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An Assessment of Employment in Sri Lanka

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PREFACE

This assessment of employment Sri Lanka was performed in August 1989, during a period of civil unrest and disruption in Colombo. The immediate disruption to the economy of Sri Lanka is evident, whereas the long-term outcome is unclear. Although our policy recommendations are limited by these events and their underlying causes, our analysis is applicable whatever transpires within the country.

Disruption to the research upon which assessments such as ours must depend has resulted in many field researchers being unable to conduct data gathering for more than a year, particularly in rural areas. It is unclear when -- or if -- they will be able to resume interrupted work or update important time series. Questions posed in this report that require further research may not receive the desired attention during the USAID/Sri Lanka Country Development Strategy. Also, our recommendations may be superseded by accommodation by the government to political pressures or by policies of a different government with its own constituency.

Sri Lanka is not unique in this situation. Our assessment reflects the lessons we have learned from experience elsewhere. Donor policies or programs with policy implications cannot be conditioned by, or attempt to condition directly, the domestic political politics of a democratic state. Individual decision makers may resist reform, not only from individual or class interest but also from a genuine belief that the system that has served them well is open and (at least potentially) equitable. Many experts studying the experience of the United States and Southeast Asia, for example, favor market-oriented liberalization; those studying the experience of Northeast Asia favor government-favored, vertically integrated conglomerate capitalism; and those studying the experience of South- and Central Asia favor elimination of differences in class origins, nutrition, and education as well as other unequal access to resources. But all are committed to rapid, equitable growth.

We present strategic options that will, if implemented, increase both the quantity and the quality (as perceived by the job-seeker) of jobs through increases in both individual choice and productivity. Our recommendations are addressed to a government with an outward orientation because Sri Lankan experience has demonstrated that inward-looking and redistributive policies have already reached their limits of effectiveness. This is because of the small size of the domestic market and the need for additional resource generation if social welfare levels are to be maintained and a serious attempt made to reduce poverty. If a government with another orientation comes into power during the period of this Country Development Strategy, we believe that the rationale for these arguments is no less valid and should be taken into consideration in the design of other welfare programs.

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ACRONYMS AND ABBREVIATIONS

CCPI	Colombo Consumer Price Index. This index based on 1952 weights and administered rather than market prices (for example, housing frozen at 109.8 since the 1960s to reflect GSL rent freeze).
CFSES	Consumer Finances and Socio-Economic Survey. Sequel to Socio-economic survey 1969/70. Undertaken by Central Bank 1978/1979, 1981/1982.[1]
DCSI	Department of Census and Statistics Index. see UCPI. This term appears in several studies, such as, Fields 1986.
GSL	Government of Sri Lanka.
IPZ	Investment Promotion Zone. Essentially equivalent to a Free Trade Zone (FTZ). The Greater Colombo Economic Commission operates such a zone.
JVP	Janata Vinokti Peramuna (People's Liberation Army), a political group. Led an insurrection in 1971 and currently (1989) threatens the governing UNP through insurrection.
LFSES	Labour Force and Socio-Economic Survey. Sequel to Labor Force surveys (various names) of 1968, 1973, 1975. Undertaken by Department of Census and Statistics in 1980/1981 and 1985/1986 (only two of four rounds of latter available at this writing).
LTTE	Liberation Tigers of Tamil Eelam, a political group, 1976-date, favoring a separate Tamil country in the northern and eastern provinces.
MOPI	Ministry of Plan Implementation.
SSE	Small-Scale Enterprise (definitions differ and are explained in text).
SLFP	Sri Lanka Freedom Party. Governing party in Sri Lanka 1960-1965, 1970-1977; major opposition party when out of power.
UCPI	Urban Consumer Price Index: not an official index. Maintained for working purposes by the Department of Census and Statistics, considered by most researchers to reflect cost of living better than other indices, especially the official Colombo CPI (CCPI).
UNP	United National Party. Governing party in Sri Lanka 1948 (Independence)-1956, 1965-1970, 1977-1989, 1989-date; major opposition party when out of power.
USAID	United States Agency for International Development, Sri Lanka.

[1] Results of this used for re-weighting in National Accounts by Central Bank, and for derivation of the Urban Consumer Price Index (UCPI).

CHAPTER ONE

INTRODUCTION

Sri Lanka faces a grim situation today. It is confronted with political and economic crises of a magnitude without precedent since independence. Growth per capita in gross national product and income have halted and even declined in the past three years. Foreign reserves have sunk to seriously low levels, while exports of tea have fallen in absolute terms at a time of higher prices. Open unemployment is estimated to be 1.1 million, the highest since independence; this represents an increase of around 300,000 since 1985/1986. At a time when the ranks of the educated are increasing, the government has put a freeze on public service recruitment. At the same time, the security situation has added to the fiscal burden and government sector employment. And in pursuit of its social welfare program (Janasaviya), the government has announced ambitious new food and related subsidies.

Analysis must begin from fresh approaches. This requires a critical assessment of the nature of the economic malaise, including open unemployment. Any diagnosis must also focus on the comparative, and unfortunately not adequately exploited, strengths of the economy. A strategy for economic growth must also direct thinking towards the diverse patterns of economic activity and sources of household income which are emerging and need encouragement. The policy regime should contribute to this. A government pursuing economic policies of liberalization and continuing with the policies of the welfare state must also define its priorities and role in realistic terms, taking into account the demands on its strained resources and the compelling need to exploit potential for growth in the private economy. All economic and social objectives may fail unless a realistic strategy is developed for economic and employment growth. Such a strategy calls for new efforts in data collection, and even more in the areas of analysis of emerging patterns of employment, household choices in the Sri Lankan labor market, the complementary role of the infrastructure, the content of education, and patterns of adjustment in the labor market.

Sri Lanka must generate productive employment. It is not an overpopulated nation. It does not have a high rate of population growth. Malthusian pressures (shown in a high dependency rate and excessive rural-urban migration) are not evident. Unemployment is not open urban unemployment, fuelled by institutional forces which push up urban wages to invite an excessive inflow, but mainly a rural phenomenon. The classic dual economy of the Lewis-Ranis-Fei typology is also not the paramount feature. Even in the plantation-type tea estates, organized along the lines of a wage economy, labor surplus is no longer a key feature.

The country's comparative advantage, which provides a strong basis for a forward-looking strategy, lies in its talented labor force, characterized by high levels of literacy and formal education, a supportive family and social framework, and a well-organized framework of social services. Nutritional standards, health services, water supply, and other basic services meet a standard uncommon in developing nations. The problem lies not in lack of human capital investment, but in establishing priorities so that such investment does not regress, and is targeted effectively.

Sri Lanka's small size in relation to the world economy also has certain advantages. Labor emigration abroad has provided a significant but temporary outlet for diverse components of the labor force, including skilled craftspeople, educated women, and professionals, and provided some of them with organizational skills, marketing

contacts and other useful training for their return. The majority of emigrants, however, are unskilled women seeking an improved standard of living for their families which they cannot obtain at home. The response to economic liberalization after 1977 also indicates that segments of the domestic economy are receptive to new opportunities and could be assisted further.

In developing an employment strategy, the U.S. Agency for International Development must consider those segments of the economy which are capable of generating (rather than depending upon) growth. Two important economic groups are worthy of special analytic treatment: the Dhanopayana and women's enterprises.[1]

Women's enterprises must be viewed in the broadest sense of the word, since the behavioral and motivational phenomenon which drives this set of local activities, ranging from what is defined as household economic activity to small business, is the same phenomenon which drives the more than half of overseas migrants who migrate as housemaids. Despite the overwhelming evidence from survey information of the importance of this sector, lack of specific information on use of capital, on finance, and on the dynamics of these enterprises prohibits us from anything more than speculating on its characteristics.

The Dhanopayana sector also transcends the dichotomies frequently used to describe labor markets. It is neither specifically urban nor specifically rural; nor are its firms characteristically informal (unregistered) or formal. Both (labor and capital) flow freely across such boundaries. This section is characterized by a market orientation and non-separation of management and ownership; firms in this sector tend to be family based (95 percent of all firms in the Mahaweli area -- and enterprises providing more than a fifth of all employment in Colombo City -- employ fewer than five persons), but the sector is not defined by smallness. Larger entrepreneurial activities may not have the formal organization of the corporate sector or the limited potential of microenterprises. A firm's characteristics -- urban/rural, formal/informal, and medium/-small/micro -- appear to be determined by the competitive characteristics of the market for the good or service produced, rather than by the market for labor or other factors of production.

This study attempts to establish a basis for appraising the potential effectiveness of alternative strategies in expanding employment and income opportunities for Sri Lanka's population. We accompany this assessment with specific findings and recommendations to develop an umbrella strategy for the growth of productive employment.

HISTORY

Sri Lanka emerged as an independent country in 1948 and practices a competitive parliamentary democracy. The two parties which came to power in a see-saw fashion since then have both sought socioeconomic development although with different emphases -- one relying on economic growth in a market-oriented economy, while the other on direct redistributional, more socialistic policies. The role of the private sector in economic development was suppressed through some policies adopted by the latter party,

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[1] In our analysis we introduce two economic groupings in the Sri Lankan economy which cannot be categorized by such traditional dichotomies as formal/informal, medium/small, or urban/rural. Both women's enterprises and the Dhanopayana (sinhala for wealth-creating) are likely to grow in importance as the economy grows and must be considered in any strategy for employment generation.

as was the role of the public sector by the former. They have both worked towards the satisfaction of basic human needs and improving living standards within a framework of a mixed-capitalistic economy.

This see-saw governance for a long period covered up problems of patronage allocation of public service jobs. As long as qualified job seekers had to wait only until the next change in government to enter public service, a rough meritocracy was maintained and dissatisfaction muted. The current government has broken records by being returned twice to power, breaking this cycle. A further barrier to quality of personnel in government has been wage compression due to the indexation of non-wage benefits while wages have failed to keep up with the general wage level. As Korale (1987, p. 56) demonstrates, real wages have fallen for skilled government employees, while they have risen more rapidly than in the private sector for unskilled government workers. This has led the best potential candidates for government service to seek employment in the private sector while the least qualified queue for government positions.

The year 1977 provides a dividing line in analyzing the performance of different policy regimes. Although there were some differences in emphasis between governments in respect to certain policy issues, the pre-1977 period is recognized as one of import substitution (an inward-looking strategy/ISS) and the post-1977 period as one of import liberalization, or an outward-looking/export orientation strategy.

The ISS policies at their peak included a dual exchange rate system, quantitative import restrictions, a high and cascading tariff structure, price and interest rate controls, heavy taxation of economic rents in traditional resource-based exports, and public sector involvement in a number of sectors (including monopolies in activities such as public transportation and cereals trade). The Government of Sri Lanka (GSL) maintained an overvalued exchange rate and implemented a major land reform program. Economic growth slowed during this period. However, some writers argue that the agricultural sector, particularly the food subsector, and the manufacturing sector responded well to the ISS strategies. Income inequality declined during this period, partly due to a system of progressive taxes and subsidies on basic consumption items. It is also argued that the slow rate of growth of inter-sectoral linkages in the economy hampered the faster growth of the industrial sector. The pressures in the world market -- continued deterioration of the terms of trade, the oil crisis, the world food shortage, and low volume of foreign aid -- and internal problems, such as 1971 insurrection and a period of drought from 1973-1975, also affected the growth performance before 1977.

The employment situation deteriorated during this period. Open unemployment rose to 25 percent by 1977 and underemployment remained high, at above 20 percent of the employed work force.

The liberal economic strategy begun in 1977 included, among other things, a unified and devalued exchange rate, removal of price controls and other restrictions on domestic trade, lowering of import duties, and encouragement of direct foreign investment. The government also raised interest rates to positive real levels, provided better opportunities for private sector participation in economic activities, reduced the level of government social expenditure, and targeted benefits towards low-income households.

Different views are expressed on the economic responses to these liberalization policies. Some argue that these policies, particularly in the early phase 1977-1982, led to an impressive growth rate of the economy, reduction of the unemployment rate, diversification of exports, greater choice and availability of imports, and near self-sufficiency of rice production (Pyatt 1977, Isenman 1987). Others argue that growth was

not remarkable, or was negligible (Glewwe and Bhalla, 1986, 1987). The impact of the two policy regimes, and the performance of the export and import sectors are discussed in Chapter Two.

PHYSICAL AND SOCIAL INFRASTRUCTURE

The island of Sri Lanka is a small country of 66,000 square kilometers; its greatest length is 435 km and width, 225 km. Although it has several urban areas, the capital, Colombo, is the only city with a population exceeding 500,000, which represents 16 percent of the urban population in the country. This represents a 12 percent decrease of its share in urban population. Urban growth was greater in the provincial and district capitals between 1965 and 1984 (World Bank 1986).

Sri Lanka has an extensive network of motorable roads, connecting district capitals with Colombo and with each other. The road network connects even remote villages with local town centers. Low passenger fares, some subsidized, facilitate trade and worker mobility over relatively large distances. The transport services combined link villages with each other and with towns and cities quite effectively. A network of railroads also facilitate mobility and lowers the cost of transportation.

Physical infrastructure is quite developed, and supports urban industrial growth and international trade. Besides a modern telephone system in urban areas, this includes an international airport, four ports, and international telephone services. Education is free and of quite high quality (the student-teacher ratio system-wide is 27). Health care is also free, though budget cutbacks in the recent past have reduced availability of care in rural areas.

A NOTE ON DATA QUALITY

Sri Lankan economic literature is advanced and its volume is impressive, yet the ground is unevenly plowed. There are also many complexities and puzzles as regards available data and labor market behavior, suggesting a need for continuing inquiries on many key aspects of how the employment market functions.

There are severe problems of underenumeration with the 1981 census, which we must use. We prefer the 1985/1986 Consumer Finance and Socio-Economic Surveys (CFSES), of which only two of four rounds have been published and which itself severely underrepresents the troubled Tamil regions of the north and east where surveying had to be curtailed. Chapter Three mentions only in passing the numerous measurement or survey problems, noting possible gaps and biases in available information, both quantitative and qualitative, and the need to remedy them. Our main concern in this chapter is with establishing the principal orders of magnitude which are relevant for an understanding of how the Sri Lankan labor market functions.

Historically, the most reliable data on wages or salaries have come from the government and plantations sector. Wage data also exist for 37 trades covered by minimum wage boards (there is some overlap with the estate sector). These go back to 1949 and have been compiled by Korale (1987) and Rodrigo (1986, 1988). The Department of Labor also collects data on a biannual basis from voluntary returns. The CFSES provide information on earnings, but have not established a regular basis to permit comparison over time. Finally, the Central Bank has issued private sector wage statistics since 1979 that cover only select agricultural and construction workers.

These existing data sources are on the whole inadequate. Korale provides a good discussion of these sources (1987, Ch. 4); Glewwe (1985, 1988) provides a more critical evaluation. He provides strong independent support for the unreliability of published wage figures. In addition to the arguments (noted in Chapter 4) concerning the limitations of minimum wage data, he notes the problem of considerable under-reporting of earned incomes, especially and increasingly as benefits such as food stamps or participation in the proposed Janasaviya poverty grant program became linked to *recorded* income. The share of wage incomes in national income (NI) accounts has been compared to the same share as calculated from responses to household surveys. In 1969/1970, income reported in surveys could account for 74.5 percent of the NI wage share due to underreporting; by 1980/1981 it accounted for only 44.3 percent.[2]

Glewwe's analysis of self-employment incomes and expenditures reinforces the points made above as to the usefulness of the wage/earnings series. Apart from extensive under-reporting of income in five surveys, there is also the problem, in self-employment particularly, of the omission of nonmonetary incomes. There is also the problem of possible exclusion of incomes from subsidiary occupations, as the data collected focus on incomes from the main occupations.

Price indices are particularly poor. The official price index is the Colombo consumer price index (CCPI), which (1) is weighted with 1952 consumption shares which are far out of date; (2) uses administered rather than market prices for several important items, particularly rent which has been frozen in theory since the 1950s[3] and some food items; and (3) represents prices in a particular urban area which has been stable as a share of the population while other urban areas have grown. Most researchers prefer the unofficial Urban Consumer Price Index (UCPI) developed by the Department of Census and Statistics, with weights based on the 1981/1982 CFSES. This is used where possible in this survey. The problem with this, as with any index used to deflate well-being, is that some groups may have been better protected against rising prices than others because of fringe benefits, supplements or payments in kind, and the wage drift.

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[2] The reader should note the magnitude of the change, not the precise values. National income accounting was based on 1952 weights until the results of the 1981/1982 CFSES were used to reweight them, and thus may have overestimated the wage share of National Income for a period as late as the 1980/1981 Labour Force and Socio-Economic Survey (LFSES).

[3] This may make it a reasonable proxy for an index of cost of living for homeowners and squatters who do not pay rents.

CHAPTER TWO

MACROECONOMIC CONTEXT

GROWTH IN GROSS NATIONAL PRODUCT

Income growth has ceased in the last two years, and one cannot count on generating new employment without such growth. The other restrictions to employment growth are relatively unimportant. Employment generation is closely linked to growth in national product: rapid growth in GNP will create new jobs, while slow or no growth does not provide incentives to invest and create jobs in leading sectors or demand for the products of labor in all sectors. If growth is slow, any changes in employment must be explained by local or other factors. Fields (1986) demonstrated that most measures which indicate rising real GNP per capita during the period 1970-1982 are based on outdated or unrepresentatively weighted price indices; according to one based on the most current consumption bundle in the urban areas (the UCPI), real per capital GNP rose negligibly during that period.[4] As a result, net employment growth could occur only at lower levels of labor productivity, including work-sharing. Since Fields' study was completed, real per capita GNP grew strongly (almost 4 percent annually) from 1980 to 1986, but has fallen by one percent annually since then, as shown in Appendix Table 1.3. Real GNP per capita at the end of 1988 was 18 percent above its level of 1970 and 14 percent above that of 1982. Nonscientific observation suggests that due to strikes, curfews, and supply interruptions the per capita GNP will fall again in 1989, with the negative implications this carries for employment creation.

Unemployment statistics generally support this assessment of growth. The open unemployment rate remained stable (15.3 percent in 1980/1981 and 14.1 percent in 1985/1986 (Korale 1987c, MOPI 1987), while the labor force has been growing at 2.1-2.9 percent annually (according to different estimates), exceeding employment growth of 1.1 percent per year, from 4.85 million to 5.13 million persons employed. Comparison of real GNP (which grew at 5.5 percent per year in 1980-1986) with the 6 percent increase in employment 1980-1985[5] suggests very high incremental value added per additional worker. While this may be due to recovery from a period of low capital utilization, it is more likely due to increased use of capital-intensive technology absorbing little labor per incremental unit of output. A similar conclusion is reached by Kelegama and Wignaraja (1988).

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[4] Fields argued that real GNP per capita declined strongly during the 1970s and recovered only after 1980. This conclusion was based on significantly lower values for GNP per capita in 1975 and 1978. Unfortunately, the 1975 figure is suspect (as acknowledged by the Department of Census and Statistics and by Fields), while his calculation for 1978 contains an arithmetic error which when corrected in our Appendix Table 1.3 eliminates the drop. Fields' more important conclusion, that employment-generating growth did not occur during the period he studied, is unaffected by this correction to his analysis.

[5] The two Labour Force and Socio-Economic Surveys (LFSES) were chosen for comparability of definition of labor force participation; the 1985/1986 survey is only published at this time for two of its four rounds, and severely under-samples areas in the north and east where the fieldwork could not be carried out due to violence.

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Economic growth may change the composition of labor demand and induce shortages as well as surpluses. Growth may also fail to use effectively the abundant resources of a nation, in particular labor. There is thus no one-to-one correspondence between growth and employment. This was the lesson of the 1960s and early 1970s, which led to the emphasis on employment-oriented strategies for development. The International Labor Organization (ILO) Employment Strategy Mission to Sri Lanka in 1971 was part of this pioneering effort.

Migration data are not of sufficient quality to judge the macroeconomic impact of foreign employment. Nevertheless, by 1989, migrant remittances were the largest single source of foreign exchange, with remittances per migrant fairly stable at Rs. 8,800 per person-month worked overseas.[6] Despite the smaller number of departures, Korale (1989, p. 55) finds that average length of stay abroad of returned migrants has lengthened from 23.5 months in 1984 to 42.3 months in 1988,[7] suggesting that those who vote with their feet do not now see attractive job possibilities in Sri Lanka. Migrants are important not only for their contribution to the labor force size (directly and through the quantitative and age-specific effects of migration on fertility) and to national accounts, but for their distinctive attributes. They are of working age, and their remittances affect both the balance of payments and gross investment levels as a share of GNP. Their departures are of sufficient volume to impart a statistical bias to measured dependency ratios. Their return represents an addition to the human and non-human endowments of the economy.

The extent of new employment growth since 1986 must be considered negligible because of overall poor economic growth or even decline. On a priori terms, one would presume that net additions to the labor force are absorbed in low-productivity activities, as replacements of labor force withdrawals (such as migration), or in increased unemployment.

INVESTMENT

The decline in investment, including capital flight, lower foreign private investment, and inadequate financial intermediation between savings and investment are impediments to employment growth. The marginal efficiency of investment has declined due to a larger share being accounted for by inefficient state-owned enterprises, low-productivity investments undertaken by both the public and private sectors, and excess capacity due to work stoppages.

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[6] Korale (1989) concludes from a sample survey that this amount has increased since 1984, but even when disaggregated by skill level the sample variance in his small sample does not permit confirmation of that hypothesis. The means and sample standard deviations used for the test are given in Appendix Table 4.5.

[7] There are clear differences in the two samples compared, and proper standardization for early returners who appear to be under-represented in the 1988 sample would reduce this extraordinary apparent two-year increase in duration over a period of only four years. However, certain homogeneous classes of workers demonstrate such an increase, such as housemaids extending a two-year tour on average to a four-year (41.3 person-months) tour.

Investment is important for employment and earnings in two ways. First, it provides the future capital stock or replaces the deteriorating existing stock which complement labor and provide jobs. Second, it is the vehicle by which many technologies are introduced into the productive process -- either as capital goods or through the organizational changes accompanying their adoption -- permitting lower cost or higher output per worker. Third, capital goods and construction are both important sectors of the economy in themselves, providing employment and profits to individuals and firms. This last is the most immediate and measurable effect, but also the most volatile both on demand (which is determined by the expectations of potential investors), and on supply (which is heavily policy-determined according to the monetary policies of the central bank). Both demand and supply are affected by macroeconomic performance of the economy, and -- in different fashions -- by sectoral performance.

The share of investment in GDP, which was 13 percent in the mid 1970s, more than doubled between 1977 and 1979 to become nearly 29 percent of GDP in 1982 (Appendix Table 1.1). Since then its share has been declining, to 22 percent in 1986 and 1987, and the Central Bank reports it declined further in 1988 (CBC 1989). It remains substantially above the 1975 level, however. The jump -- and subsequent decline --have been due to a variety of factors: public investment in the irrigation headworks of the Accelerated Mahaweli Programme; public sector investments in housing and in manufacture of fertilizer and other goods; large private investment in hotels and tourism facilities; and investment in export industries in a strong supply response to the economic liberalization program. If this is productive, it will have a positive employment impact.

Many of these investments, particularly the government infrastructure and parastatal ones, have had low or zero productivity (IBRD, 20), and have not contributed to growth and employment, or have done so only at the cost of a large subsidy which precludes productive investment of these resources elsewhere. Others have been unable to operate at capacity due to work stoppages or to a drop in demand in tourism, for example. Still other investments have gone into improving security of enterprises -- walls, fences, and checkpoints -- and are not directly productive either. Finally, although it is impossible for us to measure this, the violence (against property), strikes, and curfews of the recent past have almost certainly depreciated the capital stock at a faster rate than previously, so that *incremental* investment -- the source of new jobs -- will be considerably less than that indicated by gross investment. The decline in gross investment as a share of GDP since 1982, itself partially due to the poor investment climate, masks a still larger decline in net investment.

While without investment there cannot be job creation, particularly in the export sector, the marginal efficiency of proposed investments is important for job creation. As the above argument makes clear, income growth from investment is not automatic. Indeed, comparing investment and GDP growth (Appendix Table 1.1), the macroeconomic marginal efficiency of gross investment appears to vary strongly from year to year, and no particular confidence can be given to these data. However, the marginal efficiency has appeared to fall from around 0.4 in the early 1980s to 0.3 later in the decade.

GOVERNMENT EXPENDITURE

Government consumption expenditure remained at a fairly constant 10 percent share of GDP after the reforms of 1977. Since 1985 it has risen rapidly, to 13-14 percent of GDP in 1985-1987 (Appendix Table 1.1). This large increase is due almost entirely to defense outlays, which rose from Rs 193 million or 9 percent of total government

expenditure in 1975 to Rs 8.4 *billion* -- a 33 percent share -- for 1987, more than a ten-fold increase in real terms. The burden of defense has derailed the liberalization effort by posing a heavy fiscal burden on the government. At the same time the GSL has gotten out of many direct economic services, which accounted for a fifth of government expenditure in 1980 but declined to 6 percent by 1987. Education and health expenditures have each increased by 2 percent per year in real terms over the past decade, although their share of expenditure has declined (to 15.0 and 7.5 percent, respectively) as a result of the increase in defense expenditure.

AGRICULTURE

While agriculture accounts for nearly half of all employment it contributes less than a quarter of GDP, less than trade and tourism (Appendix Table 1.2), and an eighth of the wage bill. Still, due to its size and its links (particularly to industry and export), it has an impact on the overall economy. Heavy taxation of the plantation export sector has adversely affected reinvestment in this sector, resulting in lower yields. In the mid-1980s, tree crops production (tea, coconut, and rubber, in particular) was adversely affected by drought. Currently the civil strife is affecting production and marketing. Although tea prices have been high in recent years, Sri Lanka's production declined over the past decade and only in 1986 recovered its 1975 level. Heavy investment in irrigation in the Mahaweli region is beginning to lead to increases in area cultivated, and USAID and other donors are attempting to introduce high-value crops to raise the return on this investment. Slow growth in the agricultural sector has been the greatest determinant of the slow growth in GDP.

Fisheries, both deep sea and coastal, are largely concentrated (around 80 percent) in the north and east of the country and have been adversely affected by the ethnic disturbances. This has had negative repercussions on incomes and on related industry, such as canneries.

EXPORTS

While it is a matter of conjecture what the employment situation would look like today if the previous import-substitution policy had continued in effect, most evidence supports arguments that it had reached or passed its limits of easy gain, and that continued growth would have to rely on demand from external markets. Immediately following liberalization in 1977 there was a boom, particularly in construction associated with the Investment Promotion Zone (IPZ) and in tourism. The construction boom has faded, due partly to lack of further response from potential foreign investors to opportunities offered. Both foreign investment and tourism are adversely affected by the current domestic strife. Textiles and especially garment production has led growth in nontraditional exports, despite the low labor intensity and high import content[8] of this subsector. Increased textile exports are associated with a significant loss of jobs in traditional hand looms (Athukorala, 1988; ARTEP, 1988; Kelegama and Wignaraja 1988), which may have offset most or all of the gross employment generation in the industry. Fabricated metal products have also responded strongly to liberalization. However, policy

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[8] This is due both to the poor domestic interindustry links remaining from the previous policy regime (thread and most materials for the industry have been imported) and to a conscious GSL decision to develop a free trade zone enclave in an otherwise protected economy which cannot export even to its own IPZ.

vestiges from the previous import substitution framework impede the formation of inter-industry links with domestic subsectors and have had a negative effect on domestic value added: commodities which could be produced competitively locally are simpler and less expensive in the short term to import.

