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LABOR MARKETS IN JAMAICA
Structure, Performance, and Policy

Bruce T. Vermeulen
Colby College

Peter B. Doeringer
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This study was conducted under AID contract #OTR-0092-C-00-2254-00, Project #930-092. Project title: "Labor Markets and Labor Market Structure in Developing Countries."

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Summary

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Summary

Chronic unemployment, low productivity, and widespread poverty and inequality have been persistent features of the Jamaican economy for decades. However, sharp reductions in opportunities for emigration, severely curtailed rural job options, rationalized production in manufacturing, and faltering economic growth in the late 1970s, have combined to aggravate joblessness and undermine income growth in recent years.

Unemployment declined and real wages rose during the early 1970's, spurred by Keynesian expansionary policies coupled with public employment programs aimed deliberately at alleviating unemployment. However, productivity went into a sharp decline, which continued through the decade, as a result of OPEC price rises and subsequent foreign exchange crises. Once austerity measures were required to bring spending more in line with productivity, real wages fell as well. By the end of the 1970's unemployment was well above its level at the beginning of the decade and real wages had fallen as well.

The slow pace of job growth in the late 1960's, and the virtual stagnation of employment growth after the public employment projects of the early 1970's proved unsustainable, testify to the difficulties which Jamaica faces in attempting to employ its population productively. Employment, as well as the population, is increasingly urban and jobs are becoming concentrated in 'modern' rather than 'traditional' occupations. This transformation has been the result more of "push" forces due to changes in agricultural employment than of strong 'pull' forces created by a prosperous urban economy.

The negative effects on worker incomes of declining labor demand have been felt only partly through job losses and unemployment. To a much greater extent than in more industrialized economies, unemployment effects are partially disguised in the increased marginalization of income-earning opportunities, as individuals are pressed into less and less productive jobs. Particularly in the informal sector, adjustments to faltering demand take the form of falling incomes rather than "open" unemployment. Thus, although official unemployment data have an upward bias due to the inclusion of youths some of whom may not genuinely be seeking employment, they also greatly understate the extent of unemployment among those whose skills and willingness to work are seriously underemployed.

For women, whose labor force participation rates are unusually high and have continued to increase, the consequences of declining wage-earning opportunities have been especially severe. The data indicate that women have suffered disproportionately high rates of open unemployment in all occupational categories.

Among women who are employed, incomes tend to be relatively low even in a strong labor market. With female employment concentrated in services, teaching, clerical jobs, and petty trade ('higgling'), most income-earning opportunities, even for more educated Jamaican women, are in occupations at the lower end of the wage distribution. Unemployment is also disproportionately concentrated among females.

Since 1980, government policies to address conditions of high unemployment, low productivity, and poverty have had a limited impact on these problems. After an initial surge, the economy has shown far greater resistance to growth, and the hoped for infusion of international business initiatives has not yet come to fruition.

A second major concern of Jamaica's recent efforts to stimulate domestic and foreign private investment, and to generate new jobs, has been the contentious nature of labor-management relations. Within the formal sector, industrial relations concerns are voiced prominently by both businessmen and labor leaders in discussions of employment problems. Yet, the link between the quality of industrial relations and successful employment growth is largely unexplored in recent policy discussions.

The persistence of labor market and industrial relations problems underscores the difficulty of generating sufficient productive employment in Jamaica. While macroeconomic and international factors will continue to dominate the economic situation, growth prospects can be improved through better labor market policies. Devising such policies demands a better understanding of the functioning of labor markets within Jamaica's various types of employment subsystems.

Distinctions need to be made between markets in which easy entry and open wage competition are the principal determinants of income-earning opportunities, and those within which internal labor markets, job sharing networks, and other institutional structures constrain and modify the forces of market competition. Effective human resource policies will also require a more complete understanding of the ways in which employers fill jobs in different sectors and the manner in which individuals from various socio-economic and geographic backgrounds navigate through the complex employment system to build a livelihood.

Policy Considerations

Our reading of labor market problems and policy in Jamaica suggests that four closely related areas of particular importance and concern are:

(1) skill bottlenecks and labor force training; (2) labor productivity; (3) youth employment; and (4) labor-management relations. Failure to improve performance in each of these areas may inhibit job creation, stifle economic growth, and worsen poverty and inequality.

