE OF EXISTING MICRO AND SMALL ENTERPRISES\* "AVERAGE" GROWTH MEASURE — ORIGIN YEAR BASE

	Growth Rate (Percent)			
Country	Urban	Rurai <sup>b</sup>	Entire Country	
BOTSWANA	17.4%	8.7%	11.4%	
KENYA	21.2%	<u>.</u>	•	
LESOTHO	12.2%	4.3%	5.9%	
MALAWI	15.7%	9.9%	10.5%	
SOUTH AFRICA	23.9%	•	•	
SWAZILAND	12.3%	5.6%	6.6%	
ZIMBABWE	9.0%	6.7%	7.4%	
Southern/Eastern Africa	16.0%	7.0%	8.4%	
Nigeria <sup>c</sup>	15.6%	•	-	
Ghana <sup>c</sup>	11.9%	-	-	
NIGER	8.9%	5.4%	6.3%	
Colombia <sup>d</sup>	15.4%	•	•	
DOMINICAN REPUBLIC	16.4%	13.1%	15.1%	
India	16.1%	•	•	
Worldwide	15.1%	7.7%	9.0%	

Sources: South Africa — Liedholm and McPherson, 1991; Swaziland — Fisseha and McPherson, 1991; Lesotho — Fisseha, 1991; Zimbabwe — McPherson, 1991; Kenya — Parker and Aleke Dondo, 1991; Nigeria — Chuta 1990; Ghana — Steel and Webster, 1990; Colombia — Cortes, Berry, and Ishaq, 1987; Dominican Republic — Cabal, 1992; India — Little, Mazumdar, and Page, 1987; Botswana — calculated from data generated by Daniels and Fisseha, 1992; Niger — Journard, Liedholm, and Mead, 1992; Malawi — calculated from data generated by Daniels and Ngwira, 1992.

Notes: Average annual growth rate in terms of employment and 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. For countries named in capital letters, data are from our surveys.

- <sup>b</sup> Rural includes rural areas (enumeration areas) plus secondary towns.
- Manufacturing enterprises only.
- d Metal firms only.

it is that it will remain the same size. In Swaziland, once again, 85 percent of one-year-old firms have not grown, while only 62 percent of the firms more than four years old have not grown.<sup>5</sup>

Given the large percentage of nongrowing firms, these findings also imply that the net growth rates of these expanding firms must be very large. Indeed, in Zimbabwe, Botswana, and Malawi, the growth rates of the expanding MSEs range from 40 to 48 percent per year, while in Lesotho and Swaziland the comparable growth rates are 36.7 percent and 32.5 percent, respectively. Thus, a powerful minority of the MSEs are generating these impressive overall growth rates. The characteristics of these growing as well as nongrowing firms must now be examined to ascertain whether or not there are consistent patterns to this growth phenomenon.

TABLE 12

COMPOSITION OF EMPLOYMENT CHANGE
IN MICRO AND SMALL ENTERPRISES
(percentage of firms by category)

Country	No Change	Expanded	Contracted
Botswana	75.7%	19.0%	5.3%
Kenya	59.6%	37.6%	2.8%
Lesotho	73.6%	18.2%	8.2%
Malawi	75.0%	23.0%	2.0%
South Africa	49.4%	48.3%	2.3%
Swaziland	68.9%	28.3%	2.3%
Zimbabwe	77.0%	19.3%	3.7%
Southern/Eastern Africa	68.5%	27.7%	3.8%
Niger	44.8%	37.4%	17.8%
Sierra Leone	58.0%	39.0%	3.0%
Dominican Republic	67.3%	29.1%	3.6%
Average — Overall	65.0%	29.9%	5.1%

Sources: Sierra Leone — Chuta and Liedholm, 1985; for other countries, same as Table 11.

Computed from data generated by Fisseha and McPherson, 1991. Similar findings have been reported for firms in Nigeria (Chuta, 1990).

#### PATTERNS OF GROWTH OF EXISTING FIRMS

Among the key characteristics of MSEs that might be expected to provide clues to these growth patterns would be the sector, location, size, and age of the enterprises along with the gender of the entrepreneur. In this initial search for patterns, the relationships between each of these characteristics and firm growth will be briefly examined.

#### Sector

Table 13 reveals that the growth rates of existing firms in Southern and Eastern African countries surveyed vary widely by sector. For the most part, these sectoral differences in growth rates within each country are statistically significant. What is of particular interest, however, is whether patterns emerge across countries. One is immediately struck by the wide sectoral variations in growth from country to country and the apparent lack of any obvious regularities. On closer examination, however, a few common patterns begin to emerge. At the more aggregate level for the major sectors, for example, the manufacturing sector tends to be the slowest growing, while the service sector is frequently the fastest growing.<sup>6</sup> At the more disaggregated level within the manufacturing group, fabricated metal production is frequently among the most rapidly growing sectors, while textile and wearing apparel typically is among the least rapidly growing. Yet, the sectoral growth rate variations from country to country are wide within manufacturing, and no clear patterns emerge. The most rapidly growing sector in Botswana and South Africa, for example, is wood processing; in Kenya and Zimbabwe, it is food processing. Country-specific factors thus appear to play an important role in determining sectoral growth rates, pointing to the need for individual country surveys to determine the growing sectors.

#### **Location**

What role does location play on the growth rates of existing MSEs. A striking finding is that enterprises located in urban areas have grown significantly faster than those located in rural areas. An examination of Table 11 reveals, for example, that in Swaziland, Lesotho, and Botswana, urban firms grew more than twice as fast as their rural counterparts; in Zimbabwe and Malawi, although urban firms still grew more rapidly, the differential was not as great.

#### **Initial Size**

Do the growth rates of enterprises in the region vary by the initial size of the enterprise? The answer to this question is important because of the insights it can provide not only on the determinants of growth, but also on the size distribution of firms. If, for example, firm growth is found to be independent of firm size, it would provide empirical support for Gibrat's Law, which implies an increasing concentration of output in the hands of larger firms.