The liberalization of imports has not damaged the small-industry sector as anticipated by some writers, with the exception of hand looms. While handicrafts have been struggling during the 1980s, it is largely because of the stagnation of the tourism industry. The Central Bank (1989, p. 42) estimates that 1.4 jobs -- most of them in handicrafts -- are created indirectly for every job created directly in the tourism sector. So the stagnation of this sector, which includes hotels, restaurants, travel, transportation, and related services, has affected handicrafts heavily.[9] ARTEP (1988) found that initial impressions of rural and semi-urban, small-scale industries (SSIs) suffering discrimination in access to incentives offered exporters were not borne out in field investigation (in part because the export incentives have not been pursued by those capable or responding to them). The overall shift in export orientation of domestic industry, which would provide subcontracts for domestic SSIs, did not occur to a significant degree or did not affect them. Financial sector reforms increased costs of funds without improving banking procedures to assist productive small enterprises. On the positive side, though, small size was not found to be a disadvantage for sales, and only 4 percent (of survivors) reported increased competition from imports. Many SSIs were established after 1977, in the new policy environment, and some benefited from the liberalization of imports. Three-fourths of SSIs using imported raw materials report a significant improvement in their supply. Difficulties included the inability of exporters to expand into other product lines, and poor linkages between exporters and the more labor-intensive domestic sector.

MACROECONOMIC IMPACT OF POLICY

From the macroeconomic viewpoint, certain inherited policies affect GNP growth and associated employment. Liberalization has encouraged increased efficiency within individual sectors, but has not led to modification of the economic structure itself, particularly the links with labor-intensive domestic sectors. Certain macroeconomic aspects of this are treated here.

First, remnants of import-substitution policies continue to induce firms to import capital rather than use local labor-intensive products which are encumbered by a moderately high effective rate of protection. Large firms can negotiate duty-free imports of capital goods and raw materials better than small ones that buy from local distributors, and may prefer imported materials to domestic products (if they even exist, due to the previous import-substitution regime).

Second, while tariffs replaced quotas under the 1977 reforms (making the system of protection more transparent and predictable or less discretionary), the effective rate of protection (ERP) remains high, near 100 percent. This favors imported inputs over domestic substitutes, actual or potential. Domestic value added now accounts for less than 30 percent of the value of exports, the rest being import content. It is difficult for local firms even to maintain that share, and still more difficult to expand it, when the ERP remains so high for production for the domestic market. While the domestic

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[9] This is **not** to suggest that handicraft items are inferior goods (though some may be) or confined to a tourist niche market. Rather, the income elasticity of demand for such goods is low so incremental demand is from tourism.

market will forgive high cost of intermediate inputs, certain inefficiencies in production, and high per-unit profit on low volume because competing goods are equally costly, the export market is unprotected and thus unforgiving. The formation of linkages and externalities which are the desired outcome of export orientation is impeded, and so the employment impact is reduced. Additionally, reliance on imported inputs places a competitive disadvantage on those exporters who need a fast response time to compete in international markets. These are results of the choice of a FTZ enclave rather than general economic liberalization. Finally, this policy favors profits over wage income, worsening the distribution of income and creating legitimate political resistance to the export orientation policy framework.

Third, the GSL may have chosen to retain quota allocation in garments and perhaps elsewhere in the domain of government patronage rather than introduce market allocation as under an auction system (*People's Bank Economic Review*, quoted in the *Sun*, 22 August 1989, though the reporter does not make the specifics of the rejected auction proposal clear). If the GSL chooses to maintain this as a patronage resource, we expect that Sri Lanka will continue to be unable to meet certain quotas, and will be passing up employment expansion through subcontracting and the use of jobbers outside the IPZ.

Fourth, the existing tax system has evolved piecemeal across several governments with different economic philosophies. The resulting structure interferes with the production and consumption decisions of economic agents (IBRD, p. 86). The effective tax rate on value added varies in an unintended but distorting fashion, from 0.2 percent on smallholder agriculture, to 53 percent on paper manufacturing. An anticolonial philosophy of appropriating the monopsony rent of the foreign-owned plantation sector through heavy export taxes on their product has carried over to today when these products must be competitive on the international market. Most private monopolies have been taken over by the government, so this policy taxes domestic factors of production heavily if they are used in these sectors. Since a government commission has been appointed to attempt to rationalize the tax system, this important topic is not pursued here. The results of this rationalization should be monitored in any donor strategy.

Fifth, financial liberalization consisted chiefly of interest rate reforms which have increased savings mobilization. This in turn has eased the macroeconomic credit constraint for the domestic economy. At the micro level, own-savings (of the entrepreneur, friends, and relatives) are the most important source of fixed capital for small enterprises, so these reforms should improve the equity financing of small enterprises. That is, increases in savings represented in Appendix Table 5.3 are *net* of withdrawals to provide equity or working capital. However, government absorbs nearly a quarter of savings through the combined effects of its borrowing, the investment policies of the National Savings Bank and the Employer Provident Fund (IBRD, 8), and the tax which inflation inflicts on the economy. An increasing share of this has been diverted to military expenditure. Without further liberalization, the financial sector continues to be biased in favor of government deficit financing, existing large enterprises, and foreign investors.

Sixth, and related to this, a satisfactory policy toward returned migrants has yet to be developed. Migrants (Korale, 1989, p. 55) are increasingly using the nonresident foreign currency account (NRFC), and so providing foreign exchange loans to the economy. However, despite their substantial potential equity contribution, return migrants report difficulty in borrowing from domestic financial institutions for working capital or further investment, for lack of an ongoing banking relationship.

Various public and volunteer groups propose microenterprise programs to alleviate poverty. Any program which attempts to improve the standard of living of the rural

poor through consumption subsidies and accumulation of investible earnings, will run out its course after its one-time impact on demand for local products. A policy attempting to improve employment must target those likely to become self-sufficient, rather than the larger group of poor people with community development needs. Investment components of such strategies risk further politicizing the Cooperative Rural Bank savings program and the less politicized Thrift and Credit Cooperative Societies, which are among the successes worldwide in mobilizing potential equity capital for microenterprises.

The FTZ/IPZ policy of the government may have been intended to take advantage of Sri Lanka's low-cost, highly skilled labor to promote exports. The evidence suggests that, since protection of the non-IPZ economy remains high, linkages with the domestic economy are weak, and that industries attracted to the IPZ seek the ephemeral low cost in preference to the core high skills which appear to provide the dynamic comparative advantage of the country's economy. Evaluations by the ILO which agree with this approach (ARTEP 1986, 1987) suggest that programs to build the necessary bridges within a hostile policy environment have failed. While ARTEP recommends redoubling the effort, we believe that strategies to improve links may succeed only partially and at a high cost unless these policies are reformed to reduce the level of protection of the domestic economy.

CHAPTER THREE

LONG-TERM DETERMINANTS OF THE SUPPLY OF LABOR

The quality, adaptability and low growth rate of Sri Lanka's labor force define its advantage in the international economy, and provide a source for the generation of employment based on an educated, healthy labor force. Government investment to maintain this quality appears to be well placed: despite dissatisfaction of the currently educated unemployed, the evidence is that the labor force does adjust. Other findings of this assessment are that job search mechanisms are efficient and that labor mobility is high, preventing marginalization of the rural population and structural disequilibrium. Further, to a much larger extent than other developing economies, the Sri Lankan malaise is an employment rather than an unemployment problem -- one of generating productive employment rather than liquidating an unemployment deriving from aberrations of government and institutional interventions in the wage structure. This permits strategies seeking first-best employment generation without being distracted by the need for geographical or sectoral adjustment.

LABOR FORCE SIZE

Demographic pressures are often associated with excessive rural-urban migration or high levels of unemployment. In fact, however, many populous countries have low rates of urbanization, and population growth may result in an increase in the ranks of the poor rather than those of the unemployed. A decline in the rate of population growth may be accompanied by increases in per capita incomes as well as in labor supply as an earlier generation comes of age, particularly if participation rates go up at the same time.

Sri Lanka's rate of population growth fell from about 3.0 percent in the early 1950s to 1.4 percent in 1988. Table 1 gives absolute population figures for selected years. This decrease in rate of population growth is due mainly to the effect of social welfare policies adopted by successive governments, particularly in health and education. A family planning program has helped to bring down the birth rate. However, in the recent past the health services have begun to deteriorate. The number of physicians and nursing staff per thousand population is declining and Sri Lanka is witnessing the reemergence of malaria and other diseases (World Development Report 1986).

Table 1
Population, Sri Lanka (selected years)

Year	Population
1953	8,098,000
1963	10,582,000
1971	12,690,000
1981	14,847,000
1988 (est)	16,300,000

Source: Various censuses. 1988 estimate by Department of Census and Statistics.

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The labor force at present is estimated to be growing at about 2-3 percent per year. The estimates also indicate that the total labor force in 1986 was 6.4-6.8 million, and the annual addition to the work force 132,000-167,000. The projections made of the total labor force lie between 6.3-7.6 million for 1991.

Table 2
Population, Labor Force, and Unemployment: 1940-1987

	Growth rate per annum				Share of Agriculture in Employed Labor Force
	Population	GDP Per capita	Labor Force	Unemployment rate	
1940-1959	2.4	1.2	2.2	11.6	53.0
1960-1969	2.6	2.4	2.1	14.0	55.0
1970-1979	1.6	2.4	2.2	17.5-23.8	54.0
1980-1987	1.8	3.1	2.1	12.0-17.0	53.0

Source: Excerpted from World Bank (1988, II, Table 1.1).

It should be noted that although agriculture employs half the labor force, it contributes only a quarter to a third of the GDP. It includes the organized commercial plantations (tea, rubber, and coconut), which provide an estimated 13.6 percent of rural employment (Fields, p. 158), emphasizing further the low productivity of the rural agricultural labor force.[10]

The Sri Lankan population is predominantly rural, which is reflected in the labor force statistics. The 1981 Census gives a population total of 14.85 million, the rural and urban proportions being respectively 78.5 and 21.5 per cent (Korale, 1987, Table 2). The labor force was estimated to be 5.01 million, giving a participation rate of 33.7 percent. Total employment and open unemployment were 4.12 million and 895,000 (17.8 percent). Open unemployment is also overwhelmingly rural (70 percent).[11] A more recent estimate for 1985-1986 gives the following total and breakdown of unemployment:

Total:	840,252	
Rural:	567,064	(67.5 percent)
Urban:	236,350	(27.8 percent)
Estates:	36,843	(4.4 percent)

Source: LFSES 1985/1986, Table 10.

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[10] Fields notes that 53 percent of rural workers which comprises 80 percent of the labor force are engaged in agriculture, yielding an agricultural share of 42 percent of national employment and, an estate share of only 5.7 percent; this contrasts with an alternate estimate from the 1981 Census of agriculture which gives the shares of national employment at 45.5 and 16.2 percent, respectively. The two figures are difficult to attempt to reconcile, except that the Census is known to undercount in some areas.

[11] It is not clear whether the urban proportion of unemployment is 30 percent or, as one account puts it, urban 21.5 percent and estates 6.5 percent (CFS 1978/1979 and Census, 1981 as reproduced in ARTEP, 1985). The latter distribution is exactly equal to the population distribution and, therefore, suspect. Assuming a higher incidence of urban unemployment at 30 percent yields an urban total of 268,000 compared to an urban population of 3.23 million.

The unemployment rate was highest in urban areas (19.5 percent) and lowest in the estate areas (7.8 percent). Within rural areas, females comprised almost 51 percent of the total unemployed and had more than twice the unemployment rate of males (21.3 percent compared to 9.5 percent).

Dual labor markets amenable to models of the Todaro type, that is, with an institutionally maintained urban disequilibrium wage which leads to an urban overflow of workers awaiting entry into the high-wage formal sector and high open unemployment, are notably absent. Absent also is the easy-entry, low-productivity informal sector which is a corollary of this model.[12]

The paid labor force is relatively young (60 percent are between 20-39 years old), male (73 percent), and educated (only 13 percent report no schooling, and 60 percent have gone beyond Grade 6). Professional, clerical, and sales workers constitute about 30 percent of the total. The service sector dominates (about a third of the total), followed (if one excludes the estate sector) by manufacturing and construction in the secondary sector.

High participation rates (shown in Table 3) and low levels of urbanization distinguish Sri Lanka from other developing economies. Malthusian pressures and excessive migration to urban areas are notably absent. The Sri Lankan case is not the urban nightmare one might associate with developing economies. Also, the sizeable numbers of Indian Tamils repatriated to India from the tea estates, and the grant of citizenship to others, have reduced and perhaps even wiped out the plantation labor surplus. Further, the annual outflow of workers going abroad has been significant in relation to the additions to the labor force. The opportunities provided by the global labor market for the literate and small Sri Lankan labor force have been important in reducing pressures in the domestic labor market.

Table 3
Labor Force and Employment

	Labor Force	Participation Rate	Employment	Unemployment	
	Millions	Percent	Millions	Millions	Percent
1980/1	5.71		4.86	0.863	15.0
1981	5.01	31.9	4.12	0.895	17.9
1981/2	5.81	34.3	5.21	0.609	11.7
1985/6	5.97	32.8	5.13	0.840	14.0

Source: Appendix Table 2.1 and Korale, 1987, Table 5.

[12] Williamson (1989) emphasizes the model's theoretical weakness, Harris (Speare & Harris 1986) rejects the corollary wage hierarchy (urban formal sector wages exceed urban informal sector income which in turn may exceed rural earnings), Berry and Sabot (1984) acknowledge a tendency to overemphasize open unemployment and Banerjee (1986) brings out forcefully how prevailing anxieties biassed methods of investigation as in the Indian Planning Commission City Socio-Economic Surveys. A detailed, relatively nontechnical discussion is found in Kannappan (1988).

Recent estimates of the labor force, employment, and unemployment are given in Table 3. The 1985-1986 figure includes the age group 10-14 in the economically active population. This group adds only 100,000 to the overall total, but its inclusion reflects economic reality. The economically active population also includes a substantial number (slightly over 2 million or almost 40 percent) of own-account and unpaid family workers. This total is important because of the growth of the Sri Lankan economy outside of institutional or regular paid employment.

It should be noted that these estimates have been the focus of supplemental work and even controversy involving the foremost experts in Sri Lanka and we have little to add on this score. The 1980-1981 census is generally believed to understate the labor force, so the more reliable figures indicate unemployment of 609,000-863,000 over six years, a large variation. It is generally assumed that employment conditions have worsened since the last survey; we give the figure of 1.1 million currently unemployed.

Undoubtedly, changes in definitions, enumeration procedures, and methods of estimating unemployment have varied considerably and limit the value of exercises aimed at establishing trends or even consistent prevailing levels in the labor force or its components. This is a point which has received wide recognition. But we are also faced with more fundamental difficulties in analyzing or explaining observed data, when we can only estimate roughly the economic conditions which prevailed at the time of each sounding, and lack complementary information or analyses. This raises serious problems because the Sri Lankan labor markets are undergoing long-term change. Continuous monitoring of the labor market at regular intervals, by such means as monthly labor force surveys, would help identify short-run changes in involuntary unemployment arising from inadequate demand. Current surveys suffer because they are infrequent and irregular. There is a further potential for misleading inferences if the results are used uncritically without taking into account long term changes in labor market structure and behavior which were not the focus of the surveys.

There has been little change in the ethnic/religious composition of the population in the intercensus period 1971-1981. Indian Tamils decreased from 9.3 percent of the population in 1971 to 5.6 percent in 1981, as a result of repatriation to India under the Srima-Shasthri agreement of 1964. From 1975 to 1986, 337,000 adults and 124,000 children left Sri Lanka, but more recent statistics show that the departures have declined to less than 200 a year. While acceptance of family planning methods have been greater than in many other countries, there is no indication that differential birth rates are leading to a significant change in the ethnic and religious composition of the population, and thus of the labor force.

LABOR QUALITY AND ADAPTABILITY

An important characteristic of the Sri Lanka labor force is its high levels of public health, longevity, literacy and school enrollment rates compared to other countries at the same income level. The literacy rate is about 86 percent and the school enrollment rate is almost 100 percent. Enrollments rose from 1.4 million in 1950 to about 4.0 million in 1988. The school-going population increased from 13 percent in 1943 to 22 percent in 1981.

However, 20 percent of pupils drop out of schools at the end of grade 5, another 20 percent after sitting the GCE O-Level examination. Even though the university system has expanded during the recent past, the number entering the universities is limited. Although new admissions to school were about 300-350,000 in the 1970s, only

about 6,000 per year of these are now entering universities, another 15,000 students enter technical institutions, and about 200 matriculate in the three agricultural schools.

Questions have been raised about the value of the relatively high expenditure on education in Sri Lanka. Bhalla and Glewwe (1987) maintain that Sri Lanka has benefitted from its endowment in social welfare infrastructure established before 1970, and that its expenditures have not improved its relative position since. Taking an opposing view, Pyatt (1987) and Isenman (1987) assert that a country at Sri Lanka's level has had to incur a high level of social expenditures simply to *maintain* the standards already achieved. The evidence seems to support the latter thesis. Recent education expenditure has been about 7.7 percent of the national budget. Of this, about 86.4 percent is spent for general education. Teachers' salaries account for 84 percent of expenditure, and capital expenditure accounts for only about 10 percent. At the same time there are large disparities in the school facilities between urban and rural (particularly estates) areas and within given areas.

The ILO (1971) argued that the phenomenon of educated unemployed in Sri Lanka implies a structural imbalance in the educated labor market. The attempts to change the existing situation in education in recent years have sparked off serious protests, particularly on the basis of equality of opportunity for general and higher education. Students also protest the way access is determined to the limited available job opportunities in the public sector. The press carries testimony that the structural mismatch of the educated segment of the labor market has become more severe than it was 18 years ago. Gunatilleke (1989) argues persuasively, however, that the 1985-1986 LFSES shows that the educated behave differently (and more flexibly) than their *stated* preferences would indicate.

The information necessary to evaluate this argument is given in Appendix Table 3.2, particularly regarding younger cohorts where it is most relevant. One notes virtually no difference between the urban and rural sectors concerning the share (percent of cohort) of employment for males aged 15-34 with no education, or for GCE O-level diploma holders 20-29. These are the cohorts where unemployment is considered politically most sensitive. The employment distribution for women shows similarities between urban and rural sectors also, but this is not as pronounced as for men. Finally, the estate sector differs from the other sectors, with a high proportion of uneducated or not graduated and a virtual absence of diploma holders. The Gunatilleke argument is persuasive that the number of GCE O-level graduates employed in agriculture is not significantly less than its share in the general population.

LABOR MOBILITY AND JOB SEARCH MECHANISMS

Gunatilleke's findings speak to the concern that structural unemployment in Sri Lanka is based on rigid expectations among job seekers. Sinhalese resistance to wage employment in plantations was emphasized in the colonial period (Bandarage, 1983, Ch. 6) and revived in the early 1970s, at the time of the ILO Employment Strategy Mission. The educated unemployed continue to be a source of disquiet as the ranks of the educated spread in Sri Lanka, including increasing numbers of females, giving rise to fears of a growing mismatch between the cohorts entering the labor force and the jobs being created. The Gunatilleke findings, and current evidence that Sinhalese have been filling the vacancies left by the departing Indian Tamils in an adequate

manner,[13] suggest that the mismatch is more imagined than real, and that the constraint is the absence of favorable growth and infrastructure rather than unyielding expectations and inadaptive behavior.

Since 1976 there has been a phenomenon of temporary migration to Middle Eastern countries, reflecting the oil-financed demand for expatriate labor for development activity in these countries, and the liberalized approach of the GSL[14] toward migration and employment overseas. Two phases have been observed in migration patterns toward these countries. During the first phase, all Asian labor-exporting countries provided labor, mainly male for construction activities. During the second phase, service and maintenance became important, with increasing job opportunities for female workers subject to severe restrictions in these Islamic countries. Only slightly related to this, a separate migration stream of unskilled females for housemaid and related jobs has slightly exceed male migration in numerical importance. During this second phase, migration from many countries declined. Data are poor regarding recent levels of departure for temporary migration to the Middle East, but it is estimated to have peaked in 1983, when about 69,000 migrated.[15] Some estimates and projections indicate current and future migration levels of about 20,000 workers per year. The data also show that the share of professional and skilled workers has decreased gradually, and the share of the unskilled has increased. The volume and characteristics of this migration are analyzed in Chapter 4.

Rural-urban migration is low, due partly to GSL programs in land settlement and rural development, and to the slow growth of the urban economy. Colombo is growing more slowly than urban areas in general in Sri Lanka, an anomaly among third world capitals. As a result of a good transportation and communications infrastructure, it is difficult to differentiate job seekers or unemployed conceptually as rural or urban: potential or actual participants in both urban and rural labor markets are recorded by censuses and surveys as rural-based, in terms of residence.

This spatial organization contributes to flexibility in the labor market. For example, suburban workers come into Colombo paying as little as Rs. 1.50-2.00, a fraction of what they can earn in an unskilled hour. Colombo workers can return home to remote villages in a double stage bus or bus/train journey of about Rs. 6-7.50 in less than half a day. One reason for the slow rate of urbanization is the ability to combine urban economic activity with a non-urban base and the possibilities this infrastructure provides for non-urban economic activity.

On the other hand, rural-rural migration increased in the 1980s with the opening of the Accelerated Mahaweli Development Project. By 1968, about 95,000 families had resettled in 105 irrigation colonization schemes in the dry zone; about 54,000 additional families were resettled by the end of 1986. In addition to direct employment, non-farm employment opportunities are expected to develop in these areas. However, the possibility of continuing settlement projects on such a scale has been questioned in recent times. If it were possible, roughly another half million hectares (around 200,000

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[13] Sinhalese reluctance to live like the indentured Tamil laborers in plantation housing was mistaken for an unwillingness to perform the same tasks.

[14] Mainly measures easing foreign exchange and travel restrictions.

[15] Appendix Table 4.1 and others use gross departure data which are firm data but which do not obtain motive for departure. These are clearly not comparable directly to estimates of migratory departures such as this one.

households) could be developed in the dry zone, though at a substantial capital cost and with relatively low return.[16]

There is also a seasonal migration of rural labor from wet zone districts to major irrigation schemes in the dry zone to offset the seasonal shortages of labor for paddy cultivation there. These separate markets for unskilled labor encourage agricultural workers to travel long distances to reduce the time they are unemployed. The existence of a general labor surplus, however, affects the bargaining power of laborers. The spread of labor-saving mechanical technology and cultural practices in these areas will also reduce the demand for labor in the future, if current policies which subsidize capital are continued.

HOUSEHOLDS AND FAMILIES

Good social conditions have raised the reservation price[17] of labor in Sri Lanka. Analysis cannot look at dissatisfaction of individuals in a vacuum, but must also look at possibilities and opportunities posed through their membership in a family unit to respond to income opportunities. If potential workers respond through this institution, job creation schemes must focus on policies and incentives which lead households to respond to income opportunities. This cannot be realized by setting artificial targets for public agencies, formal production targets, or other techniques to recruit *and retain* individual workers. We will look at the household and family in this section, the results of which will be incorporated into later analysis.

Sanderatne calls for consideration of the household as the appropriate unit of measurement. He emphasizes that employment growth between 1977 and 1983 was "much higher than [that] indicated in statistics" because a substantial portion of the increase was in the unorganized sector (UNICEF, 1985, Ch. 4). He cites examples including private transport following deregulation, wholesale and retail trade, and small businesses. Underenumeration arises from nonparticipation in employee provident fund schemes, high turnover rates, and the large amount of "casual" labor (which is often not distinguished from "temporary" workers whose durability may be much longer than a daily or weekly contract). He cautions about the growth of incomes in "unorganized" activity.[18] He considers such incomes to be understated as well, and emphasizes the need to focus on the *spending unit* for an income proxy because its multiple earners and its scope provided for combining different activities and sources of income. He elaborates:

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[16] World Bank ex poste analysis of System H calculated a negative economic rate of return on investment in downstream irrigation (even accepting the headworks as sunk cost). Current donor efforts (such as USAID in System B) are aimed at higher value added activities than paddy.

[17] The wage which a potential entrant finds attractive enough to enter the ranks of the employed.

[18] Sanderatne cautions that many such activities are indeed *very* well-organized, as family-based or independent entrepreneurship. This both enhances the potential for internal expansion and limits entry by outsiders.

> The pooled income of all income receivers [is] relevant to the welfare of all members and a significant amount of income of especially rural households [is] not attributable to a single member in it. Recent developments which indicate that a larger number of household members may be working *owing to improved employment opportunities* too reinforce this validity (Sanderatne, 1986, p. 20, emphasis added).

During a period of income expansion between 1973 and 1978/1979, growth in income per spending unit was much greater -- and during the period of income contraction between 1978/1979 and 1981/1982 the decline in income per spending unit was less -- than the corresponding movement per income receiver.

Female employment has increased considerably. While sources disagree on its magnitude, from the census figure of 19 percent in 1981 to better estimates of 25 percent in 1980/1981 and a higher rate of 30.2 percent in 1985/1986, it is rising over time.[19] The 1980/1981 figure may be underestimated. The share of females in the unemployed has also declined by about 11.1 percent between 1978/1979 and 1985/1986. Female unemployment is greater between the ages 15-29 (65.7 percent). Female participation in the labor force has also been increasing over time. On the supply side, more are entering the universities and other technical institutions, and the increase in the average age of marriage of females suggests that the opportunity cost of employment has declined. On the demand side there are employment opportunities in the IPZ (90 percent of the jobs in IPZ are taken by women).

The fact that the female unemployment rate drops significantly after age 29 shows that some of the married unemployed withdraw from the formal labor force. Many are measured in the LFS as unpaid family workers (MOPI 1987), indicating that the current definitions of employment cannot capture female labor used in household economic activities, in home gardening and dairying, and other for-income activities. Thus, the female labor force participation rate is severely underestimated.

In the estate sector, female labor force participation is high because of sexual differentiation of labor among families already resident on the estates and with limited geographical or occupational mobility. Certain activities are considered "female work" and others "male work." This is particularly true in the tea estates: tea-plucking, which is almost a year-round activity, is reserved for women and girls. The sexual division of work also prevails in other estate agriculture. Since male jobs are more diverse but not in general open to females, and because estates regard families as consisting of a male primary earner and a female secondary or intermittent earner, such division leads to substantial wage differentials between males and females. The low rate of self or family employment in this sector (Table 5) is partly tradition and partly measurement error: as Sinhalese have replaced indentured Tamil laborers, household surveys record them in the rural, rather than the estate, sector.

Labor hiring of women for cultivation or non-farming also depends on the level of income, wealth, and social status. Women in the poorest families work as wage laborers to supplement household income. In less poor families, women and grown-up girls may work on household cultivation, but will not be available for (permitted to accept) many kinds of work outside the household. There is some religious variation here. Thus, what is reported as unemployment may be an overestimate under such circumstances.

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[19] Sources are CFS 1978/1979, Census 1981, LFSES 1980/1981, and LFSES 1985/1986.

This is clearly changing rapidly in Sri Lanka as women's participation in the labor force has increased. Women without recognized trades or industrial skills are important in three categories of work. The first is in export industry, where it remains unclear to us whether women dominate because of their superior manual dexterity or their inferior reservation wage. The others are international migration (as housemaids) and a type of women's enterprise which accounts for much of the activity shown in Table 5.

CHAPTER FOUR

EMPLOYMENT, UNEMPLOYMENT AND EARNINGS

In this chapter we investigate the structure of demand for labor and the resulting employment and earnings in the rural sector, the export sector, through international migration, and in the Dhanopayana sector.