Solutions which have already been proposed to correct problems in these areas focus on the formal sector -- and on the stimulation of market competition by reducing union power. Skill bottlenecks are to be addressed by expanding the vocational training capability of the education system; inadequate labor productivity is seen as being rooted primarily in skill deficiencies; and youth unemployment has been viewed as a structural problem also to be solved by a combination of school-based training programs and subsidies to employers who hire young workers.

Labor-management problems are viewed most frequently by business and government decision makers as a result of union militancy. In this view, union power is used to press for economically unjustifiable wage increases; to resist technical and administrative changes which could improve productivity; and to disrupt production through strikes in order to achieve union objectives. Unions are thereby thought to weaken the international competiveness of Jamaican industry. The principal recommendation has been to lessen union power and to invigorate labor market competition.

Our analysis of labor market processes in Jamaica leads to a significantly different analysis of Jamaica's labor market problems. While a number of important questions remain unanswered, our findings suggest that several modifications in current policy approaches may be appropriate.

Skill bottlenecks. The formal sector has developed a variety of effective strategies for meeting major changes in the level and skill composition of its labor force. We encountered no insurmountable skill

bottlenecks as the companies interviewed seemed well equipped to handle skill development in response to a variety of fairly substantial changes resulting from growth, new technology, and the introduction of new products.

The internal training capability of these large enterprises is strong. These companies have also developed partnerships with individual vocational schools to provide specialized training which tailored to the company's particular needs. Where training facilities are unavailable within Jamaica, such as when specialized machinery is brought on line requiring a small number of newly-skilled workers, companies have found suitable programs in the United States and Canada to which they have sent key employees.

Apart from skill bottlenecks among highly educated occupations, the main problem in the education and training area seems to be connected to primary (and possibly secondary) education. As in more industrialized countries, employers generally expect to provide a considerable portion of any specific skill training needed by their work force. However, the learning ability of trainees, and therefore the costs of accomplishing any training, depends crucially on workers' ability to learn. This capacity to learn efficiently often depends on having effective skills in reading, writing, communication, and basic mathematics. Jamaican employers we interviewed are critical of the educational foundation in these basic skills which is being provided by the public schools. Although these employers are able to find sufficient workers to meet their minimum hiring needs in the present economy, they reported that many school leavers were only marginally prepared in the basic mathematical and communication skills needed for effective learning on the job. Thus, hiring often requires screening many applicants to find a few with sufficiently developed learning skills.

Apart from short-term complaints about labor quality, especially from lower-wage and more marginal firms, employers are not likely to face

difficulties in meeting the bulk of the labor demands in the foreseeable future. Where specific skill shortages do emerge, they are likely to be in technical and managerial occupations. These vacancies will continue to be hard to fill within the Jamaican labor market and in the short term will require some on-going recruitment from abroad.

Jamaican employers do turn to the international labor market on those rare occasions when internal recruitment and training, or vendor training, cannot provide a particular set of highly specialized skills. Such foreign recruitment typically involves technical, professional and managerial occupations for which demand cannot yet be met quickly enough within the Jamaican labor market and its education and training system.

Past emigration has created a pool of educated and experienced Jamaican nationals living abroad. If income-earning opportunities at home improve, this pool of already-qualified individuals represents an important source of skilled labor which requires no additional educational investments. Thus, expanded investments in very expensive forms of higher education may be ineffective in the absence of relative wage increases within these occupational categories, and they may be superfluous if such wage changes occur.

Rather than causing major bottlenecks in a broad range of specific skill categories for which expanded vocational training is appropriate, successful economic growth is likely to intensify concerns over the quality of basic primary and secondary education already expressed by the employers interviewed for this report. Thus, as growth progresses, the costs of job creation, the biases in choice of technology, and the decisions governing levels of investment within Jamaica as a whole, all depend to an important degree on the basic learning abilities of the work force. Developing a

successful human resources strategy, therefore, requires evaluating the costs and benefits of a wide range of training options — employer-based on-the-job training, vocational training, basic education and higher education.

Labor productivity. Labor productivity has improved substantially in recent years in Jamaica's formal sector. This improvement occurred without major changes in either skill levels or technology. Our interviews suggest that much of this improvement can be traced to changes in management practices with respect to the organization of production and the utilization of labor. In addition, there have been improvements in the quality of human resource management, in the interpersonal and organizational skills and attitudes of supervisors, and in the financial and nonmonetary incentives provided at the workplace. The extent to which productivity improvements also reflects workers' reactions to the prospect of layoffs could not be determined, but this was undoubtedly a reinforcing factor.