A similar pattern is found in Malawi, with manufacturing growing at 8.7 percent, trade at 12 percent, and services at 13.7 percent. These data refer to firms with 100 or fewer employees and are thus not strictly comparable to the data presented in Table 13.

<sup>&</sup>lt;sup>7</sup> Rural is defined as localities with 20,000 inhabitants or less.

Table 13

Average Annual Growth Rate In Enterprise Employment
By Major Sectors — Africa

Sector						
	Botswana	Kenya	Lesotho	South Africa	Swaziland	Zimbabwe
Food, Beverage, and Tobacco Production (31)	6.1%	39.7 %	1.1%	19.5%	7.3%	15.9%
Textile, Wearing Apparel, and Leather Production (32)	19.2%	23.1 %	5.9%	13.0%	3.6%	3.3%
Wood and Wood Processing (33)	27.6%	27.6 %	5.6%	43.3%	5.4%	4.0%
Fabricated Metal Production (38)	15.0%	24.3 %	55.7%	38.1%	18.3%	6.2%
TOTAL, MANUFACTURING (3)	11.9%	26.3 %	4.0%	21.1%	5.6%	5.6%
Retail Trade (62)	11.4%	17.9 %	9.6%	25.1%	7.6%	11.9%
Restaurants, Hotels, and Bars (63)	4.8%	49.0 %	1.1%	28.6%	24.2%	0.9%
TOTAL, TRADE (6)	10.0%	19.6 %	9.0%	25.6%	7.6%	11.6%
SERVICES (9)	15.0%	25.8 %	9.1%	21.9%	9.8%	16.5%
TOTAL, ALL ENTERPRISES	11.4%	21.2 %	5.9%	23.9%	6.6%	7.4%

Sources: see Table 11.

The empirical evidence from Southern and Eastern Africa indicates that, counter to Gibrat's Law, firm growth tends to be inversely related to initial size. In Zimbabwe, for example, firms starting with from 2-5 workers grew at a 10.4 percent annual rate, while those starting with 10 or more workers actually declined.<sup>8</sup> Similar results have been reported from studies in South Africa (Liedholm and McPherson, 1991) and Kenya (Parker and Aleke Dondo, 1991). Indeed, in a more detailed analysis of

The correlation coefficient between growth and initial size, including only growing enterprises, is -0.928 and is significant at the 99 percent level. When all firms are included in the analysis, the significance level is reduced but the results are still statistically significant. Computed from data generated by McPherson, 1992.

two subsectors in Kenya, Parker (1991) found some evidence that this negative relationship held even when absolute rather than percentage changes in growth were analyzed. These findings are consistent with those reported in several recent studies outside the region, specifically Nigeria (Chuta, 1990), Colombia (Cortes, Berry, and Ishaq, 1987), and the United States (Evans, 1987). Thus, there is evidence from this region that the smallest firms are growing more rapidly than their somewhat larger counterparts within the MSE group, implying that this group is becoming more homogeneous in terms of size.

#### Enterprise Age

Is there evidence from the region that firm growth rates are related to the age of the enterprise? The life cycle aspects of the firm are central to any dynamic analysis; yet, age has only recently been incorporated into such studies in developing countries.

The recent findings from Southern and Eastern Africa point to an inverse relationship between the enterprise's age and its growth rate. In Zimbabwe, for example, the average growth rate for a firm in existence for two years is 10.9 percent per year, while the comparable growth rate for a firm more than 10 years old is only 2.9 percent per year. A similar result is reported for South Africa, where the growth rate of firms one year old or less was nine times that of firms more than 11 years old (Liedholm and McPherson, 1991). This inverse relationship has also been observed in studies undertaken outside the region, such as in Nigeria (Chuta, 1990), Colombia (Cortes, Berry, and Ishaq, 1987), and the United States (Evans, 1987). Such findings point to the importance of age in understanding growth and the consequent need to incorporate these life cycle components into any analysis of firm dynamics.

#### Gender of the Entrepreneur

Firm growth rates also are systematically related to the gender of the entrepreneur. The findings from the country studies in the region reveal that, overall, female-run firms grow significantly more slowly than their male-run counterparts. Specifically, in Zimbabwe (McPherson, 1991), firms run by women grew at a rate 40 percent less than those run by men; in Botswana (Daniels and Fisseha, 1992), the growth rate of female firms was 47 percent less than the growth rate of male firms, while in Swaziland and South Africa (Liedholm and McPherson, 1991) the female firm growth rate was 32 percent less than the corresponding male firm growth rate. What might explain these dramatic and statistically significant differences in growth rate by gender? One partial explanation is that the fastest growing

The absolute change findings provide even stronger evidence of the role played by the smallest enterprises in generating growth. For very small firms, a high percentage growth rate can be generated by a small absolute change. In this case, however, there is some evidence that the absolute change of the smallest firms exceeds that of the larger firms. This is due largely, however, to the fact that a larger percentage of the smaller firms actually grew. If only the growing firms are examined, the results become more ambiguous. Firm age may also be playing a role that can be isolated only in a more formal analysis of firm growth, which is under way.

Computed from data in McPherson, 1992. The correlation coefficient between firm age and growth rate was - .08 and was significant at the 99 percent confidence level.

sectors, particularly in manufacturing, tend to be those traditionally dominated by male proprietors.<sup>11</sup> Yet, the South Africa and Zimbabwe enterprise studies also reveal that, even within the same sector, female-run enterprises generally grew more slowly than their male-run counterparts. Possible explanations for these growth rate differences as well as additional gender-related findings in the region are explored in a companion paper prepared by Downing and Daniels (1992).