SOURCES OF EMPLOYMENT

The analysis begins with a structural breakdown of the labor market according to age-sex and educational breakdown; sectoral and occupational composition; forms of work organization; paid-employment distributions; and, finally, the role or relative importance of different forms of wage determination. The analysis must be selective because of comparability problems of available data.

Economic activity and employment in the three major sectors in 1985/1986 are as follows:

Table 4
Labor Force Participation by Sector 1985/86
(Thousand Persons)

Sector	Total Population	Population Age 10-65	Employed	Unemployed	Activity Rate
			Male		
Urban	1,588.6	968.5	708.7	132.8	86.9 %
Rural	5,601.6	3,124.0	2,650.5	278.5	92.8 %
Estate	431.8	253.2	222.1	21.9	96.4 %
			Female		
Urban	1,689.5	1,036.9	267.9	103.5	35.8 %
Rural	5,548.0	3,245.9	1,066.3	288.5	41.7 %
Estate	475.9	275.0	216.1	14.9	84.0 %

Source: MOPI (1987), Table 8.2.

For both sexes, participation is near-complete in the estate sector, but this is because this sector is defined by on-plantation residence and excludes rural-resident labor supply. Own-account and unpaid family activity amount to 40 percent of the economically active (Table 5) in Sri Lanka. This category is particularly relevant for women in both urban and rural economies, especially in the latter.

Total unrecognized employment (own-account plus unpaid family work) is not only sizeable but represents an absolute increase of about a quarter of a million over the corresponding total for 1980/1981. Paid employment at 58.2 percent represents a slight decline in relative importance since the earlier period when it was a little over 60 percent. Not much is known about own-account or family work, or about large

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segments of private activity in paid employment. But these suggest possible strengths in the economy as we have argued elsewhere in the report and demonstrate later in this chapter.

Table 5
Employment by Category 1985/86

Sector	Regular Employee	Casual Employee	Self - Employed: Employer	Self - Employed: Own Account	Self - Employed: Unpaid Family	Self - Employed: Total Self-Empl.	Total Employment
				MALE			
Urban:	267,400	237,968	33,617	140,621	29,123	203,361	708,729
	37.7%	33.6%	4.7%	19.8%	4.1%	28.7%	
Rural:	415,377	954,496	72,322	911,735	296,569	1,280,626	2,650,499
	15.7%	36.0%	2.7%	34.4%	11.2%	48.3%	
Estate:	159,201	50,786	1,383	7,008	3,722	12,113	222,100
	71.7%	22.9%	0.6%	3.2%	1.7%	5.5%	
				FEMALE			
Urban:	109,350	83,134	2,476	49,265	23,710	75,451	267,935
	40.8%	31.0%	0.9%	18.4%	8.8%	28.2%	
Rural:	177,892	325,052	10,983	223,449	328,963	563,395	1,066,339
	16.7%	30.5%	1.0%	21.0%	30.8%	52.8%	
Estate:	171,064	39,450	295	2,040	3,294	5,629	216,143
	79.1%	18.3%	0.1%	0.9%	1.5%	2.6%	

Source: MOPI (1987), Table 8.2. Totals may not agree due to minor addition errors in original, corrected here.

Paid employment is the largest category. It has also been the focus of much of the current concern with unemployment and of major policy initiatives for generating employment. Accordingly we will focus on breakdowns provided by the 1981 census, the 1985/1986 CFSES, and some related data. At approximately three million, it is over 60 percent of total employment in the economy, *97 percent* of employment on the estates, and under 20 percent of employment in subsistence agriculture. According to Table 5, there are three times the number of regular employees as casual employees in the estates sector, but about the same number in the urban area; regular employment accounts for only a sixth of all employment in the rural sector. The importance of self-employment varies widely, from half of all employment in the rural sector to a little over a quarter in the urban sector; once again the estates are anomalous, with only 3-6 percent self-employment. The pattern is similar by sector for both men and women, though the composition of self-employment varies both by region and by sex. In the decade ending 1980/1981, paid employment had witnessed rapid growth: the blue-collar labor force by 26 percent, the professional by 50 percent, and clerical by 47 percent.

There is an understandable but not quite established presumption that open unemployment is mainly a manifestation of malfunction in the labor market for paid employment. This would derive partly from disequilibrium wage pressures in the modern or formal sectors of the labor market and pressures for entry. As noted at the outset of the report, these are inadequate ways of classifying the labor market.

Observers have also commented upon possible rigidities in entry patterns of the unemployed in choosing between paid and self-employment. The issue is complex (Glewwe, 1985, pp. 119-120), and similar rigidities may be noted within paid employment, too. It is also important to note that many labor market choices are made at the margin as the structure of opportunities and possibilities change.

The wide range of career options includes possible choices: within the elite segments of government and corporate employment; between these and the independent professions; between these and the less certain private sector; between paid and self-employment; between rural and urban employment; between rural farm and non-farm employment; and between various combinations of these either at the level of the household or at the level of the individual. The increase of educated women and returning overseas migrants with accumulated savings also highlight the possibility of combining homemaking with remunerative economic activity (prolonging the process of job search). All these emerge as increasingly important as the simplifying classifications of yesterday become more and more outdated. The more aggregate the employment categories we employ for analysis, the more will such behavior be obscured. This is an area where we need to know more at the level of household behavior. Since it is also a policy objective to weaken rigidities we need to identify and capitalize on encouraging evidence in this respect (Gunatilleke, 1989).

Young persons dominate the ranks of the unemployed: according to the 1981 Census, 29.6 percent were between 15-19 years, and 52.4 percent between 20-29 years (Korale, 1987, Table 9). The educated also dominate. The 1981 Census indicated a large bulge in the group with 6-10 years education at 70.5 percent of the total, the male-female proportions being fairly close. The corresponding figures for those with O-level educational attainment were 14.1 percent and for those with A-level 2.4 percent. In each case, the female totals were much higher and the unemployment rates about twice the corresponding male data. The 1981 figures represent a clear increase compared to 1971 in the percentage unemployed for both males and females. The changes were less pronounced for those with GCE O-level education, but the increase was again very sharp, particularly for females, among those with A-level educational attainments (Korale 1987, Table 12.)

The paid employment total of three million can be broken into organizational categories reflecting employer characteristics with a view to matching these against different modes of wage determination. The modes differ according to whether employment is with government, parastatal enterprises and local government, or private (this last category being heterogeneous and constituting nearly 60 percent of the total). Five modes of wage determination coexist, namely: (1) pay commissions; (2) cabinet decisions; (3) wage boards and remuneration tribunals for shops and office employees; (4) industrial relations machinery, including collective bargaining; and (5) unilateral employer decisions and/or individual bargaining.

Whatever the mode, wage determination is influenced by economic and market constraints. Sri Lanka's real wage history provides ample support for this proposition. Product market conditions and constraints have been thus important in wage determination in tea plantations whether before or since nationalization. The significance of this point will become more apparent as one examines Table 6.

Table 6
Paid Employment by Employer and Wage Determination Characteristics
(Circa 1981)

Major Categories	Modes of Wage Determination: Paid Employment	Pay Commissions	Cabinet Decisions	Wage Boards and Remunerations Tribunals	Industrial Relations (IR) Machinery incl collective bargaining (CB)	Unilateral Decisions and/or Individual Bargaining	Role of Economic and Market Forces
GOVERNMENT 0.5 million (15.6%)		1965-69-75-82 COLA Adjustments. Govt as "Model" Employer	Reg. feature in '70s. Mainly DA-- often tied to budget.				Have fallen in real terms.
PUBLIC CORPS & LOCAL SELF-GOVERNMENT 0.7 million (25.0%)	- Parastatals - LSGs - Estates (Tea, Rubber, Coconut)			Nationalized 1975. Est. 750,000			Related but separate from Gov't service-- upward drift
PRIVATE 1.8 Million (59.4%)	Employers Federation of Sri Lanka (100,000)			Better Paying Employers	Strong trad'n of collective bargaining. IR machinery active.	Probably bulk of EFSL not affected (+/-100,000)	Scheduled min. wages have tended to fall behind actual.
	Min. Wage and Remun. Tribunals. (Legal 1.5 Mn., actual no. unknown). Excluded: informal sector.			Conservative objective. Actual Nos. benefitted unclear as opposed to legal coverage. Will fall as CPI rises.	Trade union and coll. bargaining weak. But '58-59-65-67-71 GSL widened applicability of some CB agreements.	No. excluded is unknown (Marga, 1979 has 20% in Colombo informal sector). Possibly market pays better.	Clear drift noted 1949-79. Carpenters, masons leaving paid empl. for self employmnt. School leavers migrate abroad
TOTAL (Approx) 3 Million (100%)	Source: Rodrigo, 1986						

THE WAGE STRUCTURE

Secure and well-paying jobs have been traditionally limited in scope and pertain mostly to regular employment in government and in the established corporate sector, which gradually saw the encroachments of the industrial relations and minimum wage machinery. This gave rise to the concept of an organized or formal sector, with its implications of privileged conditions and wages in the labor market. This was probably true historically of a select category of the employed and may have provided a useful contrast with a residual informal sector. As the economy is now more diverse and the range of economic activities much greater, such a mutually exclusive dichotomy (and corresponding extensions of the scope of each component) is unduly limiting. The attribution of wage advantage to certain a priori characteristics like formal sector, minimum wage coverage, or trade union membership becomes uncertain and unreliable. Employment strategies need to focus on activities which have outgrown these stereotypes.

The concept of a formal sector (a high-wage sector, and possibly one which reflects disequilibrating institutional pressures) would apply unequivocally only to the 40 percent in the first two (governmental) categories, and a select proportion of the large residual called private. The majority of employees in small shops and establishments do not enjoy the sinecure-like conditions of privileged employment. Informed observers do not place more than 35 to 40 percent in this category for the Colombo metropolitan labor market. The Employers' Federation of Ceylon, an organization of blue-chip employers, accounts for probably 100,000 workers, not all of whom may be in the high-wage category. It is active in collective bargaining on behalf of its members but "such coverage is on a purely voluntary basis" (Employers' Federation, p. 101). A perusal of the major collective agreements indicates a selective involvement of leading individual companies rather than industry groups. The prevailing levels and negotiated increases are substantial, but high barriers to entry distinguish this select group of firms from the rest, even within the employers' federation membership. The IPZ firms are not unionized, are not part of the Employers' Federation (with one exception), and government policy aims at a wage more closely related to the prevailing minima in the Greater Colombo Economic Commission (GCEC) jurisdiction (ibid., pp. 28-29).

It is thus quite possible that an indeterminate number of a million or even more of the 1.8 million in private paid employment are not in protected employment. While a precise figure is unattainable, if insecure paid employment is combined with own-account and unpaid family workers, a majority of the economically active population is governed by fairly decentralized processes of wage determination. The extent of this decentralization can be seen in the small size of the rural-urban gap, the stable levels of urbanization, and the more rapid growth of the smaller urban areas as compared to the larger ones (where institutional forces may be expected to be stronger) or rural non-agricultural employment as opposed to the rest of the rural economy.

The problem goes beyond identifying sources of wage advantage at any one time to assessing forces which bring about change over time. It is highly unlikely that these would necessarily be linked closely to institutional affiliation which conferred initial advantage and thereby explain even the existing size distribution of firms or structure of economic power. Market forces change relative productivity and set in motion new patterns of employment expansion. Interventions in the labor market may lag or be conservative. Analyses of the impact of trade unions stress unions' weakness in collective bargaining and reliance on political support (which has not been forthcoming in recent years) for their power. The wage boards act conservatively, staying close to

the prevailing market average rather than acting as instruments of income redistribution (Korale, 1987, pp. 50-52). Mostly, general and across-the-board revisions are restricted, and only belatedly and partially compensate price increases. In such an environment wages are largely market determined, with existing institutional mechanisms observable (and published) but not binding for much of the para-public and private sector. The minimum wage is currently an expression of legal coverage and applicability, but not a matter of economic relevance, when supply and demand forces yield a higher wage.

In such a situation, new wage and earning hierarchies will emerge. It will be even harder to classify them in a consistent, mutually exclusive, hierarchy. Government service seems to have lost its pride of place, as parastatals have moved ahead of civil service, and blue-chip private corporations have taken the lead in wages and benefits.

The results of anthropological studies have prompted calls for systematic efforts to redress the gap in economic intelligence about the large unprotected private sector (Sanderatne, "Introduction," in Rodrigo, 1986). The legal minimum wage in Colombo has little effect on the wages in shops and small establishments where Rs. 1,500 to Rs. 2,000 are commonly paid. Scooter drivers are said to net Rs. 250-300 a day; daily village rates of Rs. 150 for carpenters and Rs. 100 for masons have been reported. Our visit to Colombo produce and fish markets yielded information that haulage labor averaged Rs. 200-300 a day and had no problem obtaining 6-day work weeks. The rewards are high enough to attract Indian Tamil illegal immigrants as laborers despite the socio-political (i.e., physical) risks involved.

Given the high mobility of labor and capital, an analyst will run into a conceptual problem whether identifying a formal sector and treating the residual as a subsistence informal sector, or pinpointing an informal sector and treating the rest as the formal sector. This is illustrated by the Marga-ILO study of the Colombo informal sector (Marga 1978). Along with Richard Webb's study of the Urban Traditional Sector in Lima, Peru, it stands among the best in improving our understanding of -- and dispelling cliches about -- important and little-known segments of the urban economy. Both focus on enterprises employing less than five persons; the Peru study is stronger on the data on economic performance and the Marga study richer on the economic processes involved. Although the Marga study focuses on microenterprises, with on average a little over one "activist" per enterprise, it excludes the bulk of the poor workers, as well as various small enterprises which might normally be included in any residual after identifying the privileged urban economy. These are discussed in Chapter Five.

Even when coverage is restricted to units with five or less economically active participants, it is difficult to generalize within the category or about the residual urban economy *as if* the excluded sector operated under distinctively different and homogeneous conditions. Further, there are many aspects of labor market performance which are common across labor market demarcations. Success (in the Marga study) depended on access -- social and ascriptive networks were particularly important; innovation in terms of products and processes was also important.

The discussion so far has tried to show that the Sri Lankan labor market is flexible, and that changes in employment and earnings are not captured by available data. Potential researchers must take a closer look at available wage and income series, which are important, seriously deficient, and much used in analysis today. The market price of labor is better indicated by wages actually paid than wage schedules which reflect changing labor market conditions only imperfectly and after a lag; however, schedules rather than actual wages are the more readily available. In the case of

manual labor, we also need complementary information on days worked, regularity of employment, and other variables. Surveys might determine household incomes, associated with breakdowns of types of household labor market participation. While surveys exist, they are generally weak and lack of resources has prevented the publication of important data which can be extracted from them..

Rodrigo (1988, pp. 34-35), relying largely on minimum wage indices, has adjusted nominal wage or earnings growth for price increases using four alternative indices (see Chapter One): CCPI, implicit GNP deflator, wholesale price index, and UCPI. Using the first three price indices, she summarizes trends and economy-wide comparisons as follows:

- The economy's wage bill and GNP at current prices increased at the same annual rate of 23 percent between 1977 and 1984;

- Real wage changes between 1960 and 1985 suggest an annual rate of increase of at best 2 percent per year; there was an implicit decline in the first half of the 1980s; and

- Over the longer period, 1960-1985, the economy succeeded in containing the pace of real wage growth within that of real productivity growth; some groups did better than others, and in the 1977-1985 period a marginal gain is suggested for government and plantation workers.

Rodrigo then points out that the decline in real wages may be much greater if nominal figures are adjusted instead by the preferred UCPI index, except that such aggregates conceal that some groups may have been better protected against rising prices than others because of fringe benefits, supplements or payments in kind, and "wage drift."

Rodrigo is aware that wage data do not represent household earnings, but points out that schedules suggest a negative drift and a decline in the real minimum wage. Sanderatne (1985), on the other hand, emphasized growth of earnings among Dhanopayana enterprises. In the protected formal sector, actual wages may be higher. Rosairo argues on behalf of the Employers' Federation (op. cit., 1989, V. 1, p. 19) that "most of the workers in regular employment in the trades for which minimum wages had been prescribed by law were earning a monthly wage that exceeded" the average monthly income per income receiver reported by the Central Bank 1981-1982 survey. The plain fact is we do not know and cannot tell on the basis of the available data. All that we can say is that wage-fixing machinery has not been an important disequilibrating force.

Glewwe, whose criticism of income data was reported in Chapter One, relies on expenditure data (a technique which has given more accurate results than income surveys in most economies) to show:

- The economic welfare of the self-employed rose by the late 1970s and early 1980s, but in a manner consistent with the general pattern for all workers;

- The self-employed did better than wage earners since 1970, while government sector real wages declined -- this is partially attributable to the growth of self-employment incomes in paddy production; and

- Among the self-employed, professional and clerical workers, followed by self-employed cultivators, did better than the average, and production workers fared the worst. He hypothesizes that price incentives for paddy production and the differential impact of liberalization were responsible factors.

Glewwe concludes that "there is very little useful information regarding private sector wage levels, even after 1979." Analyses which integrate data with knowledge of labor market processes, which would again suggest useful questions and issues for further data generation, must begin at a level more theoretical or conjectural than empirical, as parts of this analysis bear witness. This interactive process must develop if policy makers are to develop a firmer grasp of how the various labor markets function in Sri Lanka.

These are the reasons why we need to know more about the spectrum of unorganized activities. Assuming constant returns to scale and neoclassical flexibility in production and consumption, we are talking about a wide and viable range of feasibility, as shown in studies elsewhere such as Little, Mazumdar and Page's 1987 study which shows a range of capital-labor ratios coexisting in competitive markets where capital markets are not yet highly developed. However, high urban land costs and income elasticities for processed goods may encourage small batch production processes (Mohan, 1986). Consumption is also likely to be time intensive (Becker, 1965), a proposition sustained by the vitality and growth displayed by Sri Lanka's service sectors. Even small economies like Urban Juba in the Sudan display considerable diversity of growth and enterprise. A feature emphasized by the Lima study was the wide range of product and technological choice in the context of economic change from a traditional to a modern economy and the resultant inducements to entrepreneurship.

INTERNATIONAL MIGRATION, LABOR SUPPLY, EARNINGS AND UNEMPLOYMENT

International migration has had a major impact on employment, unemployment, and earnings. Although Sri Lanka does not provide a large proportion of such migrants to the international pool, this migration has a major impact on Sri Lanka's labor market. MOPI (1985) estimates that 250,000-350,000 families, representing a tenth of the total population, have or have had a family member working abroad. Beyond its volume and that of remittances by migrants, international migration should be included in an employment strategy because of the behavioral aspects of its selection process, the duration of stay of temporary emigrants, the types of individual who migrate (and the impact implied on the domestic economy), and the magnitude and potential impact of return migrant flows on the labor market and the economy. These are investigated in this section.

Migration provides an alternative source of revenue to individuals and households in the domestic labor market. It also provides a source of generalized foreign exchange for the economy, well-being to the household, and a safety valve for unemployment. While migration is a thief of scarce and costly investment in human capital, and a source of stress on households and family well-being, it may serve also as a training ground for technical and managerial skills, an important source and mobilizer of investible funds, and a selection filter for identifying entrepreneurial attitudes. Selection does not appear to lead to less personal and household hardship than averages would suggest, since the marital distribution of migrants resembles that of the general population.[20] These latter attributes are important for a USAID employment strategy in Sri Lanka, and will increase in importance as migrant departures decline so that return migration provides net additions to the labor force rather than the subtractions of the past.

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[20] Except that the proportion of divorced women is higher than in the general population.

Volume and Remittances

The volume of migration is given in Table 4.1.[21] Table 4.2 breaks this down by skill level of migrant, and adjusts returns for migrant cohort size to estimate the risk of return migration by year in 1984 and 1988. For lack of time, no further use is made of this information, but if the short-term return migration which is clearly underestimated in the 1988 survey is corrected, researchers using this document may be able to build a better picture of migration return than we do below. Data quality gives a large margin of error to estimates of net migration flows, and further distinctions such as skills lost and gained are subject to such an appreciable level of survey error that, after an attempt in an early draft, we do not attempt this here.

In 1984, remittances varied from Rs 282,000 representing 36 percent of earnings for high skilled workers to Rs 38,000 (69 percent) for housemaids. Korale (1988) finds the amount remitted increased to 1988, and this is intuitively plausible particularly given the depreciation of the rupee. However, in Table 4.5, we find that the variance of the sample makes such hypothesis testing impossible: the variance is too great to claim that the mean has increased as claimed. The amount remitted is remarkably constant per person-month overseas. Table 4.4 provides a summary. The amount per person-month appears to drop after 36 months overseas, so this is investigated in detail in Table 4.4 and is seen to be due to the small number of individuals and the change in skill composition in this small sample, rather than a decline within skill groups. Moreover, five individuals with abnormal repatriation may be simply on vacation, as they appear to be "off cycle."

A large proportion of earnings abroad are eventually reinvested in Sri Lanka. The data from MOPI (Table 4.7) suggest that highly skilled workers fail to remit 30 percent of their savings, middle-level, 9 percent, and others only 4-5 percent. Housewives save the highest proportion because of non-wage benefits received such as lodging and food; these benefits make it impossible to judge if their behavior is different from that of the others.

Selection

We begin with a note of caution in the use of these surveys, since a large number of re-departures in the gross flow are captured in the field survey which cannot differentiate these visitors from returnees.

The migrants are more educated than the general population (MOPI 1985, p. 44), implying a loss to the economy until their return. Although the average family size exceeds that of the general population (6.4 dependents as compared to 5.5), this does not appear significant, but is explained by the difference in size distribution of households between Muslims who are disproportionately represented among migrants to the Middle East, and the population in general. Their average income before departure is very high, two-three times the average; though we must be cautious of recording bias here, this is consistent with the high fees recorded to obtain positions, and the selection imposed by high travel costs and the need for the remaining household to survive until the first remittance. The evidence of MOPI (1985) is that males are drawn from the top half of the income distribution and females from the lower half. If the housemaids were treated separately the distributions would not differ so markedly.

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[21] The tables cited here and in Chapters Five and Six are Appendix A tables unless otherwise noted.

There is strong evidence of downward mobility in migration, but a higher salary. This is not strange anywhere; what is different for Sri Lanka is that less than 32 percent are downwardly mobile, the rest are at the same level or, for a few, higher.

Duration of Stay

Korale (1989) suggests strongly that the migration duration has lengthened between the 1984 and 1988 surveys, by almost two years. While this lengthening appears to be confirmed in Table 4.2, if the early return cohort is undersurveyed then the average length of stay in 1988 is exaggerated. Also, neither the 1984 nor the 1988 survey control properly for temporary returnees such as those visiting their families on vacation, who should not be counted in the survey calculation. Since the number of departures has been considered to be declining, the relation between the stock of workers now abroad and new additions to that stock has been shifting in favor of the former, and any temporary/vacation visits recorded as "returns" (reductions of that stock) will bias recorded length-of-stay and calculated probability of return strongly.[22]

Types

It is important to differentiate two major migrant groups, the larger of which, housemaids, represents 54 percent of all migrants but is driven by a different decision-making process than are skilled or professional migrants.

The difference in sex is partly supply driven, as the housemaids are the same behavioral group who make up "female enterprises" (Chapter Five), and partly demand driven, in that there is strong preference for males in shops and office employment in the Middle East. Female migrants are constituting an increasing proportion of the non-housemaid unskilled.

Muslims are disproportionately represented in the labor flows to the Middle East in particular, and Tamils (many of whom lack skills and are inaccessible to recruitment on estates) are under-represented. Recent Tamil flight, particularly to Europe, may reverse this; data are unavailable.

Return Migrants

Only 1 percent of migrants return because they have fulfilled their desired objective (Table 4.3). The most important group, a third, returns at normal end of contract, while more than half return for one of various involuntary or semi-voluntary reasons: family needs; unsatisfactory working conditions; or termination of employment.

The evidence suggests that return migrants have not changed their consumption pattern markedly, and, aside from purchases of certain durables, earnings are capitalized but do not have an expenditure impact. In real terms, investment in housing permits a drop in rental payments (Table 4.6) as well as in transportation for those who purchase vehicles; expenditures of ex-housemaids on transportation actually rises by a third. Housemaids also increase their expenditure on food significantly, fitting the view

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[22] The 1988 Korale study is extremely informative, and for this reason the length of stay and remittance information are given their entirety in Table 4.5. However, the sample variances which we have calculated in this table in fail to support Korale's claims -- which we consider plausible, particularly after inflation -- of increased remittances per month. The stratification used retains far too much heterogeneity for such hypothesis-testing.

that this migration is for family investment. Surprisingly, it is the skilled who increase expenditure (by two-thirds) on education.

The study of investments in Table 4.7 indicates that a third of remittances are invested. Housing (land, or improvement; construction is important for the mid- and high-level skill groups) is the most important category, followed by vehicles. However, the more skilled groups are likely to invest in manufacturing industry, commerce, or services, particularly commerce. Surprisingly, investment in agricultural activity is an important category only for the skilled workers.

This behavior indicates that much of overseas earnings are remitted, and that much of this remittance is available for investment in the domestic economy.

CONCLUSIONS

Glewwe emphasizes that the diversity within self-employment in Sri Lanka is due to differential barriers to entry and success. Tastes and preferences also provide entry barriers, because of the role played by social and economic (including ethnic) stratification (Marga, 1978; Bandarage, 1983; Kurukulasuriya, 1986). We need to know more about the extent to which various choices exist at the margin, are being pursued, and can be encouraged as a matter of policy. Alternatives facing the incremental potential worker include self-employment, paid employment, own-account work, and unpaid family work. Gunatilleke (1989, p. 14) concludes that "unpaid family work" probably has been the result of growth in the number of family enterprises which use such labor well in excess of the growth of the number of enterprises using wage labor, rather than a failure of formal wage employment to absorb labor force growth. He also dismisses speculation concerning structural rigidity of Sri Lankan youth -- especially the educated -- and their fixation on well-paying formal or government sector jobs, showing that an increasingly educated cohort of the young, both male and female, enter agricultural and nonagricultural occupations without marked bias. There is no support for the oft-repeated proposition that they aggravate the labor market mismatch by their disinclination to pursue opportunities outside the formal sector.

If this is so, the policy environment is poorly adapted to promote employment. Vocational training programs provide skills for jobs in paid employment rather than for self-employment. The failure to address the needs of educated women, who are interested in income-supplementing activity, is also important. There are many examples of technically qualified workers, based on experience in the formal sector, setting up businesses on their own. We talk about these workers in the following section.

In summary, Sri Lanka has a growing unemployment problem. One must add to this a great deal of "underemployment." What type of a labor market or labor market models would yield us this result, given especially the context of flexibility in wage determination, adaptive responses, and some apparently favorable macro indicators (at least after 1977 and until recently)? An explanation which seems to make sense is that in Sri Lanka an employment equilibrium is attained at a low level of productivity and a high natural rate of unemployment. This is radically different from the Keynesian concept of involuntary open unemployment which surveys have sought to measure. Models of underemployment based on dualism also need to be reconsidered.

CHAPTER FIVE

THE DHANOPAYANA SECTOR

In this chapter we address the organization and role of the lower end of what we call the Dhanopayana sector. Aspects of this sector are often treated separately as microenterprise/small enterprise or informal sectors, in order to propose policies and programs to create dynamically efficient small enterprises and to facilitate the incorporation of the informal sector into the formal economy. In this chapter, we discuss these aspects, but also relate them to the larger and more formal family-owned firms which are also part of the sector.