Although productivity does not appear currently to be the most pressing issue within the formal sector, it is a very real problem elsewhere in the economy. The shake-out in formal sector employment that occurred during the recent recessions, coupled with a growth in the youth labor force, has forced an expansion of employment in the informal sector without a corresponding growth in output or productive jobs. Thus, output and earnings per worker has inevitably declined, and underemployment has accelerated in the informal sector. While this sector has provided vital employment opportunities in a time of rising unemployment, the rapid erosion of earnings among workers in smaller enterprises and in self-employment after 1975 means that the official unemployment data account for less of Jamaican poverty than in the past. Aggregate statistics which report employment and output for the entire economy, therefore, conceal the

divergent trends in productivity and earnings between the formal and informal sectors.

Yet, as in the formal sector, problems of low productivity cannot be solved through strategies which rely exclusively on education and training. Surveys of the informal sector suggest that the problems of inadequate demand, shortages of intermediate inputs, and capital availability are also serious threats to small enterprise performance. Many small businesses survive, in spite of these problems, on the basis of long hours of work, unpaid family labor, and flexibility and ingenuity in small enterprise management.

We were unable to explore the problems of small enterprises beyond those that were evident from surveys and labor force statistics. These surveys show that the small enterprise sector is heterogeneous with respect to industry, scale of operations, and production methods. Nevertheless, many of these firms have accumulated significant items of capital equipment, many have fixed business locations. and some employ wage labor.

The challenge for policy makers is to find ways of exploiting the strengths of the informal sector by encouraging an expansion of demand for the goods and services that it produces. This small business sector has demonstrated its effectiveness in absorbing workers and in producing goods and services in a labor-intensive manner. By investing in measures which aid in its expansion, government policy can promote increased employment, productivity, and incomes.

Youth unemployment. Since 1976 there has been a substantial increase in the youth unemployment rate, and labor market policy has tended to focus on this problem. The aggregate employment data suggest that the principal cause of increased youth unemployment has been slow growth in the Jamaican

economy during the late 1960's and 1970's, coupled with a sharp increase in the youth labor force.

Even when the demand for labor is robust, however, young workers in Jamaica consistently face employment problems. In the years immediately after leaving school, young workers traditionally have higher unemployment rates than adults as they begin to establish their work patterns. Due to inexperience, lack of connections, employer hiring preferences, and the like, youth cannot always obtain the kinds of jobs they expect. They often experiment with a variety of formal and informal sector jobs, and may move erratically from job to job and in and out of the labor force prior to settling down as adults.

As a result, there may be a large component of both "frictional" and "waiting" unemployment among young workers as they sample different jobs and as they hold out for jobs that will meet their employment expectations. Since all young workers are included in the unemployment statistics, whether they are actively seeking work or merely "waiting", it is difficult to assess the social cost of unemployment among this age group. Yet, it seems quite clear that in Jamaica, most young workers face severe obstacles to obtaining productive employment, even when they engage in active job search.

Unemployment rates for Jamaican youths have been relatively high as long as data has been available; and unemployment rates have been sharply lower for workers in their late twenties. Young workers experience more frictional unemployment and more restricted job opportunities than older workers almost regardless of market conditions, as they search for and test job alternatives.

Inexperience, and possibly age discrimination, rather than a lack of formal skill training, appear to be the major employment barriers to youth.

Employers, particularly in formal sector firms, often prefer to hire somewhat older workers who have some experience with work and who are ready to settle down in the labor market. In an economy with large surpluses of available workers from which to choose, formal sector employers are particularly likely to select more mature and experienced workers in preference to recent school leavers.

Efforts to make young workers more attractive by providing skill training are, therefore, not likely to affect this overall pattern of unemployment to any great degree. Moreover, we have seen no evidence of skill bottlenecks, or of substantial numbers of unfilled jobs at skill levels for which young workers could be trained within a reasonable period of time.

Thus, the principal means of reducing youth unemployment is to achieve a rate of economic growth which is sufficient to lower the aggregate unemployment rate in the economy. Measures focusing specifically on young workers have a tendency to be self-defeating, either because they have no impact on demand, or because they tend to reallocate existing demand so as to cause job losses for some other group in the work force.