#### **Synthesis of Growth Patterns**

This search for empirical regularities in the growth of MSEs has generated some initial insights into this process. McPherson (1992) has recently applied more formal statistical methods to these Southern Africa data in order to identify more rigorously the characteristics that affect the magnitude of firm growth. He has generated statistically significant findings indicating that growth rates varied inversely with the age and initial size of the firm, and positively with location (urban and commercial districts) and gender of the entrepreneur (males). Sector was also a statistically significant variable in each country, but the specific sets of activities that were fastest growing varied from country to country.

#### **GROWTH FROM NET ENTRY OF FIRMS**

In addition to the changes arising from the expansion and contraction of existing firms, one must focus on the growth arising from the net entry of new firms. There is some indirect evidence that the net number of new firms has been increasing. In response to a survey question as to whether or not the number of "like firms" in their neighborhood had increased in the previous five years, the majority of the MSE entrepreneurs answered yes. The positive responses to this question from entrepreneurs in Botswana, South Africa, Swaziland, Lesotho, and Zimbabwe were 83, 77, 67, 62, and 59 percent, respectively.

Unfortunately, there is not yet enough information to specify how much of the change in MSE employment comes from the net entry of new firms. Even these figures would mask the rapid churning that is occurring within the MSE group from the birth of new firms and closure of existing ones. Recent evidence from Kenya, Swaziland, and Zimbabwe indicates, for example, that approximately one-half of the entrepreneurs who closed their firms eventually established new MSE firms.<sup>13</sup> The available empirical evidence relating to the births of new firms and the closure of existing firms in the region must now be considered in more detail.

There are some sharp exceptions, however. In Zimbabwe, for example, the food and beverage sector is dominated by women and is one of the fastest growing sectors.

Specifically, he used multiple regression techniques to arrive at these results. Consequently, each of the relationships, such as that between age of firm and growth, are explored using an approach that controls for changes in the other independent variables, such as the gender of the entrepreneur or sector.

The percentage of entrepreneurs of closed firms who subsequently created new MSEs was 41 percent in Kenya, 56 percent in Swaziland, and 45 percent in Zimbabwe. Less than 20 percent of these entrepreneurs became paid workers; the remainder generally did not work. The sources are the same as in Table 14.

#### Firm Births

Empirical evidence on the birth rates of MSEs in Southern and Eastern Africa is still virtually nonexistent. If the patterns in the region are similar to those found elsewhere in the developing world, however, one might expect to find annual birth rates of MSEs ranging from 8 to 12 percent; moreover, birth rates would likely be inversely related to firm size (Liedholm and Mead, 1991). Clearly, more information on birth rates is needed and some of the required statistics are currently being generated.

#### Firm Closures

Somewhat more empirical information exists on firm closures (disappearances) in the region. Yet, figures on annual closure rates still do not exist. If the patterns found elsewhere in Africa were to hold in this region, however, aggregate closure rates of 9 or 10 percent per year might be expected (Liedholm and Parker, 1989).

Several recent studies undertaken in Southern and Eastern Africa have begun to illuminate for the first time the key characteristics of firms that have closed. These studies were made possible by the pioneering work in Kenya of Parker and Aleke Dondo (1991), who developed an innovative survey procedure for locating and generating information on closed businesses.<sup>14</sup> This survey procedure was subsequently employed by McPherson and Fisseha (1991) in Swaziland, McPherson in Zimbabwe (1991), Daniels and Fisseha in Botswana (1992), and Daniels and Ngwira in Malawi (1992) to generate similar information on such enterprises in these countries.

It is important at the outset to recognize that firms are shut down for a variety of reasons and not just because they are not economically viable — the traditional business failures. As a glance at Table 14 reveals, only about one-half of the business closures in Botswana, Kenya, Swaziland, and Kenya were due to "bad business conditions." Approximately 10 percent closed because of better options, while another one quarter shut down for personal reasons, such as health or retirement. Finally, it should be noted that the government sometimes is an important cause of business closures. In Kenya, for example, some one quarter of the closures in the study area, Kibera, were forced to close either by the government (primarily because these enterprises were allegedly operating in illegal locations) or because of natural calamities (fire or flood).

#### **Patterns of Firm Closures**

What are the characteristics of the closed firms and how, if any, do these differ from the characteristics of those firms that survive? Among the variables likely to be systematically related to firm closures are the age, sector, location, growth, and size of the enterprise, the gender and ethnic origin of the entrepreneur, and governmental policy. The evidence generated by the country studies plus a recent

A closed business in these surveys is defined as an enterprise previously run by someone from a household in the sample area, but no longer operating. Thus, a firm that simply changed location would not be considered closed. In India, a closed enterprise is one no longer operating in its listed activity at its previous location (Liedholm and Parker, 1989).

In Malawi, approximately 45 percent of the businesses closed because of "bad business" (Daniels and Ngwira, 1992).

TABLE 14

REASONS FOR CLOSURE OF MICROENTERPRISES
(in percentage of enterprises)

Reason	Botswana	Kenya	Swaziland	Zimbabwe
Business Conditions Bad	43%	40%	56%	47%
Better Options	21%	12%	6%	7%
Personal Reasons	28%	22%	22%	28%
Government Action/Natural Disaster	2%	26%	4%	6%
Other	15%	0%	12%	12%
Total	100%	100%	100%	100%

Source: Botswana - Daniels and Fisseha, 1992; Kenya - Parker and Aleke Dondo, 1991; Swaziland - Fisseha and McPherson, 1991; Zimbabwe - McPherson, 1991.

statistical analysis of firm closure in Swaziland and Zimbabwe by McPherson (1992) provides new insights into this phenomenon in Southern and Eastern Africa.

One of the most powerful empirical relationships is that between firm closure and the age of the firm. Table 15 reveals a strong inverse relationship between the age of the firm and the closure rate in Swaziland, Zimbabwe, and Kenya. Most closures occur in the early years of the firm's existence; in these three countries, more than 50 percent of the closures took place by the end of the firm's third year. This pattern is similar to that observed in India and the United States (Liedholm and Mead, 1991). In Kenya and Zimbabwe, the closures peak between years one and two, while in Swaziland they peak during the first year.