RELATION TO THE INFORMAL SECTOR

Discussion of the dynamics of the informal sector in Sri Lanka is circumscribed by constraints of both definition and measurement. Three definitions have implications for policy development: the ILO definition as the urban residual after the formal sector has been identified; the de Soto definition as illegal activities; and the Marxian and dependency theorist definition as the result of proletarization of formerly self-sufficient workers. We find none of these satisfactory. Measurement problems will later be discussed under census definitions and the 1980/1982 survey of household enterprises.

The ILO definition of the informal sector considers it to consist of residual, low-productivity activities which absorb labor that the more productive, capital-intensive formal sector is unable to employ. This paradigm has come under criticism on the empirical grounds that a large number of such enterprises have high total factor productivity and are capable of competing with larger companies in their subsector; that informal entrepreneurs may be former employees of the efficient, large-scale enterprises who form their own companies; and that the linkages between the informal and formal sectors may be quite close. In Colombo City, these linkages were found to be not just two-way labor flows; informal sector enterprises are dependent on formal sector enterprises for raw materials and intermediate goods, and for transportation of raw materials and output. Linkages through subcontracting were found to be weak, but linkages through capital flows (entrepreneurs investing their accumulated capital in new, formal sector activities) were identified (Marga, 1978).

A more recent definition of informality, developed by Hernando de Soto, is that of illegal enterprises which produce legal goods and services. The enterprise may be "illegal" because it is unrecorded by the tax or licensing authorities, or because it does not comply with various labor, health/sanitation, safety, environmental, or other regulations. In this way, de Soto attempts to exclude purely illegal activities (drug trade, prostitution) while encompassing productive economic activity.[23] Such an enterprise may be recorded in some aspects but non-recorded in others, so that even where this concept is understood it may be difficult to quantify for purposes of comparative study. Some such enterprises have been captured: in the Colombo Informal Sector Survey (which is a survey of small enterprises of five or fewer workers, regardless of legal status (Marga 1978)); in the census definitions of own-account workers or family labor; and in the 1984/1985 Census of household Economic Activities (MOPI 1986b). These enterprises cannot constitute a "sector," since they are defined by exclusion: those which are non-recorded. In the ARTI Mahaweli enterprise census of 1987-1988, registration

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[23] This begs the question of arbitrariness in deciding what is an illegal good or service by the law or society.

rates varied according to sector of activity and roughly by location, rather than by regulatory or legal requirements. Registration itself appears to be more informal than the sector.

For completeness, a third, Marxian or dependency definition of informality can be given as "a conceptually identified category which takes its identity in the socio-economic process through which persons from the relatively self sufficient rural agricultural communities move toward modern production (i.e. capitalist production) which is the dominant mode in urban centers and in Government and Mercantile structures." (IRED (1986), p 2). This interpretation also is not supported by the Marga survey. There may be subsectors in which informal sector enterprises are dominant and others in which they cannot compete with modern firms. Informal sector enterprises appear to coexist with both agrarian and mercantile forms.

With these three definitions based on exclusion from a "preferred" category, measurement problems and conceptual problems can be expected in attempting to define and track the Dhanopayana sector. We attempt to look at it first by size, use of self-employment or unpaid family labor, and whether agricultural, nonagricultural, or somewhere in between in organizational form. We also have some information on income, though this is subject to considerable measurement bias, so both amounts and ratios must be used with caution.

The Janasaviya program has a microenterprise (ME) element with an intended Rs 2500/month grant to the poorest of the poor, of which Rs 1042 is an investment grant. It is intended that larger companies will provide assistance to MEs so created. The questions raised are the following: (1) does this policy identify individuals capable of successful entrepreneurial activity? (2) If so, is the investment policy the appropriate one for assisting ME development? If not, is there an alternative or supplementary policy which will achieve the desired goals? (3) What will be the cost of such a program to the Treasury, and what will be achieved for that cost? and (4) Will there be a cost of this program to the voluntary Co-operative Movement (including its savings mobilization elements) which is required to implement it?

We will ask similar questions for employment policy regarding medium enterprises or small-scale enterprises (MEs/SSEs) in general. We identify returning migrants as a group which could be targeted to promote sustainable, employment-generating micro and small enterprises and cover the macro, trade, and financial policies currently impeding such an effort.

THE CHARACTERISTICS OF SRI LANKAN ENTERPRISE

Before the economic liberalization measures of 1977, the small-scale and informal sector had been considered as a sector engaging in import-substituting activities, creating large-scale employment, and saving foreign exchange through the use of domestic inputs. This strategy relied on heavy tariff and quantitative trade protection; the government also reserved certain manufacturing activities for small industries, awarded preferential access to credit and public resources, and offered various kinds of direct assistance. Most of these were withdrawn in 1977, and replaced by increasing reliance on market incentives (abolition of price controls, liberalization of import of inputs, and elimination of administrative requirements which had fostered corruption and delay) to promote the self-selection of viable subsectors within the small-scale sector. There is some evidence that smaller enterprises have borne a disproportionate burden of adjustment, with both real wages and real value added per worker declining and profits as a share of value added increasing (Athukorala p 99). Comparing "approved" and "unapproved" industries (the latter mostly rural processing and handicrafts), Athukorala finds a smaller proportion of unapproved industries closed in 1977-1979 than approved industries, but that 27 percent

were adversely affected (compared to 16 percent for approved) and a far smaller share benefitted. These data are shown in Table 6.2. The failure rate is not remarkably high for microenterprises.

Two points might be mentioned here. One is that you cannot attribute the fate of SSEs to the liberalization policy alone, when many other phenomena also affect small enterprises.[24] The second point is that the closure of a small enterprise is not necessarily associated with hardship for the entrepreneur or his employees. We would expect to see enterprises close as market signals led their operators to shut down unprofitable ventures to move their labor and capital to profitable uses. In the subsample of firms existing before liberalization in the ARTEP 1986 survey, more than half of rural enterprises in its sample universe had existed more than a decade, as had a third of the enterprises in its semi-urban sample. Compared to a 1977 survey, fewer rural enterprises (3 percent as against 11 percent) were less than one-year old, with the difference entirely to the benefit of those existing over ten years (p. 33). The negative effects of liberalization were clear for hand looms; traditional subsectors using mostly non-traded inputs and producing non-traded outputs (pottery, coir, and furniture) were unaffected; and enterprises using imported materials and equipment had grown (despite a disadvantage in comparison with large firms in access to, and economies of scale in purchasing of, imports) -- in particular, garments, plastics, chemicals and light engineering (ARTEP, 1987, p 47). A third piece of information comes from the ARTI census of Mahaweli enterprises for USAID (Kerkoven, 1988). Although Mahaweli consists of colonization areas in which enterprises themselves are in their infancy (a fifth had operated less than a year), a third of the entrepreneurs registered in this census in December 1987-January 1988 had more than 15 years of experience in their main occupation, and half, more than 10 years. In summary, the sector is transformed but is still active.

In this section we look further at the information available on self-employment, microenterprises, family labor, and family-owned agricultural units. This is a large unclassified category not easily captured by conventional formal-informal distinctions. Our objective is to draw inferences on their importance for a strategy of employment generation.

SURVEY INFORMATION

The best and most recent data available on employment status of individuals comes from the 1985/1986 LFSES, though the analysis is incomplete at the time of this report. Age-specific labor force participation information, given in Table 3.1 and recapitulated in Text Table 5, indicates that self-employment of some form (ownership, own-account, or family labor) accounts for 28-29 percent of urban employment for both sexes and around half of rural employment; the latter tend to be family-owned agricultural units, the structure of which differs from that of nonagricultural enterprises. The LFSES finds that 11 percent of urban employment is in agriculture. The same survey finds that 41 percent of rural activities are in industry or services (MOPI, 1987, p. 49). Employment is diverse in both urban and rural areas. It is only in the estate sector, with its particular socioeconomic characteristics, that self-employment is unimportant (3 percent of women and 6 percent of men). Finally, since this survey records the formal as well as the informal sector, attribution of employers as self-employed overstates their importance in the informal sector.

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[24] Most of the enterprises we describe in this sector are own account or small enterprises. Males account for a vast majority of the former and the near-totality of proprietors of the latter. A separate category of distinctly women's enterprises is described later.

The Marga Institute survey of the informal (actually microenterprise) sector of Colombo City (Marga, 1978) considers another aspect of productive enterprise, those employing five or fewer persons in urban Colombo. It does not determine the legality of these enterprises. Most entrepreneurs were found to be of urban origin, so this sector in Colombo does not represent "marginalized" migrants from agriculture. This phenomenon is notable also in the importance of Colombo as place of birth in the volume of lifetime migration to Gampaha, the site of the export processing zone (Census, 1981), and as origin of entrepreneurs to the Mahaweli areas -- 25 percent of migrants or 16 percent of all entrepreneurs, the largest class after local persons, 38 percent (Kerkovan, p. 6). Colombo appears to be a cradle of enterprise as well as a recipient.

Total small-scale enterprise employment in the Marga survey was 34,390 in 30,058 units, compared to 144,204 employed in the formal sector at that time (Marga, 1978, p. 26). Both the absolute size and the relative share of SSE employment (19.3 percent of employment) are clearly underestimated, however (Hettige, 1986, pp. 17-18). These underestimations are due to: (1) Timing: a construction downturn at the time of the survey led to an underestimate of SSEs in construction; (2) Sample frame: domestic service, irregular services, illicit (de Soto definition) trade, and other activities were seriously under-represented in the sample; (3) Arbitrary limits: the survey was confined to the administrative limits of Colombo city, not the Metropolitan Area which extends beyond; SSEs in some subsectors might be concentrated in lower-rent urban and peri-urban areas and thus under-sampled; and (4) Labor force definition: the survey determined that 9,898 workers, or 29 percent of the 34,390 SSE workers, were not Colombo city residents. No such attribution was possible for the formal sector, creating a bias in determining the denominator in calculating employment share of SSEs.[25]

The survey took place shortly before the liberalization of 1977, with ensuing structural changes and new opportunities in retail trade, transport, construction, and mechanized repair work. SSEs provide at least 20 percent of employment in the Colombo metropolitan area (particularly since 1977), a figure considerably lower than the self-employment figure given in the LFSES above, but their precise contribution is subject to conjecture.

Even this figure cannot be extrapolated easily, due to Sri Lanka's unique urbanization pattern. Colombo urban growth has lagged behind that of other urban areas and its population share, which rose from 20 percent in the 1946 census population to 22 percent in the 1971 census, has actually declined (administrative limits only) to 19.5 percent in the 1981 LFSES. Its role as a source of workers and entrepreneurs elsewhere has been mentioned.

The ARTI Baseline Survey of Small Mahaweli Enterprises, performed for USAID in December 1987-January 1988, provides an interesting composite picture of enterprises in the Mahaweli zone from its census of all enterprises. Some summary statistics that indicate the range of this sector are given in Text Table 7, which represents both census and sample survey data.

First, nearly all of the enterprises in the region would have been included in the Marga Colombo definition: 95 percent or more of the firms had fewer than five employees. The exception, manufacturing, was biased by rice mills which employ nine persons on average. Only a third would be in the unregistered or informal sector by the de Soto definition, but this varies from 87 percent in animal husbandry and fisheries, which are over 99 percent rural, to only 24 percent for trade, which is 21

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[25] This implies that the number of Colombo residents employed in SSEs -- 24,490 -- is less than the total number of firms in Colombo -- 30,058, highlighting the measurement problem of urban or peri-urban domicile.

percent urban. We do not have information on the relation between registration and firm size by sector.

Capital varies widely among SSEs in the region, with the capital-labor ratio widely dispersed even within the same sector, as is common in developing countries (Little, Mazumdar, and Page, 1987). The value of fixed assets is highest in trade (Rs. 54,600 per firm) and lowest in animal husbandry. Even in manufacture, with assets of Rs 35,200 per firm, only 24 percent of the assets are in the form of machinery and equipment, a smaller share than in services. Even manufacture relies more on tools than on machinery, and its most important investment is in transport equipment.

Half of the labor force is made up of proprietors, a third paid employees, and the residual unpaid family labor. As mentioned earlier, migration in Mahaweli enterprise appears to be urban-urban and urban-rural rather than rural in origin as posited in the ILO and Marxian/dependency models; the largest share of entrepreneurs (38 percent) is of local origin, followed by Colombo (26 percent), and Kandy (17 percent). Labor mobility does not seem to be a problem in enterprise development. Finally, the educational distribution of entrepreneurs appears to mirror that in the population as a whole, with 7 percent having GCE A-Level or higher, 18 percent O-Level, a half secondary graduates only, and only 27 percent with a primary education or less. This does not support arguments of structural unemployment among GCE holders. As would be expected, the educational distribution is similar in manufacture, trade, and services, but animal husbandry and fisheries have larger percentages of entrepreneurs with less formal education. Finally, not reported in the table, the largest share of all enterprises operates only part of the year, and most workers have other occupations.

A fourth body of information comes from the Survey on Household Economic Activities 1984/1985 (defined as at least one person in the household self-employed in either a primary or a secondary activity). This survey must be used with caution since it (1) specifically excludes the "Employers" category by definition (this would be 3-5 percent of men and 1 percent of women, outside the Estate sector, in the LFSES, looking only at primary activity); (2) is not designed to capture illegal activity;[26] and (3) because the only report available, the Second Report (MOPI 1986b), gives a breakdown only for combined agriculture (seasonal), agriculture (nonseasonal), and nonagricultural. The economic and behavioral processes underlying the first two types of enterprise (own-account agriculture) are presumably greatly different from the third, which cannot be distinguished in the published data.

In the urban sector, the report indicates that 0.7 million (22 percent[27] of the 1981 population classified as urban) lives in households reporting household economic activities. Colombo District reports 19 percent overall. If these are mostly nonagricultural, this indicates that one household in five is engaged in household economic activities. For the rural sector the equivalent figure is 6.6 million or 57 percent. Table 6.3 compares the number of households undertaking such activities with the 1981 population by district, but the density measured must be used with caution for lack of understanding of the true population "at risk" of undertaking informal sector activities. Also, the published information does not provide a confidence interval for the estimate, so the robustness of the figure is unclear. Further analysis of these data is called for.

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[26] It is unlikely that any official GSL undertaking could capture illegal activities. In addition, since this survey is conducted by the government, it suffers from severe under-reporting of income and employment.

[27] Caution in using these (and similar) figures is called for since the numerator is from 1984 and the denominator, 1981. Between use of different years and normal survey error of estimate, the population living in such households in Moneragala District slightly exceeds the <u>total</u> 1981 population.

Table 7
Baseline Survey of Mahaweli Enterprises
Summary Table: All Mahaweli Enterprises

	Animal Husbandry Fisheries	Manu-facture	Trade	Services	TOTAL
Distribution by Sector	14 %	18 %	55 %	13 %	100 %
Rural Proportion	99+ %	93 %	79 %	70 %	83 %
Microenterprises:*	100 %	89 %	95 %	95 %	95 %
Unregistered firms:**	87 %	36 %	24 %	38 %	37 %
Employment: Average Size	1.6	2.5	2.2	2.0	2.2
Type of Labor:					
Active proprietor/partner:	66 %	35 %	50 %	53 %	49 %
Unpaid family labor:	36	14	22	12	19
Paid employees	9	50	27	35	32
Percent Female of category:					
Active proprietor/partner:	13 %	7 %	14 %	5 %	11 %
Unpaid family labor:	31	28	44	16	36
Paid employees:	0	10	8	0	7
All:	16	11	19	4	15
Fixed Capital Assets:					
Value per firm (Rs 000)	12.2	35.2	54.6	29.7	30.4
Percentage of value in:					
Land	71 %	13 %	20 %	21 %	21 %
Building	5	30	45	37	41
Machinery/Eqpt.	20	24	12	36	16
Transport Eqpt.	4	32	23	6	22
Educational Level of Entrepreneur:					
Primary Graduate or less:	40 %	29 %	24 %	28 %	27 %
Secondary Graduate:	46	48	49	46	48
O-Level:	13	16	19	17	18
A/L or higher:	2	7	8	9	7

Origin of Entrepreneur

Local	Colombo	Kandy	Other Migr.
38 %	26 %	17 %	19 %

* Defined as: less than 5 persons.

** Defined as: not registered with ANY government agency, including local government, Ministry of Local Industry, Ministry of Textiles, Mahaweli Development Board, and others.

The LFSES of 1985/1986 also considers the economic importance of private enterprise beyond its employment impact. This survey covers *all* business activity, in the formal as well as the informal sector, and so this information contributes to our composite view of the Dhanopayana Sector. While MOPI (p. 53) acknowledges evident underestimation of income, we cannot even guess the bias for components of income. We would expect that profits are the least recorded by other parties and easily concealed.[28] If so, the decomposition of income by source is startling (Table 8). Reported "profits from business" dominated "wages and salaries" as a source of income in the urban sector and had equal importance in the rural sector. MOPI shows that while the average contributions of profits is high, it is highly concentrated, with a Gini of 0.62 as compared to a Gini of 0.31 for wage and salary income in 1985.[29] This is reconcilable with the Household Economic Activity survey which, overlooking owners, finds one-fifth of the urban population and nearly three-fifths of the rural population in households with such activities. Sri Lankan households cannot be differentiated by classifications which dichotomize labor use.

Table 8
Decomposition of Income by Source

Source of Income	Urban		Rural		Estate	
	1985	1981	1985	1981	1985	1981
Wages and salaries	33.3	49.8	35.2	41.5	78.6	84.9
Profits from business	40.7	23.7	34.5	29.0	4.2	4.0
Goods & services	4.7	2.0	5.2	1.4	10.1	4.2
Home grown produce	0.9	1.5	8.1	11.5	3.6	3.5
Rents, dividends, interest etc.	2.8	3.4	0.9	0.7	0.4	1.0
Other cash	9.8	11.4	8.7	11.4	1.9	4.2
Rental value owner-occupied housing	6.7	8.0	4.5	4.4	0.2	0.2
Food stamps	1.0	n.a.	3.4	n.a.	1.0	n.a.
Total:	100.0	100.0	100.0	100.0	100.0	100.0

Source: MOPI (1987), p. 58.

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[28] An alternative interpretation, less favorable, is that profits accrue entirely to a capitalist class which is so far above the threshold for receiving poverty-based benefits that (unlike wage earners) it has no incentive to underreport income. This appears unlikely since a major source of profit appears to be sale of agricultural goods produced on own account.

[29] MOPI concludes from this that "profits from business" is the major factor which determines the total inequality of income (page 59), and the only way to reduce inequality is to reduce inequality due to wages and salaries. This is incorrect: wage income is already fairly evenly distributed, while the Gini for profit income is not surprisingly of a magnitude more usually associated with distribution of wealth rather than income. The contribution of profits to total income inequality depends upon the correlation between household rank in profit income and rank in total income (see Pyatt, 1976), which cannot be assessed from this information. We propose that analysis of these data investigate the contribution of business income -- preferably disaggregated into agricultural sales and non-agricultural activities -- at various household income levels, not just to clarify this but to shed light on the contribution of private enterprise programs to broad-based growth in employment and incomes.

The survey of the effects of liberalization, performed in 1980, reports that unregistered firms could account for 44 percent of value added and 67 percent of employment in industry (Athukorala p. 83); the value added figure is not out of line with the Mahaweli evidence. The author finds suggestive evidence for a rapid shift in unregistered enterprises according to the changing economic incentives, with a catastrophic failure rate among existing firms (Table 6.2) of around 20 percent and the creation of new firms in the textile, food products, chemical- and rubber-based products, and non-metallic mineral products subsector. The failure evidence appears to be based on a panel study, so this failure rate may be normal for SSEs, with equal or better creation rates in the same or (better) more appropriate sectors. Athukorala suggests, without confirmation except for hand loom textiles (30,000 of 111,000 hand looms shut by 1980), that most failures were in subsectors competitive with imports, and that less capitalized firms closed rather than convert their production or raise quality to meet imports. The sectors of growth are the same ones detected in the ARTEP (1987) survey, and consistent with liberalization.

DEMAND FOR THE PRODUCT OF SMALL AND MEDIUM ENTERPRISES

Demand constrains expansion of all sectors, and microenterprises are particularly unable to create their own demand. A suggested model for analysis is that performed for the Mahaweli Enterprise Development project. This expenditure model suggests that in the Mahaweli region, changes in agricultural incomes and in outside investment in export-oriented ventures will provide a market for incremental small-scale enterprise output which will be sufficient to absorb the local population increase (thereby preventing fragmentation of agricultural plots), and even allow for a reduction in agricultural labor force.

The MED analysis uses an accounting framework to link growth in household (actually, individual) incomes from small enterprises to employment in agriculture export, and residual sales to the small-scale sector itself which, given fixed production coefficients, translate directly into employment. The growth in agriculture output is assumed to be exogenous -- driven by new technologies which require more inputs so that value added grows more slowly than output -- while releasing labor. Exports are mostly exogenous, net of the import component of local demand.

This sort of analysis must be used with extreme caution. An accounting framework is necessarily true if one ascribes no behavioral content to the parameters. This model is overly optimistic in the time path of impact projected when parameters are specified, and thus will lead to overestimates of the economic rate of return to SSE project interventions.[30] The evidence of Sri Lanka indicates that colonization zones such as Mahaweli have "leakages" resulting from the household nature of enterprise, which decrease the impact of donor assistance in the immediate future but build a multiplier over time as households begin to shift their local of economic activity to the locality. The other side of the coin is that other regions -- the Southeast Wet Zone for laborers and the Colombo metropolitan area for entrepreneurs, in particular -- will benefit from injections from this process in the beginning, but these injections will not be observed locally. We restate this to make our point clear: the multiplier assumed by the MED model exists, but will not be observed in the short term in the project area.

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[30] For various reasons one may prefer to use society's rate of time discount, which may be considerably lower than the market rate since society is immortal while individuals are not. A substantial literature exists on the uses and misuses of economic analysis in comparing uses of funds which are in fact incomparable.

In addition, there are conceptual difficulties with using a fixed multiplier as in the MED approach. The expenditure multiplier is not an exogenous parameter but the outcome of individuals' and firms' behavior. The immediate impact of autonomous shifts in investment is well known. However, investment may take forms as diverse as imported machinery or local construction, including public works. According to the form taken, the investment multiplier may be large or small.

Machinery is largely imported due to the absence of competitive local firms and to preferential bank credit (including negative real interest rates) for fixed capital investment (machines) rather than working capital (salaries and the hand tools which can make workers productive using more labor-intensive technology). On the other hand, construction and public works are labor intensive and heavy users of domestic resources, and would be expected to give an immediate boost to the local economy. However, ARTI has found[31] -- consistent with the observed volume of seasonal migration from the Wet Zone to the Dry Zone for other purposes -- that most construction labor is migrant labor (particularly in a colonization zone), so this boost would be lessened if laborers are part of household units with their home base in the Wet Zone. In that case, remitted earnings contribute to the economy of the Wet Zone. Contractors are also largely from the Wet Zone or Colombo, so their profits are also remitted.

We conclude that the well-known, up-front impact of temporary jobs created in construction constitutes a gain to the economy, but because of the high labor mobility it is not necessarily a gain to the construction/colonization area. Therefore, benefits deriving from linkages or secondary impact in the ERR calculation will probably not be observed locally. This contributes to donor pessimism. The World Bank (1988) also finds high leakages due to Sri Lanka's greater use of foreign contractor firms than is the norm in South Asia.

The survey shows that initially, if local small businesses are not well established (38 percent in Mahaweli are local), those from Colombo and secondarily, Kandy will be strongly represented. Colombo also dominates lifetime net migration to Gampaha in response to large-scale enterprise employment opportunities there, according to the 1981 census. This contributes to leakages until the families become well established and consider the region their home.

Transfer of rural savings to urban lending is a final source of possible leakage. To generate lending opportunities in the rural area, projects must be among the most profitable for the economy as a whole. The diversity of the Dhanopayana sector includes such potential investments. Another necessary condition is that incentives must encourage lending at rates approximating market prices (rather than subsidized credit which does not discriminate between highly profitable projects and projects less profitable). In the absence of this second condition, it is difficult for bankers (and impossible for researchers) to identify the most profitable opportunities. Rural savings are not lent locally, and the savings-investment linkage is broken.

Besides leakages, the expenditure multiplier may not have a local income impact (even when it works at the macroeconomic level) due to a low marginal efficiency of capital. This will be low, for example, for women's enterprises, which are undertaken to improve the standard of living of the family -- including human capital investment in children which is difficult to measure -- rather than to increase productive wealth. Women's enterprises may represent a large proportion of rural activity: while existing surveys do not let us distinguish it from women participants in household firms, we have indicative evidence in that the related phenomenon of housemaids international migration accounts for over half of overseas migrants. Second, the marginal efficiency

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[31] Wanigaratha, comment at presentation at USAID 25/8/89.

of capital may also be low when subsidized credit permits the undertaking of poorly justifiable proposals.[32] Third, it may be low when policy makers with a sectoral viewpoint propose projects with lower productivity than projects in other sectors. Fields (1986) does a back-of-envelope exercise of categorizing many such agricultural activities as low-productivity activities, potentially high-productivity activities blocked by institutional factors, and those which he believes require further study.

Caution must be used in transforming any accounting framework (true by definition) into a model. In this analysis, several potential problems exist with definition of exogenous influence:

- The rate of growth of agricultural output. Certainly, the vast majority of firms are closely related to agriculture, so a Mellor-based argument appears appropriate in rural areas. However, since the Dhanopayana sector exhibits high individual mobility (sectoral and geographical) within a household, the rate of growth of large- and medium-scale industry is also important.

- Agricultural technology which decreases labor needs per hectare over time. There is no empirical justification for this in a country with excess labor.[33] Credit schemes lead to "premature mechanization" by subsidizing capital purchases but not labor or the human capital component of labor input which has permitted the introduction of "micro-management-intensive" high yielding paddy varieties, integrated pest management, and other high value added labor intensive technologies elsewhere. Individual crops may benefit from imported technologies which are absolute cost saving even where relatively labor intensive. If employment is affected it is because of policy: farmers are not permitted to adapt technology or crops to the resources available to yield the highest returns; instead the resources are forced to adapt themselves to predetermined crops. This is implicitly recognized in the USAID Mahaweli projects which attempt to identify and introduce previously unknown agricultural products which are appropriate to the resource constraints of the region, but the principle is universal.

- Purchases of SSE products are a residual given exogenously determined income and exogenously determined consumption of agricultural products. There may be a class of products which provide such a residual, but we cannot identify it. Again, microeconomic analysis is of limited usefulness, since if all the above sectors plus the large scale (formal sector) is included, any econometric model would be "overdetermined" That is why a macroeconomic analysis is essential.

- The concept of a "sales per worker" parameter is untenable, if such a measure is assumed to be fixed. While there is strong evidence that increased sales has actually increased employment in retail trade in Indonesia (Nelson 1984), not just decreased underemployment, the use of a fixed parameter is not too strict.

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[32] This argument is independent of the out-lending argument given above.

[33] Mechanization may be rational under such circumstances if it reduces peak labor needs, at which time a labor-intensive technology may face labor shortages. Most paddy varieties are phototropic (growth triggered by day length), so that while seeding and transplanting may be scheduled to employ labor over a longer period of time, the labor demand at harvest will be simultaneous.

Export sales are taken as exogenous. If so, and given the above, any residual lacks real economic content -- it is purely a residual, not part of a sector with its own dynamics.

This is not intended to tear apart a brave effort to calculate the constraints to small enterprise growth. Our conclusions are meant to provide guidance for a more accurate model of Sri Lankan enterprise.

We conclude that, first, we cannot provide an empirical model for demand for SME products, not just because we cannot identify this sector in Sri Lanka, but because any model requires a general equilibrium framework. This conclusion is not based on theoretical superiority of the concept, for sector analysis serves well for many purposes. It is based on the high mobility of labor in Sri Lanka, with the evidence of close family support shown in "educated unemployment," in overseas migration, and in other aspects, which demonstrates that the proper unit for study of expenditure is the family (an unobservable unit, as compared to the household which is observable but which is not the decision-making unit). The members of the family may be geographically dispersed.

POTENTIAL ASSISTANCE TO SMALL ENTERPRISES

In this section we review the potential pool of entrepreneurs for an enterprise strategy. A particular class of survival-oriented, female-headed enterprises is behaviorally different from those considered in a growth model and is treated separately. Further, various support institutions are necessary for a dynamically healthy enterprise sector. We look at financial intermediation, at linkages between the larger modern enterprises and smaller labor-intensive firms, and at the policy environment in Sri Lanka, from this viewpoint.

This survey did not consider legal aspects of informality, that is, what are legal requirements, health and other regulations, and are they sufficiently onerous to lead to informality in the de Soto sense? The observations of the various surveys regarding the two-way flow of factors between the registered and unregistered sectors leads us to believe that this is not a significant constraint, and so it is not treated below.

Entrepreneurship

Biggs et al. (1988) present strong evidence under AID's Employment and Enterprise Policy Analysis project that in East and Southeast Asia, Large-Scale Enterprises (LSEs) are the major source of entrepreneurs for dynamic SSEs as workers quit to form their own business, bringing technical, managerial, and organization skills, and possibly discipline. Such SSEs can and should be differentiated from those which serve as reservoirs of underemployment -- the self-employed person who works for an hourly wage far less than he or she would accept in the employ of others.

Sri Lanka evidence suggests that unemployment is concentrated among first-time job seekers, with little job quitting from LSEs or other formal sector employment. The age-specific open unemployment rate declines rapidly. In Text Table 9, the information is not disaggregated by sector, since the concept of unemployment by sector is vitiated by the strong evidence of labor mobility and good communications facilitating job search between regions.

Table 9
Age and Sex Specific Unemployment Rates

	Numbers in Thousand				Rate (Percent)	
Age	Total	In-active	Employ-ed	Unem-ployed	Partic. rate	Unemploy-ment
			MALE			
15-19	854	466	278	111	45.4	28.6
20-24	733	92	491	149	87.4	23.2
25-29	586	20	506	60	96.6	10.6
30-34	516	19	462	34	96.3	6.8
35-39	456	10	426	21	97.8	4.7
40-44	355	13	323	18	96.3	5.3
			FEMALE			
15-19	828	627	124	76	24.3	37.8
20-24	772	399	214	158	48.3	42.4
25-29	673	362	224	86	46.2	27.7
30-34	567	313	212	43	44.8	16.9
35-39	490	269	204	17	45.1	7.7
40-44	372	204	158	10	45.2	6.0

Source: MOPI 1987, Table 6.1

The implication of the high unemployment rates for the young, widely discussed in the Sri Lankan popular and academic press, is that there is discontent among the not-yet-employed young, particularly those who have received higher levels of education (GCE O-Level and A-Level). These school leavers are unprepared to be entrepreneurs, lacking experience in the technical, administrative, and financial side of business. Government policy targeting such a group might succeed, but only for a portion of this group, and at a high cost per business established because of training costs and related factors. On the other hand, the evidence of Text Table 9 indicates little job quitting and frictional unemployment among males, as indicated by a high participation rate and low open unemployment rate above age 30. This lack of mobility among those who are established in LSEs sets Sri Lanka apart from other countries in which this is the major pool of potential entrepreneurs.

Second, until recently (and probably still true in fact if not in law), government hiring policies favored the unemployed. This has had several negative repercussions on the economy. First, the Civil Service has been denied access to those with on-the-job technical or administrative skills. Second, this policy restricts mobility in the formal sector, including public services. This has adversely affected government sector productivity, including government private sector programs.

By elimination, the most promising pool of potential new entrepreneurs lies in agriculture and returned migrants who are not settled in formal sector positions. These two groups bring professional experience; if policy focuses instead on the school leavers and the ultra-poor without the work skills and discipline required,[34] the process of microenterprise formation will be inefficient and costly.

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[34] This does not exclude those school leavers and the ultra poor who do have these qualifications; we are talking about appropriate target groups.

Women's Enterprises

There exists a class of enterprises which appears to be more important in Sri Lanka than elsewhere. This class is motivated by limited income goals and will not respond to microenterprise programs or policies. It is almost wholly the domain of women. Such women's enterprises (which must be treated differently from female-headed, dynamic SSEs in analysis and policy) are not sources of employment creation, but serve an important purpose in income generation for investment in the family, especially in children. They are not a locus of investment and growth as conventionally measured. The experience for small enterprises is similar to that for international migration of women. In both cases the purpose of the activity is investment in living standards: the home, nutrition, education and health of the family, especially the children. Text Table 5 indicated that in 1985/1986 self-employment represented the same share of the active labor force for women as for men in the urban area (though a third the number), and greater than that of men in the rural sector (reaching half the size). However, a much smaller share of women are employers, and a marginally smaller share own-account workers. Women tend to work within their household, and largely on their own account or as unpaid family laborers.[35] These findings are confirmed by the Mahaweli study.

The particular reasons for the existence of these enterprises should not be overlooked because of the finding that they are not dynamic sources of growth. They provide an important consumption value (including investment in children and health), particularly to the poor, and their consumption orientation is based in part on the low opportunity cost of women's labor which can be expected to change as that cost rises. Also, we are referring to a particular set of enterprises, and not to the participation of women in the general enterprise sector, which is significant: 7 percent of manufacturers and 11 percent of proprietors overall in the Mahaweli census (Table 7). Continuing the parallel with international migration, the Marga study of returned migrants in the Asian Migration to Arab Countries Study (n.d.) provides case study evidence that many women migrate to seek temporary purchasing power but do not consider transforming this into productive investment. Such results suggest a potential for PVO programs developing women's management skills.

We do not pursue this topic further since the information has been acquired tangentially in household and migration surveys, and not to measure or understand such enterprises. We understand that some anthropological studies have begun to shed light on this type of enterprise. More study is necessary for incorporation into a CDSS.

Finance and Credit

Sri Lanka has an excellent rural savings mobilization program through the cooperative movement and the national savings bank, and is in a better position for microenterprise generation using "own capital" than most countries. However, the schemes are continually in danger of politicization, which has been resisted to varying degrees.

A dynamic small business sector requires finance. Equity is the most important source, and a criterion looked at closely by all potential investors or lenders. Two rich sources of equity capital for beginning and expanding small enterprises -- a successful

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[35] A problem of definition arises in surveys of family labor, as to who are the true decision-makers. "Unpaid family labor" is not subsidiary to "employers" or "own account."

savings mobilization program, and assets of returned international migrants -- are potential sources of inexpensive and reliable finance. However, long-standing government policies favoring subsidized institutional credit have undermined the sustainability of credit. Special lending programs with subsidized interest rates and an administrative bureaucracy should be dismantled, but innovative approaches should be considered to develop commercial ties between returned migrants and the formal banking system.

A number of studies demonstrate that Sri Lanka has one of the most successful programs for savings mobilization in the world, particularly through the cooperative movement (Sanderatne 1986, 1988b). The scale and increase of deposits in the largest of these, the Cooperative Rural Banks (CRBs), is detailed in Table 5.1, and in real terms in Table 5.3, where real deposits per capita have been growing well in excess of 10 percent since 1982, until they stopped growing in 1988. The key to this growth has been their ability to pay positive real interest rates, as shown in Table 5.5.

Sri Lanka's financial sector contains a large number of finance companies which also pay market interest rates and which lend to the largely urban, high-profit sector. In exchange for the higher interest rate, the depositor faces a higher degree of risk; in 1989 some of these companies -- which are covered by no depositor guarantee -- have been failing due to illiquidity and insolvency.

As a number of authors have argued,[36] subsidized credit has not contributed to growth but has led to entrepreneurs expending energy to obtain access to this credit. Worse, the development of financial intermediation is impeded, because the financial units which can mobilize savings effectively cannot lend these funds profitably, so place them in safer, high-yielding investments while simultaneously channelling subsidized funds in the other direction from the government. The financial units may not supervise these funds correctly. Finally, the view of the borrower that these are government subsidy programs and do not need to be repaid politicizes the financial institution itself and risks damaging its savings mobilization function.

Own-savings are the major source of finance for capital investment in micro- and small-scale enterprises worldwide. The major sources are the owner, his relatives, and his friends. Own-equity avoids overleverage using credit, particularly during the rocky start of a small firm. Sri Lanka has a strong advantage in having three sources of such capital: existing small enterprises (which may invest their profits in creating formal sector firms, Marga, 1978), own-savings from savings mobilization schemes, and the remittances of international migrants. These would provide the base for financial programs to improve enterprise development.

Supplier credit and formal sector credit (banks and NBFIs such as finance companies or leasing companies, both of which are quite strong in Sri Lanka) become important particularly for working capital. Sanderatne (1988a) demonstrates that a significant share (one- to two-thirds) of informal sector credit is interest free, as reported in Table 5.4, and that the average interest rate on such credit is around 25 percent (nominal), though he argues that even free credit may have some other price in terms of social reciprocity or maintenance of monopoly in the input or product market by the lender.

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[36] See Sanderatne's (1988b) strong argument in the Sri Lanka case. His argument is strengthened by his own admission of involvement in promoting the subsidization of credit in the past and his criticism, as a participant in the process, of the logic used to justify such programs.

Finally, the banking sector does not appear to be providing the assistance it could provide to the target groups of entrepreneurs identified above. This does not call for special credit programs; it would be preferable to dismantle the programs which exist and which distort investment decisions through subsidies and targeting. Rather, it calls for establishment of regular client relationships by newly returned migrants, and rural households with agricultural-related credit needs but other sources of income, to facilitate normal banking ties.

Demand for SME Products

Demand for the products of SME labor is clearly essential to an employment strategy working through such enterprises. This demand can be final demand or intermediate demand obtained through linkages with LSEs or through traders who pass on export demand. The GSL is attempting to build demand for many of the smallest and most traditional subsectors through definition of the basket of goods eligible under the Janasaviya program. We argue elsewhere that this may add little to *incremental*, rather than average, demand. We have also argued above that a macroeconomic framework is necessary to understand the effects on SMEs of donor interventions, given the diversity of the Dhanopayana sector.

According to available evidence, linkages are weak between the LSE export sector that imports most of its inputs, and the varied but generally labor-intensive domestic firms. The original reason for this is the previous import-substitution orientation: high levels of protection made local providers noncompetitive. It will take time to overcome the consequences of import-substitution policy; there is only limited evidence of this occurring to date. The World Bank (1988, p. 5) concludes that liberalization has led to increased efficiency within the existing structure, but no change in the structure itself. Partly this is intentional, based on the desire to create a free trade zone enclave rather than to transform the entire economy to an export orientation. Whatever the reason, the growth of employment through exports is constrained by existing policies and has not continued as expected.

ARTEP (1988) discusses the Sub-contracting Exchange (SCX) set up within the Industrial Development Board (IDB) in 1980, to assist SMEs in obtaining knowledge of organizations and firms which would like to procure orders from SMEs, provide information to the large-scale sector regarding the production capability of the SME sector as potential subcontractors, and provide assistance to the SME sector in meeting quality standards and delivery schedules on subcontracts. It is difficult to make such a scheme work in a hostile policy environment like the one SMEs face: while import quotas have been transformed into tariffs and thereby made more transparent, the effective rate of protection of domestic value added (ERP) remains close to 100 percent (IBRD 1988, p. 6). This encourages export industries, particularly garments, to use foreign textiles, thread, and other inputs, and contributes to the low domestic value added content of exports and the low linkages with other sectors. At the same time, domestic producers concentrate on the still-protected local market, taking advantage of liberalized import of materials (from which immediate, one-time gains were made after 1977), rather than the dynamic gains to be made from the high-volume, low-unit-profit export market. Inter-industry and inter-sectoral linkages can be developed only at great difficulty in such a policy environment.

While this study did not do a detailed study of SCX, any possible success of this type of activity will be in spite of the policy regime, rather than building upon it. Its success will also be problematic because it attempts to do what bureaucratic administrators are poorly equipped to do well. ARTEP (1988, p. 78) cites its earlier study finding SCX ineffective; this study found that six (of a sample of 226) rural firms had heard of the program and used it, compared to nine which subcontracted without using the exchange. The comparable figures for semi-urban firms are one firm

which heard of SCX, and one firm which subcontracted without SCX. A Review Committee of the IDB identified working capital as a barrier, and lack of capital precluding quality control needed for upgrade. The Committee called for rectifying these problems through broadening the authority of SCX and strengthening its staff. The opposite is, in fact, called for: continuing to reduce protection so domestic firms can compete with imports in selling to exporters who now use imported inputs and capital.

Linkages between formal enterprises and others appear to be stronger through the factor market than these determined through the product market. The measures suggested above are needed to improve the product market linkages.

Poverty

Poverty alleviation is not the subject of this study. Since poverty and income generation are closely linked, particularly in the domain of micro and small enterprises, a short description of the findings of the AID/PPC/CDIE Microenterprise Stocktaking (Boomgard, 1989) is given.

The stocktaking study identified three distinct but overlapping groups with distinct needs: the "poorest of the poor," who require a community development approach to meet their needs, "microenterprises," and "small-scale enterprises." The second and third groups are already distinguished by certain market protection which small enterprises receive, perhaps on a very local scale. The important finding is that a microenterprise approach is inappropriate for the poverty group, which is of greatest interest to the GSL and many NGOs. Such an approach would not target the poor.

This study has identified strong points of the Sri Lankan economy for employment generation in which the poor share but imperfectly, including level of nutrition and education, especially in the plantation sector where there may be certain severe constraints on mobility. While there is an overlap between the "poorest of the poor" and the microenterprise targets, a microenterprise policy should concentrate on those most able to create viable enterprises, including those in the rural sector with savings and informal sector work experience, and returned migrants to their own villages (a smaller number), to provide employment opportunities for the poor.

A separate study has been commissioned by USAID Sri Lanka to investigate strategic options for poverty alleviation.

POLICY ASSISTANCE

We consider three sorts of policy here: policies specifically designed to affect SMEs, including microenterprises and the informal sector; those intended to have sectoral impact in which SMEs are affected; and the effects of the macroeconomic policy regime on SMEs. The policies may be those of the current GSL, a holdover of the policies of past governments, or the policies of NGOs. Our findings are proposed not in resistance to these policies but as guidance for policy makers and donors in framing a more appropriate policy framework.

Policies to Affect Small Enterprises Directly

Small enterprise policies face an immediate problem in that the Dhanopayana sector cannot be identified with either SMEs or the informal sector. These two characteristics are only tails of a statistical distribution which begins with microenterprises (or even household economic activities) and ceases to be defined at the top only with the

presence of certain attributes of the classical formal sector, such as form of management and access to capital markets. With such continuity, EEPA findings (Biggs and Oppenheim, 1986) provide several cautionary rules:

- Successful SME policies create a "missing middle," if SMEs compete more successfully against nearly identical medium-scale enterprises (MSEs) selling similar products; these MSEs are already threatened from above by LSEs and, in Sri Lanka, imports under the current policy regime. Over a period of time this leads to atrophy of the middle scale, the most important part of the Dhanopayana sector. Without a middle, growth becomes polarized in the very big and the very small, as found in the Philippines.

- Policies should lead to self-selection of target groups, rather than selection by administrators using other criteria. The latter method leads to politicization of programs, patronage, rent-seeking behavior as more profitable than productive effort, poor targeting, and hence low impact per cost. Sri Lanka has been particularly sensitive to both the inegalitarian aspects of such policies and to the budgetary cost of poor targeting, and the GSL or NGOs should consider such problems in design of future policies. To be more concrete in the types of policies we recommend, self-selecting policies are those under which firms would find it more profitable, given market conditions, to use techniques which are labor or unskilled labor intensive; to upgrade skills of their workers; to produce for export rather than <u>just</u> for protected domestic markets; to seek local subcontractors, jobbers, or suppliers rather than importing; or to use local sources of finance rather than apply for government benefits. They are not necessarily market based: South Korea in particular has been successful in devising subsidy programs which reward successful exporters while leaving it up to producers how to achieve that end.

- A niche will remain for "unapproved" industries (Table 6.1) as long as policy does not disfavor them. ARTEP evidence shows that some may thrive in an improved domestic market, through cost reductions brought about by liberalized access to imports, and potentially through exports. Others may be transformed into higher value added products with a better technology, and some are destined to decline with economic growth.

Our analysis is not intended to devolve into a list of examples. These are proposed as general rules for evaluating prospective policies. Nonetheless, we have identified several policies which should be reviewed closely: the Comprehensive Rural Credit Schemes which intend to favor small enterprises; the aspects of Janasaviya which single out the poorest as potential microentrepreneurs and try to encourage "unapproved" industries in consumption patterns; the SCX program; the IDB-ILO training centers for traditional handicraft skills; and others.

Sectoral Policies which Affect Small Enterprises

Policies aimed at particular subsectors may have a differential impact on SSEs and the informal sector. Credit subsidies in general have impeded the development of an integrated banking system capable of financial intermediation, so Sri Lanka's successful program of savings mobilization has not been extended into successful lending. In particular, the Comprehensive Rural Credit Scheme transforms rural lending into a social activity which prevents policy makers and bankers alike from identifying the potentially productive rural activities which the GSL and we believe exist and would like to promote, while savings mobilization both from the banking system and from NBFIs has benefitted primarily urban firms with identifiable high productivity.

Policies which encourage agricultural producers to concentrate on particular crops, whether paddy or plantation crops, discriminate against those who would use their land for uses with higher economic and financial returns. Several authors have commented that a fraction of the resources put into rice self-sufficiency over the past 20 years could have financed enough expansion of tea to finance the import of all rice for consumption (Fields, 1976). This is besides the point, since policy makers 20 years ago generally believed that international terms of trade were moving strongly against tea. The advent of the Green Revolution in rice at that time makes the point a difficult one to re-argue in retrospect, but the general point that the government should not force landowners to produce particular crops is still valid.

Macroeconomic Policies which Affect Small Enterprises

The overall policy environment was discussed in Chapter One. To recapitulate aspects relevant for SSEs, a high effective rate of protection of about 100 percent serves as an obstacle to linkages between exporters and domestic firms. Presumably the ease of direct import under the liberalization scheme hurts indirect importers. On this point, ARTEP evidence is that indirect importers were helped immensely by liberalization compared to their disadvantage under the previous policy regime, but efficiency alone improved within the sector. Now, with such "comparative static" improvements largely realized, policy must seek dynamic comparative advantage.

Monetary and financial policy: the Central Bank has restricted credit during the current period of austerity by imposing direct ceilings on lending. This hurt SSEs in particular and financial intermediation in general, for lending criteria were not based on most productive investment under such a system, but on who has access to credit. This discriminates against small and medium enterprises in general, and within the sector favors rent-seeking behavior rather than productive investment, even independent of the special advantages analyzed above.

Tax policy has a strong impact on particular subsectors as discussed in Chapter One. The taxation of economic rents in the plantation sector has discouraged productive enterprise in that sector, and is not justified now that most of the foreign-owned plantations which were accused of abusing monopsony power are now state owned. However, we have no information about whether the subsectors in which small enterprises have a potential competitive advantage compared to larger ones are those which are more heavily taxed. Since a Presidential Commission is investigating harmonization of the tax system, any recommendation here would be obsolete before it could be incorporated into the CDSS.

Regulations, including labor laws, registration, and various other requirements for business, do not appear to be an impediment to business growth in Sri Lanka. We have noted the substantial movement of both labor and capital in both directions between registered and unregistered enterprises and the interdependency of the two. The division of markets between registered and unregistered firms appears to be determined by the particular subsector and degree of urbanization rather than by any legal or regulatory impediments imposing artificial dichotomies.

In general, then, there remains substantial scope for policy reform which will improve the functioning of the economy in general, and will also improve the economic environment for investment in small enterprises and increase their share in national output and employment.

CHAPTER SIX

CONCLUSIONS

The puzzle-like quality of the Sri Lankan labor market is illustrated by a recent World Bank appraisal of the Sri Lankan situation (World Bank, 1988, Vol. II, pp. 1-2):

> High unemployment and macro-economic imbalances have been chronic. . . . Pressures on the labor market began with the expansion of health programs in the early 1900s. . . . Thereafter Sri Lanka's population growth rate tripled. There was a transition from a land-surplus economy in need of immigrant workers . . . to a labor-surplus economy.

This essentially neo-Malthusian and dualistic view is followed by an account of ups and downs in the unemployment rate and the failure of liberalization since 1977 to bring about a long-term change for the better. It is assumed that only about 70 percent of some 130,000 new entrants have found employment and, if the trend continues, unemployment will exceed 20 percent by the early 1990s.

However, the Bank also points out that labor force growth is not excessive at 2 percent per year. It emphasizes the literate and educated character of the Lankan labor force and its versatility as well as the favorable economic conditions in the country. These include both favorable economic growth rates and the significant opportunities abroad, especially for the educated and skilled emigrants (nearly half the total). Finally, it points out that the Global 2000/Club of Rome scenarios do not apply: GDP growth rates are ahead of population growth rates; high unemployment has not resulted because there has not been large-scale, rural-urban migration; and agriculture continues to absorb labor force increments in stable proportions.

It has already been shown that the course of real wage changes in organized wage determination has not on the whole been disruptive. Pressures for money wage increases have followed price increases; Rodrigo (1986, 1988) and Korale (1987) emphasize this point. The picture is one of a weakening thrust of government intervention and a decline in real wages. Some changes are known such as the relative ascendancy of the estate sector. Many trends are not clear because of the changes in earners per household and households combining income from different sources. All that we can say is that government intervention has not been chronically disruptive.

A paradigm which may help explain observed paradoxes may be found in classical models of the labor market. In the Sri Lankan case these models would suggest that we have a labor market equilibrium at low levels of overall productivity because of various continuing inefficiencies in the economy, including in labor markets. These inefficiencies have been identified by studies which focus on the difficulties faced by enterprises suffering from the consequences of economic liberalization and the limitations of the infrastructure (ARTEP 1985, 1986, 1987). In a similar vein, Gunatilleke (1989) emphasizes the limitations of the external environment in utilizing the skills and enhancing the productivity of school leavers.

Studies by Korale, Gunatilleke and others emphasize the importance of the duration of wait for jobs. The economic significance of this has been well brought out by Glewwe and Bhalla (1985). Sri Lanka is justly known for its welfare programs. These include food stamps and free health services. There has also been a substantial increase in the ranks of the educated, especially among females. It seems logical that this should also lead to an increase in reservation prices, the wage which a potential entrant finds attractive enough to enter the ranks of the employed. Women, as secondary earners, do wait longer. Educated workers also appear capable of longer waits, a

situation which may be rendered desirable in terms of the discrete functioning of government sector labor markets and the other characteristics of the corporate sector labor market which penalize early entry into lower-paying positions. It should also be remembered that few of the unemployed come from poverty households: in the urban economy, only 6.9 percent of those with GCE (0) level and above came from poverty-level households. The proportion is of course higher in rural areas, but dire alternatives may be more easily handled there. As Karunatilake and Indraratna (1985) point out: "The only favorable feature in this situation is, that unlike in 1977, a fair number of the unemployed would not be in dire want" (p. 151). In terms of classical theory, what has been happening is a series of shifts in labor market behavior so that the natural rate of unemployment is fairly high.

The evidence suggests that there may have been an overall increase in the reservation price of new entrants, particularly as many were females and/or in rural areas. The costs of waiting are always the relevant prevailing market wage and these clearly increase the higher the level of one's skill or preparation and the longer one waits. The comparable benefits depend on whether waiting really does pay. For the educated, the public administrative machinery for recruitment and transfers are so sluggish that it may pay to wait. Many private employers penalize or stigmatize new entrants who accept low-paying or low-esteem jobs. However, the Gunatilleke study gives hope that new entrants are adaptive, and it is possible that there will be a fall in the proportion of the educated who are prepared to wait two years or more.

The other aspect of the Lankan puzzle deals with employment generation. Participation rates are not high and employment growth has been sluggish. The key to this situation is to increase the attractiveness of market opportunities. This can only be done by sustained efforts at improving productivity and market demand for the output of the different parts of the economy. We are not dealing with a Keynesian-type economy that will respond to efforts to prime the pump. Nor will this problem respond to crash efforts at job creation, such as the ones proposed to alleviate poverty. Jobs can always be created, but the focus must be on creating productive employment without burdening the exchequer or adding to the economy's external burdens.

This consideration is also relevant to the widespread concern with underemployment. Appendix B provides a simplified model of the Sri Lankan tea plantation sector. In this model, the daily wage and the days worked per year are averages (a) for a year and (b) for workers as a whole. This is supported by the notion that workers do not prefer to work additional days at the going daily wage as compared to other alternatives: own-account work, vacations, other nonmarket constraints. An intensive study of two Sri Lankan villages shows, for instance, that in Palledeltota, workers identified only 20 percent of idle time as due to lack of work in the tea plantations; in Kirindawa, the proportion was much less (Wickramasekara, 1983). The employer also faces a problem of absenteeism (both scheduled and unscheduled).

There will be differences among individuals around these averages -- some desiring greater work, others desiring greater leisure -- that would make a market supply curve upward sloping. This result would arise even if we are dealing with backward bending supply curves (Berg, 1961).

The market equilibrium cannot produce "full" utilization because there are non-wage costs of accommodating variance of individual behavior, and because of institutional constraints (shift schedules, weather, maintenance requirements, availability of spares and raw material, supervision, and so forth). One can envisage a market equilibrium where the equilibrium wage may be low and the level of employment maybe unsatisfactory, but improvement in levels of labor utilization in tea will depend on higher wages that will in turn depend upon better markets and improved organization.

It is assumed much too readily that for low-paid and underemployed workers the marginal utility of income is very high (almost infinite) and marginal utility of leisure is low because they have so much of it. But it is also extremely likely that low-paid workers might be too exhausted to work more without better pay and might find various kinds of non-work and self-activity less strenuous and more attractive when the pay is low. Fields (1986) provides many examples which emphasize this possibility.

The last point is to question the validity of the traditional dualist model of plantation agriculture. There is serious doubt that this was applicable even in the 1920s and 1930s. Plantation labor force creation depended upon *Kanganis*, labor recruiters and entrepreneurs, who used their position to infiltrate and modernize the neighboring agricultural lands (Bandarage, 1983). Others also cashed in on the opportunities which emerged. The labor recruitment system also focussed on recruiting families for the stability it provided. While technological change selectively weakened the need for male labor, the relaxation of constraints on labor mobility have also reduced the labor surplus aspects of plantation agriculture. The growth of nonagricultural activities in rural areas also weakens the case for labor market dualism.

SECTORAL INTERVENTIONS

The departure point for discussion of the potential for sectoral interventions to improve rural employment must be the seminal study by Gary Fields (1986). Fields documents and analyses major issues that have to be resolved in the rural labor market. He argues the need for resolving the sectoral problems using a multi-sectorial approach rather than the intra-sectoral approaches usually followed. He also underlines the usefulness of subjecting sectoral solutions to careful analysis in terms of costs and benefits that such programs generate both within and outside each sector, and the need to make evaluations of the alternative options in an objective manner.