When examining age-specific closure rates, it is also important to determine the firm's "hazard rate." The hazard rate is defined as the probability that the firm will close during the period, usually the year, given that it has survived until the beginning of that period. Thus, the hazard rate can be thought of as the conditional probability of a firm surviving each year.

Preliminary statistics from Malawi, however, indicate that only 27 percent of the enterprises in that country closed by the end of the third year (Daniels and Ngwira, 1992).

Technically, the hazard rate is computed by dividing the number of firms that closed in a period, usually one year, by the number in the "risk set"; the risk set is made up of those firms that have not yet closed at the beginning of the period. Over time, the risk set, the denominator, becomes smaller because more and more firms have closed and thus fewer survivors remain. For more details, see McPherson, 1992, or Kiefer, 1989.

TABLE 15

AGE DISTRIBUTION OF CLOSED ENTERPRISES

Age at Closure (Years)	Kenya	Swaziland	Zimbabwe
<1	20.1%	20.9%	13.3%
1	25.3%	16.2%	17.7%
2	18.0%	12.3%	16.5%
3	10.8%	7.4%	10.2%
4	7.3%	8.0%	9.1%
5	4.6%	4.1%	6.4%
6	2.7%	3.9%	5.4%
7	2.4%	3.1%	3.7%
>7	8.8%	24.1%	17.7%

Sources: Swaziland - Fisseha and McPherson, 1991; Kenya - Parker and Aleke Dondo, 1991; Zimbabwe - McPherson, 1991;

The hazard rate for MSEs in Swaziland is pictured in Figure 1 (McPherson, 1992). At the beginning of year four, for example, the hazard rate was 0.16, indicating that if a firm survived until the beginning of its fourth year, it had a 16 percent chance of closing during its fourth year. The shape of this function in Swaziland is of some interest. Initially, the hazard rate declines with the age of the firm, indicating that if a firm survives its first few turbulent years, its chances of closing diminish. This finding is consistent with the empirical evidence presented earlier as well as with economic theory. Yet, after about 18 years, the hazard rate surprisingly begins to increase. The majority of the enterprises of this vintage that go out of business are closing for personal reasons (such as old age or sickness) or because better business opportunities have arisen — reasons that help to explain this unexpected finding; relatively few are conventional business failures. 19

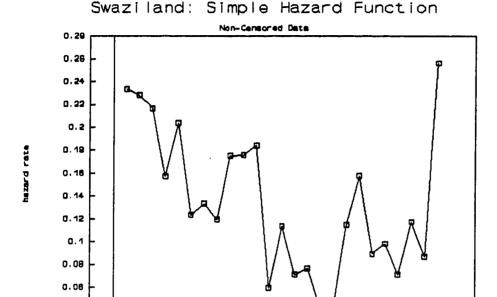
#### **Determinants of Firm Closures**

One of the most fruitful approaches to studying the closure patterns of enterprises in a systematic fashion is hazard analysis. This analysis seeks to explain the previously described hazard rate of MSEs. Although initially developed by industrial engineers and adapted by labor economists for analyzing duration of unemployment spells, this technique has recently been employed by McPherson (1992) to

Jovanovic's (1982) theoretical model of firm dynamics, for example, implies a monotonically decreasing hazard rate over time. A roughly similar empirical pattern was found in Zimbabwe, except that the hazard rate increased for the first few years (McPherson, 1992).

<sup>19</sup> It should also be recalled that the number of surviving firms of this vintage, the risk set in the denominator of the hazard rate calculation, has become quite small; thus, even if the absolute number of closures had remained the same from period to period, the hazard rate would have increased.

FIGURE 1



Source: McPherson, 1992.

0.04

analyze the key factors that determine the closure and survival patterns of MSEs in Swaziland and Zimbabwe. It is more attractive than other statistical or econometric techniques for examining such patterns, because it not only permits time-varying explanatory variables to be included in the analysis, but it also properly deals with statistical problem that arises because not all firm closures are observed (in other words, the sample censoring problem).<sup>20</sup>

time in years

50

In this analysis, the firm's hazard rate (the probability of its closing, or not surviving, during each period) becomes the key dependent variable of concern. The independent variables employed to explain or predict the firm's chances of closing arise from either theoretical or empirical sources. Prominent among these independent or explanatory variables are the size and past growth rate of the firm, both of

The sample censoring issue looms large in studies of small enterprise closure and survival, because many of the firms in the data set have not yet closed. The observations about them are thus incomplete and these observations are called "censored." Standard econometric analyses, such as ordinary least squares, ignore this fact and count these firms as if they had closed and thus yield results that would be quite misleading. Hazard analysis, on the other hand, only includes information on those firms that are at risk of failing. McPherson (1992) makes use of Cox's proportional hazard model, which does not require any assumptions about how the baseline hazard rate behaves over time. The coefficients of the explanatory (independent) variables, some of which are entered as dummy variables, are estimated using "partial likelihood" techniques with the standard errors providing approximate indications of their statistical significance. For more details relating to the more technical aspects of this approach, see Allison (1984).

which would be posited by theory and empirical evidence outside the region to be inversely related to the firm's chances of closing.<sup>21</sup> The sector or type of business is another explanatory variable that limited empirical evidence suggests systematically influences firm mortality (Liedholm and Parker, 1989). Location is another enterprise characteristic that should be included as an independent variable; sketchy evidence from empirical studies elsewhere indicates that closure rates of urban firms, particularly those operating in commercial districts, tend to be lower than their rural counterparts (Liedholm and Mead, 1991). The degree to which an enterprise is specialized is an additional factor that might influence the firm's hazard rate. Mead (1992) has hypothesized that increased specialization might lead to higher efficiency, which might be associated with lower closure rates. Finally, the gender of the proprietor might be a variable expected to help explain firm closures. If, as Downing (1990) argues, female owners are more cautious than their male counterparts, the failure rates among women-owned firms might be predicted to be lower.