Fields' departure from sectoral analysis is rare in Sri Lanka, particularly in the case of studies in agriculture and rural development. Multi-disciplinary research in this area in particularly limited and, multi-sectoral approach is completely lacking. There are problems and issues within the agricultural sector which cannot be explained in terms of labor market analysis alone. These include the operations of other markets within the agricultural sector -- the markets for land, for products, for inputs, and between farmers -- and the terms of trade between rural and urban areas. Both sectoral and national priorities affect the performance of the labor market.

Fields questions whether the Sri Lankan economy can contain its labor force growth within the rural sector itself, given internal and external options and constraints. The problem has two quite independent dimensions:

- The agriculture sector still has several identifiable but untapped potential interventions which, if a favorable economic and financial environment can be provided, will increase absorption of labor within the sector (this is the position of traditional analysts); but

- The sector overall is approaching its limits for labor absorption, particularly in relation to the additional investments needed to create income generation and employment opportunities within agriculture, in comparison to what could be achieved by investing the same sums in the best employment-generating, nonagricultural activities.

Thus, problems must be viewed not in isolation, as is usual with sectoral studies, but also longitudinally or in general equilibrium. Also, potential externalities must be kept in mind in economic analysis in selecting priorities for investment.

If the domestic smallholder agricultural subsector is characterized by low wages, low productivity, unemployment, and underemployment, should Sri Lanka rely on this sector for absorbing the increasing labor force? Should not potential benefits from that kind of policy be weighed against the opportunity cost of investment involved? In the 1970s and early 1980s, the common view was that Sri Lanka could increase without undue cost the capacity for labor absorption in agriculture. Past and current programs are based on this assumption. In the late 1980s the limitations of agriculture for absorbing labor have become more evident and so the common view is now turning to the need to speed up industrialization (MOPI, 1988)

However, to achieve this balance, more investment must be diverted from agriculture to industry and, given the labor surplus situation, to labor-intensive industry in particular. Since the country is capital scarce, and since an absolute[37] reduction in investment in agriculture (major infrastructure excepted, partly because it has already largely been completed) is politically and socially difficult to justify, Sri Lanka has sought foreign investment to achieve this.

At present, the contribution of agriculture to local industry is limited mostly to forward linkages. It is important to look at possibilities for rural-led employment according to the Mellor (1985) model. Solutions must be found to the shortage of capital and foreign exchange (ILO 1971). While improvements in other areas are being made, and labor gradually withdraws from agriculture, a turning point may be reached in the Lewis-Fei-Ranis sense. It is important to review price, subsidy, and interest rate policies periodically, giving due consideration to developments taking place within and outside agriculture.

SUMMARY OF FINDINGS AND RECOMMENDATIONS

OVERALL FRAMEWORK

I. Overall, there are three "nos" in Sri Lanka: there is no neo-Malthusian problem, no Todaro problem, and no dualistic economy problem, for tea is unimportant. There are also three "yeses" in Sri Lanka: there is a productive labor force and supporting social infrastructure; a helpful global economy; and promising experience with liberalization and imports.

2. There is also evidence of strong growth which is not captured by dichotomies such as formal/informal, large-scale small-scale, and so forth.

Income Growth

While growth has stopped in the last two years, the GSL cannot count on getting employment generation without it. Other restrictions to employment growth are not that important. This is a political problem, and the GSL must seek ways to resume growth for the employment potential be to recovered.

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[37] That is, the GSL would like to decrease the relative share of investment in agriculture while leaving its absolute share unchanged at the local level (Mahaweli headworks excepted). This requires a disproportionate increase in nonagricultural investment.

There has also been investment decline, including capital flight, lower foreign private investment, and inadequate financial intermediation from savings to investment. Investment has a lower marginal efficiency because inefficient State-Operated Enterprises (SOEs) have a larger share, and there is excess capacity due to stoppages.

Sources of Employment

Export Sector

Growth occurred after 1977, caused by a boom in construction and in the rest of economy; this growth was narrow based, and has since faded. It is blocked by investor lack of confidence, aborted liberalization, and other reasons.

Policy problems include: (1) the high remaining ERP means that indirect exports and linkages with labor-intensive segments of the economy have not developed; also functional income distribution has become more unequal; (2) quota allocation used as patronage resource limits production (also worsens functional income distribution), and builds public distrust.

Recommendation: We see no reason why exports should not be a major motor of employment growth if policy constraints can be gotten rid of. We recommend that analytic resources be developed to demonstrate the possible gains from an export-oriented policy.

Poor Enumeration Of Sector

Findings

- Looked at from the labor side, there is a lot of employment not captured in formal sector statistics. Survey evidence shows this is not residual low-productivity enterprise, but diverse scale, sector, productivity, with links to the formal sector (labor, capital, input-output).

- Sri Lanka has an excellent rural savings mobilization program through the cooperative movement and the NSB, and is in a better situation for microenterprise generation using "own capital" than most countries if savings schemes are not politicized.

- Many self-employment schemes target the wrong population group for generating productive employment among the poor. A better target group is returned migrants, in terms of rapid and sustainable employment generation.

- Women's enterprises are not dynamic sources of employment creation, but serve an important purpose in income generation for investment in the family, especially children. There is not much direct evidence for this assertion, but indirect evidence from studies of female international migrants.

Recommendations

Build on the existing savings mobilizations schemes (voluntary, positive interest rate, depositor free to use for own purposes), one of Sri Lanka's strong points, to develop sources of owner equity for small enterprises. Wind down special lending programs with subsidized interest rates and administrative bureaucracy.

Develop enterprise schemes based on return migrants (in particular), as well as other self-identified individuals who generate productive employment. Get rid of bureaucratic job creation schemes through government departments, state-sponsored subcontracting or small business linkage programs, for example.

Rural Sector

The rural sector employs a lot of people, but policy should look for first-best income opportunities. Problem is not paddy, but that farmers receive strong incentives to stay with paddy rather than accept other risks and possibilities. Fields shows rural sector already demonstrates potential for growth in nonagricultural activities. Forty percent of rural income already is nonagricultural (LFSES). We can look at a few proposed interventions, but this is not the correct way of looking at problem: we are no better than bureaucrats at identifying comparative advantage of the individual.

International Migration

Must treat as two separate groups: housemaids (majority) and all others. This involves two different sets of decision-making. Housemaids are income driven to support household and children, and savings do not go into so-called productive investment but into lodging and quality of life for household. This is important but the motivation is different from others.

Other migrants (most, not all -- depends on demand at other end -- male) are self-selecting for entrepreneurial character, and a minor temporary loss to the economy of skills for which they are recruited (note: urban bias). They return with the same skills PLUS organizational skill and work discipline, investible funds; possibly with ideas and export contacts.

Banking system has means of attracting migrants' foreign exchange (NRFC account), but not in providing appropriate services to these potential entrepreneurs on their return.

Migrants are not coming back. Delaying return or not coming at all (no way of measuring or even verifying). Political or economic motivation. Needs further study.

No information on magnitude or effects to economy of the Tamil diaspora and the growing Sinhalese second wave.

SUPPLY OF LABOR

Labor quality and adaptability.

This is a Sri Lanka strong point, and a source of potential employment creation.

Recommendation: Should not be treated only as partial source of the political problem, but open up potential productive activities and satisfaction.

Government investment to maintain quality is well placed. There is much budget discussion about the subsidy cost, but not put in perspective compared to subsidy elsewhere in the budget.

Recommendation: Continue priority to health and education. Should consider unemployed as pool of potential business people, not a problem. Develop strategies and policy accordingly.

Job search mechanisms and labor mobility

Findings:

Existence of important rural-rural migration flows and lack of much rural-urban "marginalization" points to advantages of small country, good communications and transportation. Should not have problems of structural disequilibrium -- create first-best income opportunities and evidence shows labor force will adjust.

Recent job search mechanisms and choices -- particularly among the educated -- are poorly understood in the structural unemployment models of most researchers. Wait periods for first jobs are lengthening (for several reasons).

Households and families

Good social conditions have raised the reservation price of labor. This should not be looked at as dissatisfaction -- need encouragement and opportunities for self-employment.

Recommendations:

Job creation schemes should focus on POLICIES and INCENTIVES which lead FIRMS, HOUSEHOLDS, and INDIVIDUALS to respond to income opportunities. This cannot be realized by setting artificial targets for public agencies, formal production targets, and so forth.

General Recommendations:

Sri Lankan authorities, scholars, and various donor agencies have been rightly concerned with encouraging employment generation and mitigating social ills such as unemployment. To a very considerable extent, Sri Lanka's problem is an employment problem, with the need to focus on ways of improving productivity at the workplace and more generally. Improvement of productivity depends on sound economic policies, including measures designed specifically to complement and render more effective the economic measures of liberalization.

There is also a need for sustained and continuous research and analysis which will provide a better understanding and interpretation of available data. Such research must focus on microanalysis of household and employer behavior. A macrostatistical framework cannot take us far without improved micro foundations. In a traditional society in the process of economic growth and transformation on the scale that is taking place today, this will require both field work and the contribution of the different social sciences.

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APPENDIX A

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APPENDIX A

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TABLE 1.1

SUMMARY INDICATORS OF GDP

Year	Current prices (Rs. billion*) GDP	GNP	GDP Deflator 1975-100	Constant (1975) Market Prices (Rs. billion*) GDP	GNP
1975	27.04	26.83	100.0	27.04	26.83
1982	97.53	95.57	248.8	39.20	38.41
1983	119.20	115.99	290.3	41.06	39.95
1984	147.34	143.94	341.6	43.13	42.14
1985	157.76	154.32	348.3	45.30	44.31
1986	172.44	168.58	365.1	47.23	46.17
1987	190.20	185.11	394.5	48.21	46.92

Year	GDP	Private Consump -tion	Government Consump -tion	Gross Invest-ment	Export	Import	Other
1975	27,041	21,649	2,697	3,540	7,306	9,291	1,141
1982	97,528	77,310	10,407	27,926	27,148	45,905	642
1983	119,202	93,075	12,727	31,584	32,016	50,381	181
1984	147,344	108,312	15,442	34,262	44,285	54,469	(489)
1985	157,763	118,101	19,170	37,651	42,394	62,396	2,844
1986	172,440	130,728	22,990	38,494	42,568	63,407	1,069
1987	190,197	142,278	25,519	42,322	48,570	69,212	720

		SHARES OF GDP			Marginal
Year	GDP	Private Consump-tion	Gov'Consump-tion	Gross Invest-ment	Efficiency of Investment (dGDP/I)
1975	100 %	80.1%	10.0%	13.1%	
1982	100 %	79.3%	10.7%	28.6%	0.686
1983	100 %	78.1%	10.7%	26.5%	0.891
1984	100 %	73.5%	10.5%	23.3%	0.304
1985	100 %	74.9%	12.2%	23.9%	0.389
1986	100 %	75.8%	13.3%	22 3%	0.461
1987	100 %	74.8%	13.4%	22.3%	--

* Billion: Thousand Million

Source: DCS, National Accounts of Sri Lanka 1975-1987, Table 1

TABLE 1.2

COMPONENTS OF GROSS DOMESTIC PRODUCT, 1986

	(Rs. billion*)		Share of GDP	
	Employee Compensation	Value Added	Employee Compensation	Value Added
Agriculture, hunting, forestry, and fishing	16.2	39.5	20.6%	22.9%
Mining and quarrying	0.5	1.7	0.6%	1.0%
Manufacturing	16.6	26.9	21.1%	15.6%
Construction	9.0	13.2	11.4%	7.7%
Electricity, Gas, Water	0.7	3.1	0.9%	1.8%
Transport and communication	7.3	19.7	9.3%	11.4%
Trade and tourism**	9.1	42.7	11.6%	24.8%
Banking, insurance, real estate etc.	5.9	7.7	7.5%	4.5%
Ownership of dwelling	--	2.6	--	1.5%
Government services	11.1	11.1	14.1%	6.4%
Private Services	2.3	4.2	2.9%	2.4%
Gross Domestic Product	78.7	172.4		

* Billion = Thousand Million
** includes import duties

Source: DCS, National Accounts of Sri Lanka 1975-1987, Table 10

TABLE 1.3

COMPARING GROSS NATIONAL PRODUCT AND GNP PER CAPITA USING DIFFERENT COST OF LIVING INDICES

	(1) GNP at Current Factor Cost	(2) GNP at Constant Factor Cost 1970=100	(3) Implicit GNP Deflator =(1)/(2)	(4) CCPI 1970 =100	(5) UCPI 1970 =100	(6) GNP Deflated by: CCPI (1)/(4)	(7) GNP Deflated by: GNP De-flator =(2)	(8) GNP Deflated by: UCPI (1)/(5)
1970	12,967	12,967	100.0	100.0	100.0	12,967	12,967	12,967
1973	17,737	14,016	126.5	120.7	113.8	14,695	14,016	15,586
1975	25,478	14,837	171.7	143.5	(276.2)	17,755	14,837	(9,224)
1978	40,242	17,329	232.2	164.8	270.0	24,419	17,329	14,904
1980	61,814	19,456	317.7	230.2	422.4	26,852	19,456	14,634
1982 *	92,720	21,968	422.1	301.1	570.9	30,794	21,968	16,241
1984	136,638	24,025	568.7	400.2	767.9	34,141	24,025	17,795
1986	159,892	26,433	604.9	438.5	794.1	36,464	26,433	20,134
1987	173,395	26,846	645.9	472.4	851.2	36,708	26,846	20,370
1988	198,107	27,507	720.2	538.4	977.4	36,794	27,507	20,269

PER CAPITA GNP (DEFLATED BY DIFFERENT COST OF LIVING INDICES)

	(9) Mid-Yr. Popula-tion (000)	(10) GNP Value (7)/(9)	(10a) DEFLATOR USED: GNP Deflator Growth Rate	(11) CCPI Value (6)/(9)	(11a) Growth Rate	(12) UCPI Value (8)/(9)	(12a) Growth Rate
1970	12,516	1,036		1,036		1,036	
1973	13,091	1,071	1.1%	1,123	2.7%	1,191	4.7%
1975	13,496	1,099	1.3%	1,316	8.3%	(683)	(-24.2%)
1978	14,184	1,222	3.6%	1,722	9.4%	1,051	(15.4%)
1980	14,783	1,316	3.8%	1,816	2.7%	990	-2.9%
1982 *	15,189	1,446	4.4%	2,027	5.2%	1,069	3.5%
1984	15,599	1,540	3.2%	2,189	3.9%	1,141	3.3%
1986	16,117	1,640	3.2%	2,262	1.7%	1,249	4.6%
1987	16,361	1,641	0.0%	2,244	-0.8%	1,245	-0.3%
1988	16,586	1,658	1.1%	2,218	-1.1%	1,222	-1.8%

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* Item	Real GNP	CCPI	UCPI
1982 Adjustment factor:	4.221	1.382	5.709
True Base Yr:	See **	1952	1982

Table 1.3, cont.

** GNP Series changed base from 1970 to 1982, as of 1982, to use weights from 1980/81 SCF. Raw numbers change to new series. Growth rates (Cols 10a, 11a, 12a) are adjusted to remove the following discontinuity in series (using provisional GNP data given in CB Annual Report 1983, page 3).

	Old Series			New Series			
	Current GNP	GNP at 1970 Pr	Deflator	Current GNP	GNP at 1982 Pr	Deflator	Series Shift:
1980	61,814	19,456	317.7				
1982	89,609	21,229	422.1	90,364	90,364	100.0	0.84%
1983	108,171	22,076	490.0	109,009	94,037	115.9	0.77%

Sources:

(1) Fields, 1986
C.B. of Ceylon, Review of the Economy 1982, 1983, 1987; Annual Report 1988, Table 1.
(4) Central Bank Annual Report 1985, Table 15
(9) Central Bank, Review of the Economy 1987, Table 48 (intercensal estimates by Registrar General's Department)

Definitions:

CCPI: Colombo Consumer Price Index
UCPI: Urban Consumer Price Index (an unofficial working index developed by Department of Census and Statistics based on 1980/81 Survey of Consumer Finances weights). Figures in parentheses are accorded low confidence by DCS.

TABLE 2.1

POPULATION BY RELIGION

Year	All	Buddhist	Hindu	Muslim	Christian	Other
			Number (000)			
1963	10,582.0	7,003.3	1,958.4	724.0	884.9	11.4
1971	12,690.0	8,536.9	2,238.7	901.8	1,004.3	8.3
1981	14,846.8	10,288.3	2,297.8	1,121.7	1,130.6	8.3
			Distribution (Percent)			
1963	100.0	66.2	18.5	6.8	8.4	0.1
1971	100.0	67.3	17.6	7.1	7.9	0.7
1981	100.0	69.3	15.5	7.6	7.6	0.1

Source: Department of Census and Statistics, Reported in MOPI (1988c)

TABLE 2.2

LABOR FORCE, EMPLOYMENT AND OPEN UNEMPLOYMENT BY SURVEY

Year	Survey Type	Labor Force (000)	Open Unemployment (000)	Unemployment Rate (Pct).	Sample Size
1946	Census	2,611.5	25.1	1.0%	
1953	Census	3,016.0	22.7	0.8%	
1953	CFC	3,254.0	540.0	16.6%	970
1959/60	ILO Survey	3,590.0	340.0	9.5%	10,000
1963	Census	3,459.0	265.0	7.7%	
1963	CFS	3,816.9	457.7	12.0%	4,984
1964	ILO Rural Employment	3,762.0	475.0	12.6%	1,824
1968	LFS	4,168.0	464.2	11.1%	13,000
1969	Rurl Cred/Indebtedness	4,127.4	455.2	11.0%	26,123
1969/70	SES	4,168.5	558.6	13.4%	9,694
1971	Census	4,448.1	839.3	18.9%	
1973	CFS	4,470.8	1,073.0	24.0%	5,088
1973	Determination LFPR	4,333.7	793.1	18.3%	2,500
1975	Land/Labor Utiliz.	4,996.0	984.0	19.7%	5,000
1978/79	CF & SES	--	--	14.8%	8,000
1980/81	LF & SES	5,714.8	863.5	15.1%	10,000
1981	Census	5,015.1	895.1	17.8%	
1981/82	CF & SES	5,217.0	609.0	11.7%	8,000
1985/86	LF & SES	5,971.0	840.3	14.1%	

TABLE 3.1

EMPLOYMENT STATUS BY AGE, SEX AND SECTOR
SRI LANKA 1985/86

URBAN SECTOR

MALE

Age Group	Regular Employee	Casual Employee	Self - Employed: Employer	Self - Employed: Own Account	Self - Employed: Unpaid Family	Self - Employed: Total Self-Empl.	TOTAL
10 -14	1,306	3,842	--	278	2,608	2,886	8,034
15 -19	7,919	32,639	679	1,987	9,126	11,792	52,350
20 -24	23,704	41,623	1,827	10,782	7,851	20,460	85,787
25 -29	34,010	36,725	3,380	15,564	4,847	23,791	94,526
30 -34	44,454	27,337	4,140	21,047	1,625	26,812	98,603
35 -39	38,929	25,909	5,656	18,009	489	24,154	88,992
40 -44	35,535	19,059	4,894	18,099	169	23,162	77,756
45 -49	34,565	16,014	3,738	14,041	150	17,929	68,508
50 -54	27,217	9,678	1,981	11,172	399	13,552	50,447
55 -59	13,190	12,215	3,014	11,797	582	15,393	40,798
60 -64	3,796	5,166	1,538	8,069	573	10,180	19,142
65 +	2,775	7,761	2,770	9,776	704	13,250	23,786
TOTAL:	267,400	237,968	33,617	140,621	29,123	203,361	708,729
	37.7%	33.6%	4.7%	19.8%	4.1%	28.7%	

FEMALE

Age Group	Regular Employee	Casual Employee	Self - Employed: Employer	Self - Employed: Own Account	Self - Employed: Unpaid Family	Self - Employed: Total Self-Empl.	TOTAL
10 -14	1,874	4,378	--	523	489	1,012	7,264
15 -19	4,588	12,596	--	499	1,931	2,430	19,614
20 -24	19,744	16,747	97	3,485	3,122	6,704	43,195
25 -29	21,832	12,550	354	4,641	3,735	8,730	43,112
30 -34	16,806	6,322	97	5,443	4,023	9,563	32,691
35 -39	14,277	9,388	436	5,762	3,368	9,566	33,231
40 -44	12,983	6,950	315	7,202	2,932	10,449	30,382
45 -49	7,167	4,278	116	6,266	1,996	8,378	19,823
50 -54	6,660	4,818	299	4,349	1,096	5,744	17,222
55 -59	1,818	2,148	476	3,170	561	4,207	8,223
60 -64	1,155	956	--	2,969	308	3,277	5,388
65 +	396	2,003	286	4,956	149	5,391	7,790
TOTAL:	109,350	83,134	2,476	49,265	23,710	75,451	267,935
	40.8%	31.0%	0.9%	18.4%	8.8%	28.2%	

Table 3.1, page 2

RURAL SECTOR

MALE

Age Group	Regular Employee	Casual Employee	Self - Employed: Employer	Self - Employed: Own Account	Self - Employed: Unpaid Family	Self - Employed: Total Self-Empl.	TOTAL
10 -14	3,352	11,441	230	2,68	28,112	31,028	45,821
15 -19	6,810	89,979	745	18,227	94,033	113,005	209,794
20 -24	31,014	168,760	5,539	64,383	97,572	167,494	367,268
25 -29	69,745	156,097	8,567	100,472	45,951	154,990	380,832
30 -34	69,911	127,994	6,579	109,012	15,715	131,306	329,211
35 -39	62,656	104,005	11,606	125,905	3,719	141,230	307,891
40 -44	58,062	86,458	7,389	70,630	1,138	79,157	223,677
45 -49	43,296	63,741	5,601	81,952	914	88,467	195,504
50 -54	41,189	58,406	6,729	84,090	1,722	92,541	192,136
55 -59	21,780	38,328	7,310	80,890	2,135	90,335	150,443
60 -64	3,545	23,959	3,426	69,838	1,684	74,948	102,452
65 +	4,017	25,328	8,601	103,650	3,874	116,125	145,470
TOTAL:	415,377	954,496	72,322	911,735	296,569	1,280,626	2,650,499
	15.7%	36.0%	2.7%	34.4%	11.2%	48.3%	

FEMALE

Age Group	Regular Employee	Casual Employee	Self - Employed: Employer	Self - Employed: Own Account	Self - Employed: Unpaid Family	Self - Employed: Total Self-Empl.	TOTAL
10 -14	2,211	4,456	--	234	19,899	20,133	26,800
15 -19	4,792	25,457	628	4,194	42,805	47,627	77,876
20 -24	25,108	46,886	833	14,932	43,697	59,462	131,456
25 -29	34,502	38,964	937	22,990	43,871	67,798	141,264
30 -34	33,091	55,372	267	20,732	39,478	60,477	148,940
35 -39	21,768	46,643	628	30,105	40,441	71,174	139,585
40 -44	21,953	34,605	422	28,918	24,934	54,274	110,832
45 -49	13,345	24,098	1,225	27,390	33,069	61,684	99,127
50 -54	14,905	22,134	226	23,109	22,455	45,790	82,829
55 -59	4,573	10,859	2,186	20,314	8,379	30,879	46,311
60 -64	1,644	9,118	1,803	12,694	4,794	19,291	30,053
65 +	--	6,460	1,828	17,837	5,141	24,806	31,266
TOTAL:	177,892	325,052	10,983	223,449	328,963	563,395	1,066,339
	16.7%	30.5%	1.0%	21.0%	30.8%	52.8%	

Table 3.1, page 3

ESTATE SECTOR

MALE

Age Group	Regular Employee	Casual Employee	Self - Employed: Employer	Own Account	Unpaid Family	Total Self-Empl.	TOTAL
10 -14	357	345	--	405	656	1,061	1,763
15 -19	5,849	8,425	--	180	1,105	1,285	15,559
20 -24	21,510	13,674	--	1,188	1,742	2,930	38,114
25 -29	22,578	7,749	--	--	219	219	30,546
30 -34	29,141	4,700	--	813	--	813	34,654
35 -39	24,668	2,667	286	1,098	--	1,384	28,719
40 -44	16,117	4,393	445	804	--	1,249	21,759
45 -49	15,124	1,521	--	328	--	328	16,973
50 -54	12,656	2,607	--	797	--	797	16,060
55 -59	8,878	2,430	--	524	--	524	11,832
60 -64	1,969	1,540	--	526	--	526	4,035
65 +	354	735	652	345	--	997	2,086
TOTAL:	159,201	50,786	1,383	7,008	3,722	12,113	222,100
	71.7%	22.9%	0.6%	3.2%	1.7%	5.5%	

FEMALE

Age Group	Regular Employee	Casual Employee	Self - Employed: Employer	Own Account	Unpaid Family	Total Self-Empl.	TOTAL
10 -14	200	794	--	--	437	437	1,431
15 -19	17,849	8,532	--	--	617	617	26,998
20 -24	31,695	6,985	--	--	852	852	39,532
25 -29	34,094	5,084	--	770	163	933	40,111
30 -34	25,318	4,319	--	150	775	925	30,562
35 -39	26,258	3,977	295	83	163	541	30,776
40 -44	14,680	1,816	--	--	--	0	16,496
45 -49	12,616	2,194	--	454	--	454	15,264
50 -54	5,274	3,480	--	--	--	0	8,754
55 -59	2,515	1,150	--	373	287	660	4,325
60 -64	--	1,119	--	210	--	210	1,329
65 +	565	--	--	--	--	0	565
TOTAL:	171,064	39,450	295	2,040	3,294	5,629	216,143
	79.1%	18.3%	0.1%	0.9%	1.5%	2.6%	

Source: MOPI, Labour Force and Socio-Economic Survey 1985/86 Table 8.4

TABLE 3.2

EMPLOYED POPULATION BY AGE, LEVEL OF EDUCATION, AND SEX

URBAN SECTOR

MALE

	Population Size					Percent of Cohort			
Age Group	No Schooling	0-10 Years	GCE O level	A level or higher	TOTAL	No Schooling	0-10 Years	GCE O level	A level or higher
10 - 14	2,369	5,667	0	0	8,036	29.5	70.5	0.00	0.0
15 - 19	4,262	42,142	5,903	43	52,350	8.1	80.5	11.28	0.1
20 - 24	4,070	57,499	17,727	6,492	85,788	4.7	67.0	20.66	7.6
25 - 29	3,268	62,183	19,672	9,402	94,525	3.5	65.8	20.81	9.9
30 - 34	2,424	62,969	20,956	12,254	98,603	2.5	63.9	21.25	12.4
35 - 39	3,547	55,659	21,879	7,907	88,992	4.0	62.5	24.59	8.9
40 - 44	2,433	46,751	17,461	11,113	77,758	3.1	60.1	22.46	14.3
45 - 49	3,297	44,377	16,316	4,517	68,507	4.8	64.8	23.82	6.6
50 - 54	2,094	32,340	12,484	3,530	50,448	4.2	64.1	24.75	7.0
55 - 59	1,972	28,598	7,995	2,234	40,799	4.8	70.1	19.60	5.5
60 - 64	1,016	14,526	2,036	1,564	19,142	5.3	75.9	10.64	8.2
65 +	1,930	18,215	1,828	1,812	23,785	8.1	76.6	7.69	7.6
Total:	32,682	470,926	144,257	60,868	708,733	4.6	66.4	20.35	8.6

FEMALE

	Population Size					Percent of Cohort			
Age Group	No Schooling	0-10 Years	GCE O level	A level or higher	TOTAL	No Schooling	0-10 Years	GCE O level	A level or higher
10 - 14	3,205	4,058	0	0	7,263	44.1	55.9	0.00	0.0
15 - 19	2,896	14,777	1,843	97	19,613	14.8	75.3	9.40	0.5
20 - 24	2,176	20,912	11,019	9,090	43,197	5.0	48.4	25.51	21.0
25 - 29	3,921	17,960	10,515	10,716	43,112	9.1	41.7	24.39	24.9
30 - 34	1,459	13,343	10,355	7,534	32,691	4.5	40.8	31.68	23.0
35 - 39	3,623	15,665	8,028	5,916	33,232	10.9	47.1	24.16	17.8
40 - 44	4,463	13,736	7,943	4,240	30,382	14.7	45.2	26.14	14.0
45 - 49	3,230	9,606	5,144	1,843	19,823	16.3	48.5	25.95	9.3
50 - 54	2,876	8,371	5,162	806	17,215	16.7	48.6	29.99	4.7
55 - 59	2,130	4,294	1,427	372	8,223	25.9	52.2	17.35	4.5
60 - 64	1,474	3,575	340	0	5,389	27.4	66.3	6.31	0.0
65 +	3,445	3,692	99	552	7,788	44.2	47.4	1.27	7.1
Total:	34,898	129,989	61,875	41,166	267,928	13.0	48.5	23.09	15.4

Table 3.2, p. 2 of 3

RURAL SECTOR

MALE

Age Group	Population Size: No Schooling	0-10 Years	GCE O level	A level or higher	TOTAL	Percent of Cohort: No Schooling	0-10 Years	GCE O level	A level or higher
10 - 14	5,791	40,031	0	0	45,822	12.6	87.4	0.00	0.0
15 - 19	21,035	179,014	9,534	210	209,793	10.0	85.3	4.54	0.1
20 - 24	16,998	278,637	56,195	15,436	367,266	4.6	75.9	15.30	4.2
25 - 29	19,070	271,001	71,920	18,843	380,834	5.0	71.2	18.88	4.9
30 - 34	12,108	244,241	55,277	17,585	329,211	3.7	74.2	16.79	5.3
35 - 39	15,392	229,925	51,184	11,390	307,891	5.0	74.7	16.62	3.7
40 - 44	15,474	162,089	37,502	8,612	223,677	6.9	72.5	16.77	3.9
45 - 49	16,251	149,674	24,979	4,600	195,504	8.3	76.6	12.78	2.4
50 - 54	20,366	151,781	17,420	2,569	192,136	10.6	79.0	9.07	1.3
55 - 59	15,254	120,403	13,359	1,427	150,443	10.1	80.0	8.88	0.9
60 - 64	10,476	84,193	5,718	2,065	102,452	10.2	82.2	5.58	2.0
65 +	21,880	116,766	4,638	2,186	145,470	15.0	80.3	3.19	1.5
Total:	190,095	2,027,755	347,726	84,923	2,650,499	7.2	76.5	13.12	3.2

FEMALE

Age Group	Population Size: No Schooling	0-10 Years	GCE O level	A level or higher	TOTAL	Percent of Cohort: No Schooling	0-10 Years	GCE O level	A level or higher
10 - 14	3,654	23,146	0	0	26,800	13.6	86.4	0.00	0.0
15 - 19	11,217	58,506	7,604	549	77,876	14.4	75.1	9.76	0.7
20 - 24	10,508	81,997	31,208	7,743	131,456	8.0	62.4	23.74	5.9
25 - 29	12,090	88,230	27,462	13,482	141,264	8.6	62.5	19.44	9.5
30 - 34	11,649	99,984	23,509	13,798	148,940	7.8	67.1	15.78	9.3
35 - 39	22,345	86,066	21,600	9,574	139,585	16.0	61.7	15.47	6.9
40 - 44	22,030	63,591	18,648	6,563	110,832	19.9	57.4	16.83	5.9
45 - 49	30,150	53,719	14,763	495	99,127	30.4	54.2	14.89	0.5
50 - 54	28,880	41,686	10,442	1,821	82,829	34.9	50.3	12.61	2.2
55 - 59	15,909	25,342	2,932	2,128	46,311	34.4	54.7	6.33	4.6
60 - 64	11,451	17,944	658	0	30,053	38.1	59.7	2.19	0.0
65 +	17,846	12,932	488	0	31,266	57.1	41.4	1.56	0.0
Total:	197,729	653,143	159,314	56,153	1,066,339	18.5	61.3	14.94	5.3

Table 3.2, p. 3 of 3

ESTATE SECTOR

MALE

	Population Size					Percent of Cohort			
Age Group	No Schooling	0-10 Years	GCE O level	A level or higher	TOTAL	No Schooling	0-10 Years	GCE O level	A level or higher
10 - 14	415	1,348	0	0	1,763	23.5	76.5	0.00	0.0
15 - 19	3,058	12,501	0	0	15,559	19.7	80.3	0.00	0.0
20 - 24	8,325	28,592	986	211	38,114	21.8	75.0	2.59	0.6
25 - 29	3,347	26,368	750	81	30,546	11.0	86.3	2.46	0.3
30 - 34	2,882	27,275	4,271	226	34,654	8.3	78.7	12.32	0.7
35 - 39	2,734	22,409	3,287	289	28,719	9.5	78.0	11.45	1.0
40 - 44	1,747	17,995	2,017	0	21,759	8.0	82.7	9.27	0.0
45 - 49	3,191	13,066	716	0	16,973	18.8	77.0	4.22	0.0
50 - 54	2,397	13,602	61	0	16,060	14.9	84.7	0.38	0.0
55 - 59	2,440	8,621	771	0	11,832	20.6	72.9	6.52	0.0
60 - 64	629	3,111	295	0	4,035	15.6	77.1	7.31	0.0
65 +	1,069	1,017	0	0	2,086	51.2	48.8	0.00	0.0
Total:	32,234	175,905	13,154	807	222,100	14.5	79.2	5.92	0.4

FEMALE

	Population Size					Percent of Cohort			
Age Group	No Schooling	0-10 Years	GCE O level	A level or higher	TOTAL	No Schooling	0-10 Years	GCE O level	A level or higher
10 - 14	381	1,050	0	0	1,431	26.6	73.4	0.00	0.0
15 - 19	12,129	14,617	252	0	26,998	44.9	54.1	0.93	0.0
20 - 24	11,707	26,582	480	763	39,532	29.6	67.2	1.21	1.9
25 - 29	11,862	26,611	952	686	40,111	29.6	66.3	2.37	1.7
30 - 34	12,912	16,083	1,567	0	30,562	42.2	52.6	5.13	0.0
35 - 39	9,888	20,058	535	295	30,776	32.1	65.2	1.74	1.0
40 - 44	8,734	7,762	0	0	16,496	52.9	47.1	0.00	0.0
45 - 49	10,481	4,397	386	0	15,264	68.7	28.8	2.53	0.0
50 - 54	5,308	3,446	0	0	8,754	60.6	39.4	0.00	0.0
55 - 59	3,021	1,304	0	0	4,325	69.8	30.2	0.00	0.0
60 - 64	515	814	0	0	1,329	38.8	61.2	0.00	0.0
65 +	565	0	0	0	565	100.0	0.0	0.00	0.0
Total:	87,503	122,724	4,172	1,744	216,143	40.5	56.8	1.93	0.8

Source: MOPI, Labour Force and Socio-Economic Survey 1985/86 Table 87.2

TABLE 4.1

INTERNATIONAL MIGRATION AND REMITTANCES 1970-1987

Year	Gross Migration Flows Arrivals	Departures	Net Arr.	Private Transfers (Rs million)
1972	26,624	32,971	-6,347	24
1973	35,188	42,305	-7,117	48
1974	38,874	44,833	-5,959	54
1975	46,999	53,865	-6,866	60
1976	46,442	53,322	-6,880	109
1977	52,992	66,900	-13,908	189
1978	102,142	117,075	-14,933	609
1979	100,603	122,197	-21,594	935
1980	105,684	137,797	-32,113	2,518
1981	142,427	185,035	-42,608	4,429
1982	162,036	214,466	-52,430	6,023
1983	180,729	244,955	-64,226	6,915
1984	227,389	283,290	-55,901	7,653
1985	220,094	239,272	-19,178	7,920
1986	220,614	229,536	-8,922	8,873
1987	NA	NA	NA	10,255

Source: Korale (1989) Table 20 p 83; Central Bank

Table 4.2
Duration of Stay of Migrant Workers by Skill Level

A. 1984 Survey

1. Base Data

Duration (Mo)	High	Middle	Skilled	Un-skilled	House maids	TOTAL:	Percent Dist.	Departure Cohort*
0 - 3	1	2	3	8	13	27	6.4%	283,290
4 - 6	0	0	9	2	9	20	4.7%	283,290
7 - 9	0	2	10	6	9	27	6.4%	283,290
10 -12	1	6	18	5	13	43	10.1%	244,955
13 -18	1	5	24	8	18	56	13.2%	244,955
19 -24	3	8	32	7	33	83	19.6%	229,711
25 -30	1	3	13	4	21	42	9.9%	214,466
31 -36	1	4	20	12	12	49	11.6%	199,751
37 -48	1	4	21	4	17	47	11.1%	173,226
49 -60	3	3	8	1	4	19	4.5%	133,897
61 -72	0	2	5	0	0	7	1.7%	120,917
73 +	1	1	2	0	0	4	0.9%	84,018
TOTAL:	13	40	165	57	149	424	100.0%	
Av.(mo)	33.7	27.9	25.6	20.3	20.2	23.5		

2. Recalculation

Duration (Mo)	Sample: High & Middle	Sample: Skilled	Sample: Unskilled & Maids	Sample: Total:	Adjusted for Cohort Size: High & Middle	Adjusted: Skilled	Adjusted: Unskilled & Maids	Adjusted: Total:
0 - 3	3	3	21	27	2.2	2.2	15.4	19.8
4 - 6	0	9	11	20	0.0	6.6	8.1	14.7
7 - 9	2	10	15	27	1.5	7.3	11.0	19.8
10 -12	7	18	18	43	5.9	15.3	15.3	36.5
13 -18	6	24	26	56	5.1	20.4	22.1	47.5
19 -24	11	32	40	83	10.0	29.0	36.2	75.1
25 -30	4	13	25	42	3.9	12.6	24.2	40.7
31 -36	5	20	24	49	5.2	20.8	25.0	51.0
37 -48	5	21	21	47	6.0	25.2	25.2	56.4
49 -60	6	8	5	19	9.3	12.4	7.8	29.5
61 -72	2	5	0	7	3.4	8.6	0.0	12.0
73 +	2	2	0	4	5.0	5.0	0.0	9.9
TOTAL:	53	165	206	424	57.5	165.4	190.3	413.2

Survivors of Synthetic Migration

Duration (mos)	Cohort of 10,000: High & Middle	Cohort: Skilled	Cohort: Unskilled & Maids	Cohort: All	Adjusted for Cohort Size: High & Middle	Adjusted: Skilled	Adjusted: Unskilled & Maids	Adjusted: All
1 -12	7736	7576	6845	7241	8327	8100	7384	7801
13 -24	4528	4182	3641	3962	5707	5116	4320	4832
25 -36	2830	2182	1262	1816	4127	3095	1733	2611
37 -48	1887	909	243	708	3082	1571	408	1245
49 -60	755	424	0	259	1460	819	0	531
61 -72	377	121	0	94	862	299	0	240
73 +	0	0	0	0	0	0	0	0

Table 4.2 page 2

Risk of Return Migration, 1984 Survey

Dur. (mos)	(Not Adjusted) High & Middle	Skilled	Unskilled & Maids	All	(Adjusted for Cohort Size) High & Middle	Skilled	Unskilled & Maids	All
1 -12	22.6%	24.2%	31.6%	27.6%	16.7%	19.0%	26.2%	22.0%
13 -24	41.5	44.8	46.8	45.3	31.5	36.8	41.5	38.1
25 -36	37.5	47.8	65.3	54.2	27.7	39.5	59.9	46.0
37 -48	33.3	58.3	80.8	61.0	25.3	49.3	76.5	52.3
49 -60	60.0	53.3	100.0	63.3	52.6	47.8	100.0	57.4
61 -72	50.0	71.4	--	63.6	41.0	63.5	--	54.9
73 +	100.0	100.0	--	100.0%	100.0	100.0	--	100.0%

B. 1988 Survey

Duration (Mo)	Sample High & Middle	Skilled	Unskilled & Maids	Total:	Departure Cohort	Adjusted for Cohort Size High & Middle	Skilled	Unskilled & Maids	Total:
0 -12	3	1	1	5	229,500	3.1	1.0	1.0	5.1
13 -24	12	8	3	23	229,509	12.3	8.2	3.1	23.5
25 -36	21	21	6	48	231,970	21.2	21.2	6.1	48.6
37 -48	4	2	3	9	250,277	3.8	1.9	2.8	8.4
49 -60	9	9	2	20	273,706	7.7	7.7	1.7	17.1
61 -72	12	4	1	17	237,333	11.9	4.0	1.0	16.8
73 +	9	3	2	14	190,167	11.1	3.7	2.5	17.3
Total:	70	48	18	136		71.0	47.7	18.1	136.8

Survivors of Synthetic Migration

Duration (mos)	Cohort of 10,000 High & Middle	Skilled	Unskilled & Maids	All	Adjusted for Cohort Size High & Middle	Skilled	Unskilled & Maids	All
0 -12	9571	9792	9444	9632	9568	9786	9436	9626
13 -24	7857	8125	7778	7941	7840	8071	7746	7908
25 -36	4857	3750	4444	4412	4849	3616	4401	4360
37 -48	4286	3333	2778	3750	4321	3223	2850	3743
49 -60	3000	1458	1667	2279	3235	1605	1905	2491
61 -72	1286	625	1111	1029	1564	776	1360	1262
73 +	0	0	0	0	0	0	0	0

Risk of Return Migration, 1988 Survey

Duration (mos)	(Not adjusted) High & Middle	Skilled	Unskilled & Maids	All	(Adjusted for cohort size) High & Middle	Skilled	Unskilled & Maids	All
0 -12	4.3%	2.1%	5.6%	3.7%	4.3%	2.1%	5.6%	3.7 %
13 -24	17.9	17.0	17.6	17.6	18.1	17.5	17.9	17.9
25 -36	38.2	53.8	42.9	44.4	38.2	55.2	43.2	44.9
37 -48	11.8	11.1	37.5	15.0	10.9	10.9	35.2	14.1
49 -60	30.0	56.3	40.0	39.2	25.1	50.2	33.2	33.5
61 -72	57.1	57.1	33.3	54.8	51.7	51.7	28.6	49.3
73 +	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0 %

Table 4.2, page 3

Source: 1984 Survey: MOPI (1985) Table 33 (page 70)
1988 Survey: Korale 1989 Table 11.
Cohort Size: Table 4.1

Methodology for adjusting cohort sizes: Departure gross flows taken from Table 4.1, annual adjustment made by assuming survey date 1 September of each year and 75 percent of departures occured in that calendar year, 25 percent in previous year. 1988 and 1987 assume 229,500 departures. Migration risk re-weighted according to relative cohort size, weight is

$$\text{Wgt.} = \frac{\text{(Average departure cohort size)}}{\text{(This departure cohort size)}}$$

TABLE 4.3

MIGRANTS' REASON FOR RETURN

Reason:	Priority 1st	Priority 2nd	Priority 3rd	Percentage Priority 1st	Percentage Priority 1st-3rd
End of contract	131	5	-	30.9 %	32.1 %
Family needs	67	9	-	15.8	17.9
Unsatisfactory working conditions	59	9	-	13.9	16.0
Termination of employment	49	9	2	11.6	14.2
Health reasons	32	-	2	7.5	8.0
Employer harassment	24	8	1	5.7	7.8
Political unrest	7	-	4	1.7	2.6
Achieved desired objectives	5	-	1	1.2	1.4
Other	31	29	-	7.3	14.2
Vacation/holiday	19	-	-	4.5	4.5
TOTAL:	424	69	10	100.0%	118.6%

Source: MOPI (1985) Table 73, page 144 (inconsistencies in original)

TABLE 4.4

REMITTANCES OF RETURNED MIGRANTS CLASSIFIED BY DURATION OF STAY

1984 Survey Information

Duration (Months)	No.	Person Months	Remittance (Rs) Total	Average	Per Mo.
0-6	40	240	1,122,047	28,051	4,675
7-12	70	840	3,120,396	44,577	3,715
13-18	52	936	3,511,214	67,523	3,751
19-24	82	1,968	8,509,977	103,780	4,324
25-30	40	1,200	4,353,240	108,831	3,628
31-36	42	1,512	5,249,298	124,983	3,472
37-42	23	966	3,184,600	138,461	3,297
43-48	22	1,056	4,507,975	204,908	4,269
49-54	8	432	697,775	87,222	1,615
55-60	10	600	2,000,600	200,060	3,334
61-66	3	198	321,200	107,067	1,622
67-72	4	288	3,355,000	838,750	11,649
73-78	2	156	302,500	151,250	1,939
79-84	1	84	862,500	862,500	10,268
	399	10,476	41,098,322	103,003	3,923

Remittances by Duration of Stay--Detail

Skill Level:	HIGH		MIDDLE		SKILLED	
Duration (Months)	No	Amount per Person-Month	No	Amount per Person-Month	No	Amount per Person-Month
31-36	1	5.417	3	1.863	16	4.816
37-42	1	4.643	1	4.405	10	4.378
43-48		--	2	4.823	11	5.615
49-54	1	1.111		--	4	2.355
55-60	1	5.500	4	3.192	4	3.735
61-66		--		--	3	1.622
67-72		--	2	11.111	2	12.188
73-78		--		--	2	1.939
79-84	1	10.267		--		--

Source: Calculated from MOPI (1985), Table 56

TABLE 4.5

MIGRANT REMITTANCES BY SKILL LEVEL

PROFESSIONAL

No	Duration (Mo)	Remittances Cash	Remittances Goods	Averages per mo Cash	Averages per mo Total	
1	14	350.0	2.0	25,000.0	25,142.9	
2	34	250.0	165.0	7,352.9	12,205.9	
3	36	981.0	15.0	27,250.0	27,666.7	
4	70	2,428.0	70.0	34,685.7	35,685.7	
5	28	450.0	50.0	16,071.4	17,857.1	
6	31	275.0	100.0	8,871.0	12,096.8	
7	24	150.0	12.0	6,250.0	6,750.0	
8	27	457.8	37.1	16,955.6	18,329.6	
9	36	425.0	80.0	11,805.6	14,027.8	
10	66	500.0	7,575.8	--	7,575.8	
11	49	500.0	116.0	10,204.1	12,571.4	
12	20	160.0	50.0	8,000.0	10,500.0	
13	19	190.0	100.0	10,000.0	15,263.2	
13	454	7,116.8	797.1	14,617.1	17,431.5	Totals
				9,016.6	8,387.4	Sample Std Dev

TECHNICAL

No	Duration (Mo)	Remittances Cash	Remittances Goods	Averages per mo Cash	Averages per mo Total	
1	24	145.0	20.0	6,041.7	6,875.0	
2	32	334.2	20.0	10,443.8	11,068.8	
3	26	225.0	26.5	8,653.8	9,673.1	
4	29	200.0	113.6	6,896.6	10,813.8	
5	24	150.0	3.0	6,250.0	6,375.0	
6	25	550.0	66.7	22,000.0	24,668.0	
7	14	300.0	34.0	21,428.6	23,857.1	
8	58	700.0	144.5	12,069.0	14,560.3	
9	55	559.0	134.6	10,163.6	12,610.9	
10	37	590.0	106.0	15,945.9	18,810.8	
11	82	995.0	116.0	12,134.1	13,548.8	
12	25	200.0	103.6	8,000.0	12,144.0	
13	65	2,400.0	48.0	36,923.1	37,661.5	
14	67	770.0	190.5	11,492.5	14,335.8	
15	6	--	--	0.0	0.0	
15	569	8,118.2	1,127.0	12,562.8	16,248.2	Totals
				8,834.8	9,020.2	Sample Std Dev

CLERICAL AND RELATED

No	Duration (Mo)	Remittances Cash	Remittances Goods	Averages per mo Cash	Averages per mo Total
1	16	274.0	--	17,125.0	17,125.0
2	31	344.0	10.0	11,096.1	11,418.7
3	61	400.0	100.0	6,557.4	8,196.7

CLERICAL AND RELATED, cont.

No	Duration (Mo)	Remittances Cash	Remittances Goods	Averages per mo Cash	Averages per mo Total	
4	24	175.0	7.0	7,291.7	7,583.3	
5	31	384.0	23.5	12,387.1	13,144.4	
6	83	1,005.5	100.0	12,114.5	13,319.3	
7	123	1,000.0	--	8,130.1	8,130.1	
8	25	109.2	16.7	4,368.0	5,034.0	
9	42	505.0	21.0	12,023.8	12,523.8	
10	46	467.0	85.0	10,152.2	12,000.0	
11	24	130.0	7.5	5,416.7	5,729.2	
12	11	90.0	--	8,181.8	8,181.8	
13	62	620.0	66.0	10,000.0	11,064.5	
14	67	300.0	30.0	4,477.6	4,925.4	
15	33	150.0	3.0	4,545.5	4,636.4	
16	54	350.0	--	6,481.5	6,481.5	
17	52	475.0	98.0	9,134.6	11,019.2	
18	102	510.0	15.0	5,000.0	5,147.1	
19	52	200.0	26.0	3,846.2	4,346.2	
19	939	7,488.7	608.6	8,333.1	8,623.3	Totals
				3,562.4	3,699.8	Sample Std Dev

SERVICE AND SECURITY

No	Duration (Mo)	Remittances Cash	Remittances Goods	Averages per mo Cash	Averages per mo Total	
1	54	395.0	8.0	7,314.8	7,463.0	
2	118	1,000.0	164.5	8,474.6	9,868.6	
3	13	78.0	5.0	6,000.0	6,384.6	
4	70	800.0	2.0	11,428.6	11,457.1	
5	87	462.0	55.0	5,310.3	5,942.5	
6	39	180.0	30.0	4,615.4	5,384.6	
7	22	125.0	--	5,681.8	5,681.8	
8	25	119.0	80.0	4,760.0	7,960.0	
9	30	280.0	30.0	9,333.3	10,333.3	
10	67	346.0	23.0	5,164.2	5,507.5	
11	78	782.0	60.0	10,025.6	10,794.9	
12	67	432.0	8.5	6,447.8	6,574.6	
13	64	635.0	86.0	9,921.9	11,265.6	
14	30	87.0	15.0	2,900.0	3,400.0	
15	50	1,211.0	--	24,220.0	24,220.0	
16	25	131.0	18.5	5,240.0	5,980.0	
17	11	150.0	5.0	13,636.4	14,090.9	
18	62	300.0	27.0	4,838.7	5,274.2	
19	120	140.0	130.0	1,166.7	2,250.0	
20	53	370.0	27.0	6,981.1	7,490.6	
21	25	250.0	23.0	10,000.0	10,920.0	
22	91	792.0	58.5	8,703.3	9,346.2	
23	25	85.0	15.0	3,400.0	4,000.0	
23	1226	9,150.0	871.0	7,633.2	8,173.7	Totals
				4,670.1	4,557.6	Sample Std Dev

HOUSEMAIDS

No	Duration (Mo)	Remittances Cash	Remittances Goods	Averages per mo Cash	Averages per mo Total	
1	89	326.0	15.0	3,662.9	3,831.5	
2	32	70.0	14.5	2,187.5	2,640.6	
3	26	75.3	6.5	2,896.2	3,146.2	
4	25	78.5	6.0	3,140.0	3,380.0	
5	63	151.8	--	2,409.5	2,409.5	
6	12	46.4	--	3,863.3	3,863.3	
7	34	84.0	--	2,470.6	2,470.6	
8	49	172.0	5.0	3,510.2	3,612.2	
9	59	251.0	30.4	4,254.2	4,769.3	
10	24	52.5	5.5	2,187.5	2,416.7	
10	413	1,307.5	82.9	3,058.2	3,366.5	Totals
				742.7	786.1	Sample Std Dev

LABORERS

No	Duration (Mo)	Remittances Cash	Remittances Goods	Averages per mo Cash	Averages per mo Total	
1	38	345.0	31.5	9,078.9	9,907.9	
2	33	245.0	2.5	7,424.2	7,500.0	
3	16	51.0	2.0	3,187.5	3,312.5	
4	48	170.0	--	3,541.7	3,541.7	
5	19	150.0	--	7,894.7	7,894.7	
6	37	90.0	4.5	2,432.4	2,554.1	
7	73	253.0	5.0	3,465.8	3,534.2	
8	27	150.0	26.0	5,555.6	6,518.5	
8	291	1,454.0	71.5	5,322.6	5,242.3	Totals
				2,527.8	2,706.9	Sample Std Dev

TOTAL ALL OCCUPATIONS

No	Duration (Mo)	Remittances Cash	Remittances Goods	Averages per mo Cash	Averages per mo Total	
136	5751	46,107.8	4,514.8	8,043.6	8,802.4	Totals
				5,897.2	6,197.4	Pop Std Dev
				5,919.0	6,220.3	Sample Std Dev

SKILLED WORKERS

No	Duration (Mo)	Remittances - Cash	Remittances - Goods	Averages per mo - Cash	Averages per mo - Total	
1	39	135.0	35.0	3,461.5	4,359.0	
2	32	136.0	16.0	4,250.0	4,750.0	
3	121	385.0	120.0	3,181.8	4,173.6	
4	25	110.0	5.0	4,400.0	4,600.0	
5	14	95.0	20.0	6,785.7	8,214.3	
6	56	213.0	29.5	3,803.6	4,330.4	
7	43	400.0	20.0	9,302.3	9,767.4	
8	49	245.0	6.5	5,000.0	5,132.7	
9	26	500.0	25.0	19,230.8	20,192.3	
10	14	125.0	3.0	8,928.6	9,142.9	
11	56	300.0	29.5	5,357.1	5,883.9	
12	19	165.0	24.0	8,684.2	9,947.4	
13	28	115.0	4.0	4,107.1	4,250.0	
14	16	80.0	2.0	5,000.0	5,125.0	
15	71	600.0	60.0	8,450.7	9,295.8	
16	25	62.5	10.0	2,500.0	2,900.0	
17	56	383.0	9.5	6,839.3	7,008.9	
18	26	82.0	4.5	3,153.8	3,326.9	
19	26	112.5	15.0	4,326.9	4,903.8	
20	25	95.0	--	3,800.0	3,800.0	
21	84	347.0	26.0	4,131.0	4,440.5	
22	52	512.5	18.0	9,855.8	10,201.9	
23	116	409.7	16.3	3,531.9	3,672.4	
24	25	210.0	10.0	8,400.0	8,800.0	
25	26	175.0	5.0	6,730.8	6,923.1	
26	54	450.0	18.5	8,333.3	8,675.9	
27	8	60.0	1.0	7,500.0	7,625.0	
28	25	160.0	14.0	6,400.0	6,960.0	
29	61	510.0	50.0	8,360.7	9,180.3	
30	13	132.0	34.4	10,153.8	12,796.2	
31	27	85.0	4.5	3,148.1	3,314.8	
32	24	62.5	2.5	2,604.2	2,708.3	
33	32	500.0	--	15,625.0	15,625.0	
34	28	175.0	12.0	6,250.0	6,678.6	
35	45	400.0	12.0	8,888.9	9,155.6	
36	25	135.0	8.0	5,400.0	5,720.0	
37	20	68.0	48.0	3,400.0	5,800.0	
38	25	102.5	2.5	4,100.0	4,200.0	
39	65	810.0	100.0	12,461.5	14,000.0	
40	26	150.0	15.5	5,769.2	6,365.4	
41	13	80.0	--	6,153.8	6,153.8	
42	25	370.0	12.0	14,800.0	15,280.0	
43	22	84.0	7.5	3,818.2	4,159.1	
44	62	300.0	35.0	4,838.7	5,403.2	
45	26	72.5	5.0	2,788.5	2,980.8	
46	60	271.0	47.5	4,516.7	5,308.3	
47	49	312.0	3.0	6,367.3	6,428.6	
48	54	190.0	10.0	3,518.5	3,703.7	
48	1859	11,472.7	956.7	6,425.2	6,686.0	Totals
				3,561.8	3,717.3	Sample Std Dev

TABLE 4.6

MIGRANT EXPENDITURE PATTERN CHANGES

Cohort Departing 1982 and Returning 1984

	Nominal Terms				Real Terms	
	Skilled		Housemaids		Skilled	Housemaids
	Amount	Percent Increase	Amount	Percent Increase	Percent Increase	Percent Increase
Food						
1982	37,558		24,896			
1984	56,949	51.6%	42,550	70.9%	2.4%	21.7%
Clothing						
1982	6,820		3,907			
1984	9,746	42.9%	6,428	64.5%	-6.3%	15.3%
Rent						
1982	1,049		735			
1984	1,276	21.6%	950	29.3%	-27.5%	-19.9%
Transportation						
1982	3,076		783			
1984	3,727	21.2%	1,422	81.6%	-28.0%	32.4%
Entertainment						
1982	1,446		105			
1984	2,268	56.8%	174	65.7%	7.7%	16.5%
Medical						
1982	2,113		1,472			
1984	4,857	129.9%	2,491	69.2%	80.7%	20.0%
Education						
1982	1,746		1,246			
1984	3,671	110.3%	1,925	54.5%	61.1%	5.3%
Welfare-Social						
1982	639		390			
1984	1,989	211.3%	475	21.8%	162.1%	-27.4%
Other						
1982	1,383		1,426			
1984	3,199	131.3%	1,360	-4.6%	82.1%	-53.8%
Total						
1982	91,275		58,384			
1984	139,774	53.1%	97,834	67.6%	4.0%	18.4%

Source: Calculated from MOPI (1985).