The salient findings from McPherson's (1992) hazard analysis for MSEs in Swaziland and Zimbabwe are summarized in Table 16. A statistically significant negative coefficient implies that the particular explanatory variable has the effect of lowering a firm's chances of closing or raising its chances of surviving, holding all other variables constant.

One of the important findings from the analysis is that MSEs that are growing are less likely to shut down; the coefficients in both countries are significant and negative. More specifically, a 1 percent increase in the average annual growth rate of employment implies a 5.3 percent decline of the firm's hazard rate (or conditional probability of failing) in Zimbabwe and a 4.2 percent decline in Swaziland, when all other influences are taken into account. Clearly, the outcome posited both theoretically and empirically is sustained.

The expected inverse relationship between firm size and the hazard rate, however, is not found. In neither Swaziland nor Zimbabwe is the relationship statistically significant. Thus, the initial size of the enterprise seems to have no influence on a firm's survival chances.

Another key result is that the hazard rates do vary significantly by sector in both countries. When the results from Swaziland and Zimbabwe are combined, the retail trade and transportation sectors are at a higher risk of failing than firms in most other sectors. Enterprises engaged in wood processing in these countries seem to have lower hazards than those in other sectors.

One of the most striking and powerful findings is that location plays an important role in influencing firm closures. The hazard rates for urban firms, for example, are significantly lower than those for their rural counterparts. Moreover, firms located in the commercial districts of the urban areas or that are mobile have lower hazard rates than those that are operated out of the home. Proximity to growing markets would thus seem to be an important factor in firm survival.

Most of the other explanatory variables are not statistically significant. Neither the nature of the linkages nor the ethnic origin of the entrepreneur proved to be significant. Moreover, the gender of the entrepreneur is not statistically significant in either Swaziland or Zimbabwe. Thus, when the effects of

Jovanovic's (1982) "learning model" of firm dynamics implies that larger firms and those that are growing will have a greater chance of surviving over time compared to others. Empirical studies of small firms in the United States as well as in Sierra Leone, Nigeria, Colombia, and the Philippines provide support for these relationships implied in Jovanovic's theory (Liedholm and Parker, 1989).

TABLE 16

DETERMINANTS OF ENTERPRISE CLOSURE (NOT SURVIVING):
RESULTS FROM HAZARD ANALYSIS

Characteristics	Swazilar	nd	Zimbabw	Zimbabwe		
	Significant Coeff.?*	Sign	Significant Coeff.?"	Sign		
Enterprise						
Growth	Yes	•	Yes	•		
Size	No		No			
Sector	Yes	•	Yes	-		
Location		<u>.</u>				
urban	Yes	•	Yes	-		
commercial district	Yes	•	Yes	•		
Linkages	No		No			
Proprietor .						
Female	No		No			
Ethnic Origin	No		No			
Policy						
Formal Credit	No		No			
Informal Credit	Yes	+	No			

Source: derived from McPherson, 1992.

other factors are incorporated in the analysis, female-run firms have the same probability of failing as their male-run counterparts in these two countries.<sup>22</sup>

Finally, the analysis indicates that access to credit, whether formal or informal, has no significant effect on firm closures in Swaziland or Zimbabwe. The one conspicuous exception is informal credit in Swaziland, which has a statistically significant positive coefficient. This means that Swazi enterprises that have borrowed from informal sources at least once in the past are more likely to close than their counterparts who have not borrowed from any source.

<sup>\*</sup> Significant at 95 level.

These results are even stronger when "business failures" are separated from "voluntary" closings and are analyzed separately in what is called a "competing risk" analysis. When business failures (bad business) only are examined, the influence of sectors and location on closure is even stronger and the gender influence becomes even weaker. For more details, see McPherson, 1992.

### CHAPTER THREE

### PROBLEMS AND CONSTRAINTS

What factors constrain the growth of MSEs? Information on this question was obtained by asking a smaller sample of respondents about problems they faced at three different stages in the evolution of the enterprise: when it was first started; during past periods of growth in the enterprise (if there were any); and currently (at the time of the survey). The responses as of the time of the survey are presented in Table 17; similar information for the start of the enterprise and during periods of growth is provided in Appendix Tables A-1 and A-2.

In interpreting these tables, it is important to recall that they reflect only the entrepreneurs' perceptions as to whether they faced problems, and, if so, which was the most important. Of course the entrepreneurs may have been wrong in this appraisal; a problem identified as a shortage of finance, for example, may in fact reflect poor product quality or problems of inventory management. Furthermore, respondents may be selective in what they report, either in hopes of receiving particular benefits or in an effort to play down their own inadequacies. With this caveat, perhaps the first thing to notice is that only about two-thirds of the respondents report that they had any problems. As Appendix Table A-2 shows, during periods of growth, an even smaller percentage record any problems. The fact that a somewhat higher percentage report problems in Zimbabwe while the converse is true in Swaziland may reflect the supportiveness of the environment in which MSEs operate in these countries. In South Africa and Zimbabwe, about two-thirds of those listing a primary problem also list a second one; in Swaziland, only one-third go on to list a second problem, again perhaps reflecting the relative degrees of encouragement of the business environment in those countries.

Which categories of problems are the most important? Three headings dominate: problems of working capital and credit, problems of markets and demand, and problems of access to inputs. Without exception, the first and second problem areas most frequently cited fall in one of these categories in all six countries studied, in each time period.