TABLE 4.7

RETURN MIGRANT INVESTMENTS

Type of Activity	Investment by Type of Activity and Manpower Level					
	High	Mid	Skilled	Unskilled	Maids	TOTAL
I. Number of Migrants Reporting						
Mfg Industry	0	1	1	1	0	3
Commercial	0	3	9	2	4	8
Service Industry	0	0	1	1	0	2
Agric Activity	0	2	11	1	4	18
Housing: Buy land	0	4	20	8	10	42
Repair/renovate	4	6	44	15	36	105
Construct	3	6	42	9	12	72
Vehicles	1	2	16	4	3	26
Other	1	2	1	0	1	5
TOTAL:	9	26	145	41	70	291
NO. MIGRANTS	13	40	165	57	149	424
II. Total Value of Investments Made (Rs 000)						
Mfg Industry	0.0	3.0	75.0	50.0	0.0	128.0
Commercial	0.0	121.0	579.0	170.0	67.0	937.0
Service Industry	0.0	0.0	30.0	80.0	0.0	110.0
Agric Activity	0.0	46.5	743.0	25.0	91.0	905.5
Housing: Buy land	0.0	315.0	1,021.0	262.5	211.0	1,809.5
Repair/renovate	75.0	119.0	893.6	267.7	453.5	1,808.8
Construct	350.0	1,225.0	3,534.0	366.0	411.0	5,886.0
Vehicles	25.[illegible]	60.0	1,050.0	225.0	86.3	1,446.3
Other	3.0	150.0	12.0	0.0	2.0	167.0
TOTAL:	453.0	2,039.5	7,937.6	1,446.2	1,321.8	13,198.1
III. Average Value of Investments Made (per respondent--Rs 000)						
Mfg Industry	--	3.0	75.0	50.0	--	42.7
Commercial	--	40.3	64.3	85.0	16.8	52.1
Service Industry	--	--	30.0	80.0	--	55.0
Agric Activity	--	23.3	67.5	25.0	22.8	50.3
Housing: Buy land	--	78.8	51.1	32.8	21.1	43.1
Repair/renovate	18.8	19.8	20.3	17.8	12.6	17.2
Construct	116.7	204.2	84.1	40.7	34.3	81.8
Vehicles	25.0	30.0	65.6	56.3	28.8	55.6
Other	3.0	75.0	12.0	--	2.0	33.4
TOTAL:	50.3	78.4	54.7	35.3	18.9	45.4

Table 4.7, cont.

IV. Average Value of Investments Made (Total Sample--Rupees)

Mfg Industry	--	75.0	454.5	877.2	--	301.9
Commercial	--	3,025.0	3,509.1	2,982.5	449.7	2,209.9
Service Industry	--	--	181.8	1,403.5	--	259.4
Agric Activity	--	1,162.5	4,503.0	438.6	610.7	2,135.6
Housing: Buy land	--	7,875.0	6,187.9	4,605.3	1,416.1	4,267.7
Repair/renovate	5,769.2	2,975.0	5,415.8	4,696.5	3,043.6	4,266.0
Construct	26,923.1	30,625.0	21,418.2	6,421.1	2,758.4	13,882.1
Vehicles	1,923.1	1,500.0	6,363.6	3,947.4	579.2	3,411.1
Other	230.8	3,750.0	72.7	--	13.4	393.9
TOTAL:	34,846.2	50,987.5	48,106.7	25,371.9	8,871.1	31,127.6

Source: MOPI (1985), Table 67 (page 131), Table 33 (p. 70).

TABLE 5.1

GROWTH OF COOPERATIVE RURAL BANKS IN SRI LANKA

Year	No. Banks	Amounts in Thousand Rupees: Total Deposits	Total Advances	Net Out-Placement	Local Lending -- Deposits	Growth Deposits	Rate -- Advances
1965	8	496	1,167	(671)	235.3%		
1966	13	726	1,754	(1,028)	241.6%	46.4%	50.3%
1967	27	1,371	2,663	(1,292)	194.2%	88.8%	51.8%
1968	44	3,333	4,446	(1,113)	133.4%	143.1%	67.0%
1969	89	6,173	5,396	777	87.4%	85.2%	21.4%
1970	90	16,909	9,102	7,807	53.8%	173.9%	68.7%
1971	111	17,864	9,317	8,547	52.2%	5.6%	2.4%
1972	242	23,320	15,185	8,135	65.1%	30.5%	63.0%
1973	341	45,155	38,912	6,243	86.2%	93.6%	156.3%
1974	403	62,734	67,407	(4,673)	107.4%	38.9%	73.2%
1975	447	74,214	87,286	(13,072)	117.6%	18.3%	29.5%
1976	503	116,289	101,793	14,496	87.5%	56.7%	16.6%
1977	544	175,462	110,883	64,579	63.2%	50.9%	8.9%
1978	559	222,146	125,079	97,067	56.3%	26.6%	12.8%
1979	586	271,003	129,251	141,752	47.7%	22.0%	3.3%
1980	641	368,354	176,699	191,655	48.0%	35.9%	36.7%
1981	743	434,046	271,596	162,450	62.6%	17.8%	53.7%
1982	804	541,483	329,277	212,206	60.8%	24.8%	21.2%
1983	840	683,444	361,261	322,183	52.9%	26.2%	9.7%
1984	888	965,490	508,246	457,244	52.6%	41.3%	40.7%
1985	914	1,087,536	574,811	512,725	52.9%	12.6%	13.1%
1986	932	1,295,598	657,775	637,823	50.8%	19.1%	14.4%
1987	955	1,560,178	708,782	851,396	45.4%	20.4%	7.8%
1988	968	1,832,053	764,598	1,067,455	41.7%	17.4%	7.9%

TABLE 5.2

RURAL BANKS BY SECTOR AT END 1988

Sector:	No. of Societies	No Rural Banks	Total Deposits	Total Advances	Total Investment	Investment /Deposits
Colombo	10	63	189.6	96.0	103.5	54.6%
Semi-Urban *	89	330	759.0	272.5	500.1	65.9%
Mixed	117	449	745.8	249.6	469.8	63.0%
Rural	67	135	118.0	48.0	72.5	61.4%
Total:	283	977	1,812.4	666.1	1,145.9	63.2%

* Kalutara, Galle, Mampaha, Kandy, Jaffna

Note: Totals do not agree with Table 5.1 due to different data sources in originals.

TABLE 5.3

GROWTH OF RURAL BANKS IN SRI LANKA IN REAL TERMS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			Deflator			Deposits Deflated by:		
	(Thousand Rupees)							
	Total Deposits	Total Advances	GNP Defl.	CCPI	UCPI	CCPI (1)/(4)	GNP Deflator (1)/(3)	UCPI (1)/(5)
1970	16,909	9,102	100.0	100.0	100.0	16,909	16,909	16,909
1973	45,155	38,912	126.6	120.7	113.8	37,411	35,682	39,679
1975	74,214	87,286	171.7	143.5	(276.2)	51,717	43,218	(26,870)
1978	222,146	125,079	232.2	164.8	270.0	134,797	95,662	82,276
1980	368,354	176,699	317.7	230.2	422.4	160,015	115,940	87,205
1982	541,483	329,277	422.1	301.1	570.9	179,835	128,295	94,847
1984	965,490	508,246	568.7	400.2	767.9	241,240	169,759	125,738
1986	1,295,598	657,775	604.9	438.5	794.1	295,468	214,187	163,149
1987	1,560,178	708,782	645.9	472.4	851.2	330,294	241,555	183,289
1988	1,832,053	764,598	720.2	538.4	977.4	340,265	254,374	187,445

TABLE 5.3a
RURAL BANK REAL DEPOSITS PER THOUSAND POPULATION

	(9)	(10)	(10a)	(11)	(11a)	(12)	(12a)
		DEFLATOR USED					
	Mid-Yr Population (000)	GNP Deflator Value (7)/(9)	GNP Deflator Growth Rate	CCPI Value (6)/(9)	CCPI Growth Rate	UCPI Value (8)/(9)	UCPI Growth Rate
1970	12,516	1,351		1,351		1,351	
1973	13,091	2,726	+26.4%	2,858	+28.4%	3,031	+30.9%
1975	13,496	3,202	8.4%	3,832	15.8%	(1,991)	(-19.0%)
1978	14,184	6,744	28.2%	9,503	35.4%	5,801	(+42.8%)
1980	14,783	7,843	7.8%	10,824	6.7%	5,899	0.8%
1982	15,189	8,447	3.8%	11,840	4.6%	6,244	2.9%
1984	15,599	10,883	13.5%	15,465	14.3%	8,061	13.6%
1986	16,117	13,290	10.5%	18,333	8.9%	10,123	12.1%
1987	16,361	14,764	11.1%	20,188	10.1%	11,203	10.7%
1988	16,586	15,337	3.9%	20,515	1.6%	11,301	0.9%

Sources:
Banking Deposit Information from Table 5.1
Price Deflator, Population Data from Table 1.1
Note: Parentheses imply data are not of high confidence.

TABLE 5.4

INTEREST RATE STRUCTURE IN THE INFORMAL SECTOR

Annual Interest Rate	Distribution of Borrowing SURVEY YEAR 1976	1978/9	1981/2
0%	31.2%	72.1%	54.1%
1 - 10	4.2%	4.1%	1.6%
11 - 20	15.8%	3.5%	13.0%
21 - 50	36.8%	3.0%	3.0%
51 - 100	6.2%	5.4%	4.0%
over 100	5.8%	11.9%	24.3%
	100.0%	100.0%	100.0%
Average: *	25.1%	15.0%	24.6%

Source: Sanderatne 1988a Table 1, from Central Bank of Ceylon (1981), CFSES 1978/9, CFSES 1980/81.

* Sanderatne unclear concerning break points (e.g. 10.5 percent is not defined in table), to calculate averages we assume 0 percent is exact, and other ranges rounded to nearest 0.5 percent. We then take midpoint of each range, with 125 percent arbitrarily used as midpoint of "over 100".

TABLE 5.5

REAL RURAL INTEREST RATES IN THE FORMAL SECTOR

Year	Inflation Rate *	Dep. Rate (NSB)	Lending Rate (CRCS)	Real Rate of Interest on: Sanderatne Est. Deposits	Sanderatne Est. (CRCS)	Fernando Ests ** (CRCS)	Fernando Ests ** MT+LT loans
1979	10.8	15	9	+4.2	-1.8		
1980	26.1	20	9	-6.1	-17.1	-7.6	
1981	18.0	20	9	+2.0	-9.0	-9.2	-8.8 to -6.3
1982	10.8	20	9	+9.2	-1.8	-0.9	-0.4 to +2.2
1983	14.0	18	9	+4.0	-5.0	-6.0	-5.6 to -3.0
1984	16.6	18	9	+1.4	-7.6	-6.8	-3.8
1985	1.5	15	9	+13.5	+7.5	+7.4	+10.8
1986	7.9	13	9	+5.1	+1.1		
1987	7.7	13	9	+5.3	+1.3		

* CCPI
** Fernando uses Central Bank GNP deflator

CRCS: Comprehensive Rural Credit Scheme
NSB: National Savings Bank
Source: Fernando (1987, p. 92), Sandaratne (1988a, Table 2).

TABLE 6.1

INDUSTRIES IN SRI LANKA--REGIONAL DISTRIBUTION

MEDIUM AND LARGE FIRMS

	No. Estab.	Employ-ment	Value Added (Rs. million)	Av. Employ -ment	V.A./ Worker (Rs. million)
Colombo	1,584	98,716	5,179	62.3	52.5
Gampaha	1,938	66,827	13,316	34.5	199.3
Kalutara	701	13,838	265	19.7	19.2
Kandy	1,898	35,754	497	18.8	13.9
Matale	608	11,066	107	18.2	9.7
Nuwara Eliya	1,201	36,019	877	30.0	24.3
Galle	887	19,966	422	22.5	21.1
Matara	529	10,648	398	20.1	37.4
Hambantota	157	3,156	65	20.1	20.6
Jaffna	688	12,631	554	18.4	43.9
Mannar	47	498	19	10.6	38.2
Vavuniya	47	743	61	15.8	82.1
Mullaitivu	23	369	4	16.0	10.8
Batticaloa	243	5,197	269	21.0	51.8
Amparai	368	9,635	189	26.2	19.6
Trincomalee	93	2,709	1,986	29.1	733.1
Kurunegala	1,114	21,813	671	19.6	30.8
Pettelam	800	28,350	553	35.4	19.5
Anuradhapura	168	3,248	110	19.3	33.9
Polonnaruwa	108	2,931	135	27.1	46.1
Badulla	793	12,970	550	16.4	42.4
Monaragala	204	1,913	64	9.4	33.5
Ratnapura	1,264	22,120	631	17.5	28.5
Kegalle	583	24,798	251	42.5	10.1
TOTAL	16,051	445,915	27,173	27.8	60.9

Table 6.1 p. 2

SMALL FIRMS

	No. Estab.	Employ-ment	Value Added (Rs. million)	Av. Employ -ment	V.A./ Worker (Rs. million)
Colombo	5,827	13,793	226	2.4	16.4
Gampaha	7,913	19,375	526	2.4	27.1
Kalutara	5,976	11,083	91	1.9	8.2
Kandy	4,668	10,533	114	2.3	10.8
Matale	1,444	3,203	33	2.2	10.3
Nuwara Eliya	864	1,792	30	2.1	16.7
Galle	9,683	17,622	146	1.8	8.3
Matara	8,194	18,346	94	2.2	5.1
Hambantota	2,862	5,764	39	2.0	6.8
Jaffna	2,433	5,922	132	2.4	22.3
Mannar	516	1,331	13	2.6	9.8
Vavuniya	129	327	7	2.5	21.4
Mullaitivu	68	173	1	2.5	5.8
Batticaloa	2,485	5,154	35	2.1	6.8
Amparai	1,681	3,830	88	2.3	23.0
Trincomalee	845	1,892	41	2.2	21.7
Kurunegala	10,008	21,106	253	2.1	12.0
Pettelam	3,094	7,467	118	2.4	15.8
Anuradhapura	1,976	3,951	48	2.0	12.1
Polonnaruwa	895	1,788	18	2.0	10.1
Badulla	1,273	2,822	49	2.2	17.4
Monaragala	731	1,626	11	2.2	6.8
Ratnapura	4,421	7,568	102	1.7	13.5
Kegalle	8,568	14,784	187	1.7	12.6
TOTAL	86,554	181,252	2,402	2.1	13.3

Table 6.1 p. 3

TOTAL

	No. Estab.	Employ-ment	Value Added (Rs. million)	Share of Small: No. Estabs.	Employ -ment	Value-Added
Colombo	7,411	112,509	5,405	12.3 %	4.2 %	78.6 %
Gampaha	9,851	86,202	13,842	22.5	3.8	80.3
Kalutara	6,677	24,921	356	44.5	25.6	89.6
Kandy	6,566	46,287	611	22.8	18.7	71.1
Matale	2,052	14,269	140	22.4	23.6	70.4
Nuwara Eliya	2,065	37,811	907	4.7	3.3	41.8
Galle	10,570	37,588	568	46.9	25.7	91.6
Matara	8,723	28,994	492	63.3	19.1	93.9
Hambantota	3,019	8,920	104	64.6	37.5	94.8
Jaffna	3,121	18,553	686	31.9	19.2	78.0
Mannar	563	1,829	32	72.8	40.6	91.7
Vavuniya	176	1,070	68	30.6	10.3	73.3
Mullaitivu	91	542	5	31.9	20.0	74.7
Batticaloa	2,733	10,351	304	49.8	11.5	90.9
Amparai	2,049	13,465	277	28.4	31.8	82.0
Trincomalee	938	4,601	2,027	41.1	2.0	90.1
Kurunegala	11,122	42,919	924	49.2	27.4	90.0
Pettelam	3,894	35,817	671	20.8	17.6	79.5
Anuradhapura	2,144	7,199	158	54.9	30.4	92.2
Polonnaruwa	1,003	4,719	153	37.9	11.8	89.2
Badulla	2,066	15,792	599	17.9	8.2	61.6
Monaragala	935	3,539	75	45.9	14.7	78.2
Ratnapura	5,685	29,688	733	25.5	13.9	77.8
Kegalle	9,151	39,582	438	37.4	42.7	93.6
TOTAL	102,605	627,167	29,575	28.9 %	8.1 %	84.4 %

Source: DCS, Census of Industry 1983
Reported in Ellapola, Table 10 (sums do not agree due to typographical errors in orginal)

TABLE 6.2

SECTORAL DISTRIBUTION OF UNAPPROVED INDUSTRIES, 1976

		No. units	Percent
1	Jaggery	1491	9.6%
2	Sugar Cane Syrup	194	1.2%
3	Rice Mills	959	6.1%
4	Copra	647	4.1%
5	Textile Weaving	1706	10.9%
6	Batik	201	1.3%
7	Garments	138	0.9%
8	Cane Products	220	1.4%
9	Coir fibre	284	1.8%
10	Sheet rubber	1049	6.7%
11	Bricks	1288	8.3%
12	Pottery	2022	13.0%
13	Earthenware	331	2.1%
14	Cutting of gems	241	1.5%
15	Metal quarry	191	1.2%
16	Blacksmithery	1210	7.8%
17	Curios	137	0.9%
18	Others*	3290	21.1%
	TOTAL:	15599	100.0%

* Products for which less than 100 units are functioning

Source: IDB, Census of Unapproved Industries, 1976
Reported in Athukorala, 1986, p 89

TABLE 6.3

THE IMPACT OF TRADE LIBERALIZATION ON MANUFACTURING: A COMPARISON OF APPROVED AND UNAPPROVED UNITS (1977-79)

		Approved Industries	Unapproved Industries	All Industries
Percentage distribution of number of firms according to "nature"				
Closed down		8.6	3.1	4.3
Adversely affected		15.8	26.9	24.6
Benefitted		37.6	18.5	22.5
Unaffected		38.0	22.5	48.7
		100.0	100.0	100.0
Percentage change in selected performance indicators 1977-79 *				
Investment		+69.7	-20.9	+54.4
Production		+20.5	- 6.0	+12.8
Sales		+14.1	-28.0	- 1.6
Profit		+39.0	-28.7	+ 6.5
Employment		+ 7.1	-16.1	- 6.0
Raw material usage	--Local	-15.0	-16.1	-15.4
	--Foreign	+30.2	-27.6	+14.2

* Value figures for 1979 converted into 1977 prices

Source: Athukorala, 1986, p. 91.

TABLE 6.4

DENSITY OF HOUSEHOLD ENTERPRISE

District	Population in Households with HH Enterprises (000)	Density per Square Km	Density per 000 Pop (1981)
Colombo	315.9	484	186
Gampaha	438.6	314	315
Kalutara	299.3	186	360
Kandy	544.9	253	519
Matale	228.4	115	639
Nuwara Eliya	187.0	130	310
Galle	394.7	236	485
Matara	350.2	281	543
Hambantota	321.7	124	757
Jaffna	316.9	153	380
Mannar	68.1	34	641
Vavuniya	55.8	21	585
Mullaitivu	47.8	24	619
Batticaloa	147.6	60	447
Ampara	274.4	60	704
Trincomalee	94.4	36	369
Kurunegala	900.9	189	743
Puttalam	257.9	87	523
Anuradhapura	440.4	62	748
Polonnaruwa	178.9	53	679
Badulla	341.9	121	532
Moneragala	273.8	49	1000
Ratnapura	416.1	128	522
Kegalle	334.9	201	489
SRI LANKA	7,225.5	112	487
Urban	700		219
Rural	6,600		566

Source: Calculated from MOPI Survey of Household Economic Activities (1986b), page 29 and MOPI, Census of Population and Housing (1986a), Tables 4.3, 6.1.

APPENDIX B

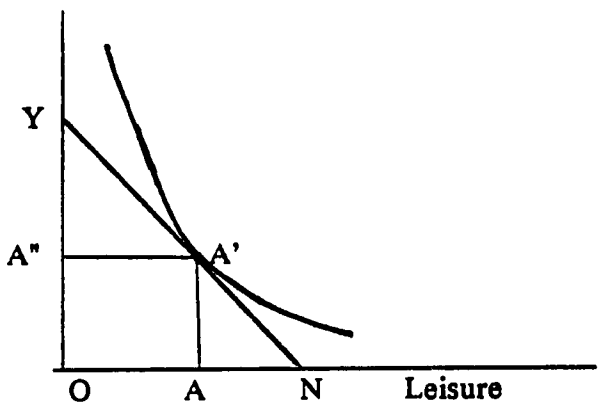
A MODEL OF THE TEA ESTATE WITH LOW INVOLUNTARY UNEMPLOYMENT

APPENDIX B

A MODEL OF THE TEA ESTATE WITH LOW INVOLUNTARY UNEMPLOYMENT

We construct a representative individual labor supply considering leisure as a "good" and work a necessary cost of obtaining income:

Figure 1

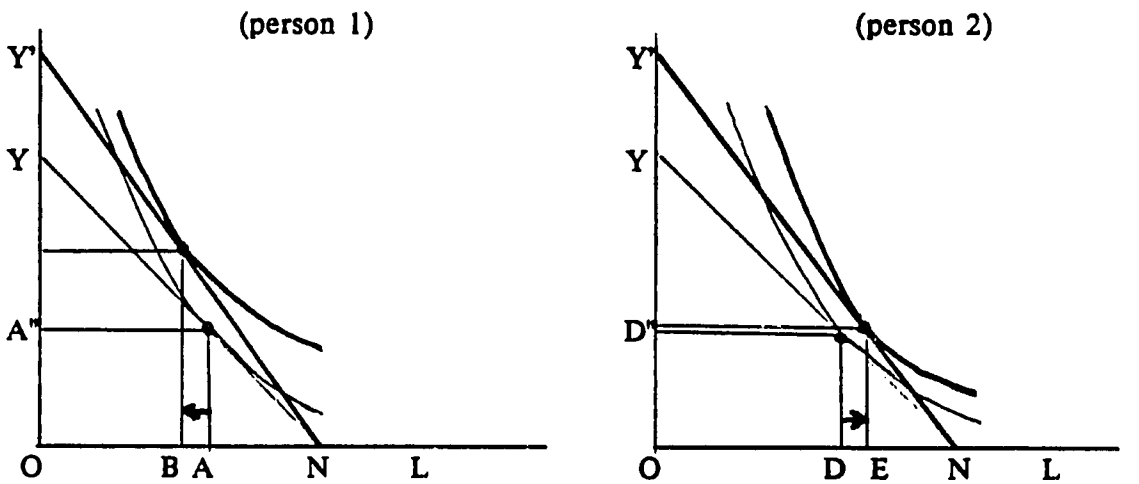


The daily wage rate = OY/ON
The supply of work days = AN
Annual income = OA"
"Leisure" (non-working days at going wage = OA
Y = Potential Income per year if no leisure were taken
N = Leisure days per year (total potential is 365.25)

Note: The daily wage and the days worked per year are averages (a) for a year and (b) for workers as a whole. This is supported by the notion that workers do not prefer to work additional days at the going daily wage as compared to other alternatives (own-account work, vacations, other non-market constraints). The employer also faces a problem of absenteeism (both scheduled and unscheduled).

From this we can construct the supply curve of labor by observing how much extra work or leisure workers choose when the wage rate, and hence potential income, is increased. Here we consider two individuals:

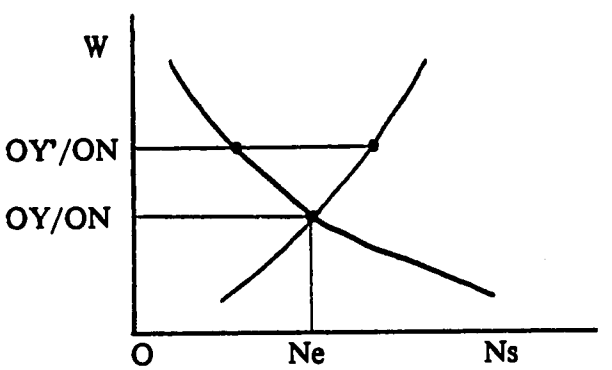
Figure 2



There will be differences among individuals around the averages, some (person 1) willing to work more at a higher wage; others (person 2) may prefer greater leisure if this same wage gives them an income more nearly sufficient for their needs. The "supply curve" of labor can be obtained by summing the total labor offered by all individuals at each potential wage: at wage OY/ON it is AN + DN; at wage OY'/ON it is BN + EN. The resulting supply curve for all such individuals is the curve shown in Figure 3. The market supply curve will be upward sloping. This result would arise even if we are dealing with backward bending supply curves (Berg, 1961).

The market equilibrium cannot produce "full" utilization because (a) there are non-wage costs of accommodating variance of individual behavior and (b) institutional constraints (shift schedules, weather, maintenance requirements, availability of spares and raw material, supervision, etc). One can envisage a market equilibrium at the lower wage OY/ON as follows.

Figure 3



W = daily wage rate
Ns = AN x Number of workers employed.

OY/ON may be low and ONe may be considered unsatisfactory but improvement in levels of labor utilization in tea will depend on higher wages which will in turn depend upon better markets and improved organization.

It is assumed much too readily that for low-paid and underemployed workers the marginal utility of income is very high (almost infinite) and marginal utility of leisure is low because they have so much of it. But it is also extremely likely that low-paid workers might be too exhausted to work more without better pay and might find various kinds of non-work and self-activity less strenuous and more attractive when the pay is low. Fields (1986) provides many examples which emphasize this possibility.