Credit is more widely reported as a problem at start-up than during either growth periods or at the time of the survey.<sup>2</sup> The principal credit problems cited relate to a shortage of operating funds (working capital), including problems of nonrepayment of credit offered by the microenterprise; in most cases, these are considered to be more pressing than fixed capital, limited access to credit in general, or the high cost of credit, the major components of the other credit category in the tables. The shortage of

The questionnaire asked whether the enterprise had any problems, then asked what was the most important problem, and the second most important problem. Table 17 and Annex Tables A-1 and A-2 give details on the single most important problem. The supplementary questionnaire, exploring problems faced by MSEs, was not administered in Kenya. In Malawi, the most important problem at the time of the survey was asked of all respondents, not just a smaller sample, so the reported results refer to a much larger number of enterprises.

Lesotho is an exception; in that country, credit was more widely reported as a problem at survey time than at start-up.

PERCEIVED PROBLEMS OF MICRO AND SMALL ENTREPRENEURS
AT THE TIME OF THE SURVEY
(percentage of enterprises in supplementary questionnaire)

	Botswana	Lesotho	Malawi	South Africa	Swazi- land	Zimbabwe
Size of sample in supplementary questionnaire	256	630	9,866	256	360	423
Percentage of enterprises reporting problems	76.2	65.0	89.2	68.8	59.1	84.3
Percentage of enterprises that listed 2 major problems	37.5	n.a.	n.a.	44.1	18.1	56.5
Of those that report problems, what	is the most in	portant one	17			
Problems of markets and demand	24.1	38.1	24.9	23.8	29.6	20.5
Problems of working capital	25.1	n.a.	17.5	13.6	32.6	19.9
Other problems of credit and finance	23.1	28.6	7.2	17.0	6.0	5.4
Problems of tools and machinery	1.5	4.8	2.1	2.9	2.0	6.7
Problems with space/location	2.1	3.2	0.5	10.8	4.5	4.9
Problems with taxes, licenses and other government regulations	0	0	5.3	10.3	4.0	3.2
Problems relating to inputs	8.2	6.3	30.4	1.2	7.5	27.4
Problems relating to the transport system	7.2	4.8	4.9	9.7	5.0	6.2
Labor problems	4.6	3.2	0.8	1.7	0.5	1.7
Problems with utilities	0.5	1.6	0.2	1.2	0	0.9
Problems relating to the entrepreneur, misc. problems	3.6	9.5	6.2	8.0	8.0	4.6

Sources: see Table 12. In Malawi, this question was asked of all respondents, not just those covered by the supplementary questionnaire.

working capital is particularly significant at start-up; in all cases except Botswana, this declined somewhat in importance thereafter (although it is generally still the most important financial problem). In two countries (Swaziland and Zimbabwe), problems of bad debts are reported to be particularly severe during periods of growth.

Turning to demand issues, the major problem cited, particularly during start-up and at the present time, is the straightforward one of "not enough customers." During periods of growth, the detailed answers under this heading are more diverse, including such problems as excessive competition or lack

of product publicity; but the recurring theme here is simply one of inadequate demand for the products or services being offered.

Problems relating to inputs stand out in both Malawi and Zimbabwe as deserving of special comment. In Malawi, access to inputs is the most widely reported problem during periods of growth as well as at the time of the survey. In Zimbabwe, respondents complain about both the unavailability and the high cost of raw materials. Although some of these complaints come from retail establishments which find it difficult to obtain products for sale, the majority are in manufacturing activities, particularly in garments and wood products. The shortage of tools and spare parts also receives some prominence in Zimbabwe during periods of growth, reflecting the limited access to foreign exchange for imports. These responses suggest that problems of raw materials and other intermediate inputs deserve careful attention in that country.

It is striking that problems with the government — taxes, licenses or other regulations — receive very little attention in the answers to questions about major problems facing the enterprise. Only in South Africa is this reported to be a significant issue; respondents there point with some regularity to problems in obtaining business licenses. In Zimbabwe, a country where there has been widespread complaint about the oppressive nature of the regulatory environment, the low level of complaint under this heading is surprising.<sup>3</sup>

The questionnaire also gave respondents an opportunity to list a second major problem. Among these second problems, problems of taxes, licenses, and government regulations are again of only minor importance.

### CHAPTER FOUR

### **SUMMARY AND CONCLUSIONS**

The findings from baseline surveys of MSEs conducted in seven countries — Botswana, Kenya, Lesotho, Malawi, South Africa, Swaziland and Zimbabwe — provide new insights into the structure and patterns of growth of these activities in Southern and Eastern Africa. With regard to the current structure of MSEs, it is clear that the overall magnitude of employment in MSEs in the region is very large, providing work for substantially more people than the formal sector in most of these countries. The great majority of these enterprises are in rural areas, more so than in other parts of the world where similar data are available. Employment densities — MSE employment per thousand persons in the population — appear to be unusually high in rural areas, particularly in Zimbabwe and Swaziland. The sectoral breakdown of employment indicates that two-thirds of all MSE workers in rural areas of these countries are in manufacturing activities. In urban areas, by contrast, only a third or less are in manufacturing in each of the surveyed countries except Zimbabwe, where the proportion is close to two-thirds. Within manufacturing, an overwhelming majority of MSEs are concentrated in three sectors: textiles and garments, food and beverages, and wood products.

The great majority of MSEs are very small; in most countries, two-thirds of the enterprises consist only of one person, with few having more than five workers. The labor force is made up overwhelmingly of proprietors and unpaid family members. The negligible share of trainees and apprentices sets this region apart from small enterprises in West Africa, where this group can constitute as much as half the total labor force. Women play a major role, constituting a clear majority of both proprietors and workers in all countries studied except Kenya and Malawi.

With respect to dynamic issues, a key finding is the high rate of growth in employment among existing MSEs in the region. These growth rates, which are similar to those found elsewhere in the developing world, are usually more than double the growth rates of GDP in these countries. The national averages hide wide variations in several dimensions. Urban enterprises grow substantially more rapidly than rural ones. Some sectors of the economy grow more rapidly than others, although no clear pattern emerges across countries in this regard. Enterprises owned by males grow more rapidly than those with female proprietors, reflecting in part the concentration of males in more rapidly growing sectors. Finally, it is important to recognize that the majority of MSEs do not grow at all; the high average growth rates reflect the fact that a minority of enterprises grow at impressively high rates.

Net expansion in employment among MSEs comes not only from growth among existing firms but also from the establishment of new enterprises, adjusted for losses because of firms going out of business. Although little information was collected in these surveys concerning firm births, a supplementary questionnaire permits us to say some things about firm disappearances. The likelihood of disappearance is highest in the first three years, declining substantially thereafter; analysis suggests that about half of all new enterprises disappear before the end of their third year. Only about half of firm closures can be considered as failures as a result of bad business conditions; other explanations include a move to better opportunities, personal reasons of the entrepreneur (including old age or sickness), or governmental interventions. Hazard analysis reveals that the firm's location, sector, and growth rate are statistically significant determinants of its chances of survival (or disappearance).

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In asking entrepreneurs about problems and constraints that they faced, clear patterns emerged. About a third of the respondents indicated that they face no serious problems. Among those listing problems, two categories predominate in the responses: problems of finance, particularly of working capital; and problems of markets. Other problems receive attention in particular countries or at particular stages in the enterprise life cycle (for example, during periods of growth, enterprises in Swaziland complain about difficulties in obtaining work space while those in Lesotho are hindered by the transport system, the availability of inputs, and the shortage of qualified workers). It is striking that little attention is paid to problems with taxes and governmental regulations in these responses.

There are several ways in which the survey results discussed here can be used in follow-up activities.

- The surveys provide a baseline for monitoring future changes, either by resurveying particular localities or by following a panel of enterprises over time;
- The surveys help identify potential target groups for future interventions while reminding policy makers of the need to take account of the ways in which their actions might affect large numbers of people engaged in MSE activities;
- Sectoral comparisons across countries can identify situations out of line with normal patterns in the region. These may call attention to problems in the legal and regulatory environment that, if addressed, will open up new opportunities for growth in particular segments of the economy;
- Past growth experiences identify types of enterprises that have been successful in expanding in the past, and therefore that may have particularly favorable growth prospects in the future. These can be categorized as sector, location, age, size, or gender of the proprietor; and
- Problems reported by the entrepreneurs in the questionnaire responses identify constraints in urgent need of attention. Problems of working capital and of markets cannot be ignored. Issues of input supplies, of availability of work space, and of transport services are identified in selected countries. The limited concern expressed with taxes and government regulations as problem areas may reflect the fact that most respondents are small and are unaffected by these factors. If the enterprise seeks to grow, these are likely to become more serious issues.

The results reported on in this paper are based on a survey approach that involved collecting a carefully targeted but limited amount of information from a relatively large sample of respondents. Although this approach is particularly revealing in presenting an overall picture of the structure and past growth patterns among micro- and small-scale enterprises, it can provide only limited insights into the central prospective questions: where is there a potential for growth in productive employment among MSEs? What needs to be done to facilitate such growth? Full answers to these questions require a different kind of analysis from that which is possible on the basis of baseline surveys. In particular, one needs to know more about income earned, about the efficiency of resource use in different activities, about linkages and competitive relationships between participants in particular subsectors, and about patterns of demand for products of different types and qualities. Baseline surveys tell us quite a lot about what is, and where the existing structure has evolved from; to move on to what can be in the future, and how to get there, one needs an analysis that goes more deeply into a more limited set of enterprises, products, and services. There is also a need for panel studies that monitor patterns of change among

MSE firms over time. Such studies can throw considerable light on the forces that have brought about change, as well as the constraints to further growth of productive employment. The authors hope that this review has provided a context for these more detailed examinations.

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# ANNEX A STATISTICAL ANNEX

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TABLE A-1

PERCEIVED PROBLEMS OF MICRO AND SMALL ENTREPRENEURS:

AT THE TIME THE ENTERPRISE WAS STARTED

(percentage of enterprises in supplementary questionnaire)

	Botswana	Lesotho	Malewi	South Africa	Swaziland	Zimbabwe	
Percent of enterprises reporting problems	58.6	64.0	60.9	60.5	57.0	75.1	
Percent of enterprises that listed two major problems	28.1	n.a.	32.4	37.9	23.1	50.1	
Of those that reported problems, what was most important one?							
Problems of markets and demand	16.7	37.9	23.5	28.1	21.6	23.3	
Problems of working capital	17.3	n.e.	21.3	23.1	44.7	21.5	
Problems of credit and finance	34.7	21.2	19.7	12.2	6.5	10.4	
Problems of tools and machinery	2.7	6.1	2.8	4.4	4.0	7.2	
Problems with space/location	1.3	7.6	2.6	5,1	2.0	2.5	
Problems with taxes, licenses and other government regulations	2.0	1.5	5.5	10.9	4.0	3.7	
Problems relating to inputs	3.3	6.1	10.7	2.5	5.0	18.4	
Problems relating to the transport system	6.0	6.1	4.6	6.4	4.5	1.2	
Labor problems	5.3	3.0	0.8	1.2	1.5	0.6	
Problems with utilities	2.0	1.5	0.1	0.6	0.5	0.9	
Problems relating to the entrepreneur, misc. problems	8.7	9.1	8.4	5.0	5.5	9.8	

Sources: see Table 12.

B

TABLE A-2

PERCEIVED PROBLEMS OF MICRO AND SMALL ENTREPRENEURS:
DURING PERIODS OF GROWTH

(percentage of enterprises in supplementary questionnaire)

	Botswene	Lesotho	Malawi	South Africa	Swezi- land	Zimbabwe		
What % of firms have experienced growth?	39.8	30.0	37.8	50.6	15.2	18.6		
Of those that experienced growth, what % reported problems?	76.5	15.0	51.0	79.1	37.0	62.7		
Of those that experienced growth, what % reported two major problems?	33.3	n.a.	23.2	55.0	22.2	29.3		
Of those that reported problems, what was most important one?								
Problems of markets and demand	21.8	21.4	14.3	23.4	4.5	24.0		
Problems of working capital	10.3	n.a.	14.0	18.5	36.3	16.0		
Other problems of credit and finance	15.4	14.3	8.8	9.7	9.0	4.0		
Problems of tools and machinery	3.8	0	3.9	5.9	0	16.0		
Problems with space/ location	2.6	7.1	2.9	9.7	18.1	10.0		
Problems with taxes, licenses and other government regulations	1.3	0	6.5	6.8	0	4.0		
Problems relating to inputs	19.2	14.3	24.4	1.9	9.1	8.0		
Problems relating to the transport system	7.7	14.3	5.8	9.7	4.5	4.0		
Labor problems	7.7	14.3	9.7	4.9	4.5	2.0		
Problems with utilities	0	0	0.6	1.0	0	0		
Problems relating to the entrepreneur, misc. problems	10.3	14.3	8.8	8.8	13.6	10.1		

Sources: see Table 12.

TABLE A-3

SECTORAL BREAKDOWN OF ENTERPRISES: ALL LOCATIONS COVERED BY SURVEY (percentage of all enterprises)

	Botswana	Kenya	Lesotho	Malawi	South Africa	Swaziland	Zimbabwe
Manufacturing	27.8	22.3	57.1	34.1	16.9	60.8	69.7
Construction	0.1	0.1	4.8	0.4	0.6	0.9	4.1
Trade	66.0	68.4	29.8	61.2	70.3	32.3	22.6
Transport	0.9	0.2	0.5	0.5	2.7	0.3	0.2
Real eএফোলে renting flats/rooms	2.5	4.0	5.1	1.1	2.3	0.6	0.0
Other services	2.7	5.0	2.8	2.8	7.1	<b>5</b> .2	3.4

Sources: see Table 12.



TABLE A-4

ANNUAL EMPLOYMENT GROWTH RATE OF EXISTING MICROENTERPRISES\*

COMPOUND GROWTH MEASURE

	Growth Rate (Percent)						
Country	Urban	Rural <sup>b</sup>	Entire Country				
KENYA	17.4%	-	•				
MALAWI	13.7%	8.5%	9.0%				
SOUTH AFRICA	18.9%	•	•				
SWAZILAND	8,2%	3.4%	4.1%				
BOTSWANA	12.7%	6.5%	8.5%				
ZIMBABWE	6.9%	5.0%	5.6%				
Southern/Eastern Africa -	13.0%	5.6%	6.8%				
Nigeria°	NA	-	-				
Ghana <sup>e</sup>	NA	•	•				
NIGER	NA	NA	NA				
Colombia <sup>d</sup>	NA _	-	•				
DOMINICAN REPUBLIC	13.8%	10.8%	12.6%				
India°	NA	•					
Worldwide	NA	NA	NA				

Sources: South Africa: Liedholm and McPherson, 1991; Swaziland: Fisseha and McPherson, 1991; Malawi: Daniels and Ngwira, 1992; Zimbabwe: McPherson, 1991; Kenya: Parker and Aleke Dondo, 1991; Nigeria: Chuta, 1990; Ghana: Steel and Webster, 1990; Colombia: Cortes, Berry, and Ishaq, 1987; Dominican Republic: Cabal, 1992; India: Little, Mazumdar, and Page, 1987; Botswana: calculated from data generated by Daniels and Fisseha, 1992; and Niger: Journard, Liedholm, and Mead, 1992.

Notes: \*

- \* Compound growth rate is calculated as:{( Final Employment/Initial Employment)(1-Firm Age) } -1.
- Rural includes rural areas (enumeration areas) plus secondary towns.
- Manufacturing enterprises only.
- d Metal firms only.

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- 55. "A Review of Donor-Funded Projects in Support of Micro- and Small-Scale Enterprises in West Africa: Case Studies." William Grant. GEMINI Technical Report No. 55. March 1993.

#### Technical Notes:

### Financial Assistance to Microenterprise Section:

\*1. Series Notebook: Tools for Microenterprise Programs (a three-ring binder, 1 1/2 inches in diameter, for organizing technical notes and training materials) and "Methods for Managing Delinquency" by Katherine Stearns. \$7.50. Also available in Spanish and in French.

- \*2. "Interest Rates and Self-Sufficiency." Katherine Stearns. \$6.50. Also available in Spanish and in French.
- \*3. "Financial Services for Women." C. Jean Weidemann. March 1992. \$5.00

### Nonfinancial Assistance to Microenterprise Section:

- \*1. "A Field Manual for Subsector Practitioners." Steven J. Haggblade and Matthew Gamser. \$4.65. Also available in Spanish and in French.
- \*2. "Facilitator's Guide for Training in Subsector Analysis." Marshall A. Bear, Cathy Gibbons, Steven J. Haggblade, and Nick Ritchie. December 1992. \$20.00

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\*1. "A Manual for Conducting Baseline Surveys of Micro- and Small-scale Enterprises." Michael A. McPherson and Joan C. Parker. February 1993. \$13.60.

### **Special Publications:**

- \*1. Training Resources for Small Enterprise Development. Small Enterprise Education and Promotion Network. Special Publication No. 1. 1992. \$11.00
- \*2. Financial Management of Micro-Credit Programs: A Guidebook for NGOs. Robert Peck Christen. ACCION International. Special Publication No. 2. 1990. \$19.00
- \*3. The ADEMI Approach to Microenterprise Credit. A. Christopher Lewin. Special Publication No. 3. 1991. \$15.00
- \*4. Microempresas y Pequeñas Empresas en la República Dominicana. Resultados de una Encuesta Nacional. Miguel Cabal. Michigan State University and FondoMicro. Special Publication No. 4. 1992. \$9.00

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