Other changes in employability. The concern with youth unemployment has masked several changes in the labor market situation of other groups. For example, there appears to be a general shift in employment practices which has favored prime-age adults. These workers not only experienced employment gains relative to young workers, they also showed improvement relative to older males aged 55-64 and to young adult females aged 20-24. The employment rates of adult female workers aged 25-54 have also shown gains relative to those of adult males, along with sharp increases in labor force participation rate. However, unemployment rates among adult women

have grown even faster, and are more than three times as high as males in the same age range.

While open unemployment of young workers may not be as serious a structural problem as has been argued, so long as adulthood brings a reasonable likelihood of stable employment, the benefits and costs of economic change are not being spread evenly through the labor market. Wage differentials continue to be substantial by sector, and workers in some sectors are far more vulnerable to layoffs and real earnings declines than in other sectors during periods of recession. Moreover, even where employment rates have been improving, much of the growth has occurred in sectors of the economy, such as services and self employment, where low earnings and underemployment are a persistent problem. Thus, there are a broad range of structural problems affecting the employability of various demographic groups.

Labor-management relations. The stridency of union-management relations is also cited as a cause for concern in the labor market. Historically, there has been a long tradition of animosity and distrust between employers and workers. Unions are blamed for inflationary pressures in the economy, for disrupted production, and for inflexibility and opposition to productivity enhancements at the workplace. Management is termed old-fashioned, and insensitive to the working conditions and welfare of their employees.

In spite of these perceptions, aggregate measures of strike activity do not indicate that Jamaica is unusually strike prone, particularly for a country with a relatively large unionized sector. This apparent paradox may stem from the fact that strikes are only one manifestation of a troubled industrial relations climate. An adversarial relationship between workers

and managers can have a devastating impact on productivity even without actual strikes.

It may also be that the degree of unpredictability in labor-management relations creates a sense that the conduct of business in Jamaica is unusually difficult. The nature of Jamaican unions, inter-union rivalries, and the weakness of the governmental industrial relations machinery, contribute to conditions of uncertainty. They create a volatile atmosphere in which work stoppages may occur for non-economic reasons, without warning and when they are completely unexpected by the employer. Where relations are poor to begin with, minor altercations can trigger major disuputes.

Government machinery for resolving industrial disputes has not been successful at addressing these problems and promoting orderly collective bargaining. Regardless of which major party is in office, there may be conflicts of interest between narrow political objectives and the smoother functioning of industrial relations. Neither party has incentives or inclinations to disengage itself from its union supporters and the intense inter-union rivalry.

Therefore, despite the efforts of a number of key government mediators and arbitrators, the government's industrial disputes machinery remains exceptionally weak. The lack of well-defined regulations, poor facilities, a shortage of technical support, and the limited experience of some mediators and Tribunal members, all serve to undermine efforts to ensure a degree of rationality and foster peaceful bargaining between the parties. While it may be difficult to depoliticize industrial relations in Jamaica, improvements in the mediation and arbitration services can and need to be made.

Our interviews further suggest that worker militancy and strike activity are related to the state of the economy. The pressures of

declining demand and job cuts have reduced the frequency and intensity of industrial disputes during the most recent economic recession. The prospect that economic recovery may rekindle industrial strife, further emphasizes the need to improve Jamaican industrial relations.

For policy makers intent on encouraging private investment and accelerating the process of job creation, the industrial relations system in Jamaica has advantages as well as disadvantages. Although the highly political nature of the trade union movement in Jamaica encourages both businesses and politicians to settle disputes in a politically expeditious manner which too often is not conducive to economic growth, a well organized work force and business community can also be a great asset for economic development. The close relationship between the government and the unions, combined with both high levels of union organization and the presence of a tightly-knit business community in the formal sector, provide an institutional vehicle which can be coordinated far more effectively than it is now for linking economic policy with industrial relations policy. This potential for harmonizing growth and industrial relations policies is an important key to making private investment more attractive, and thus is vital for accelerating employment growth in the future.

An Integrated Labor Market Strategy

There is little disagreement concerning the problems which need to be addressed by policy-makers in Jamaica. Clearly, job creation is a critical need. Currently, additions to the labor force are outstripping employment growth. Increased productivity is needed, both to keep Jamaica's exports competitive on world markets, and to make possible widespread increases in incomes.

Our labor market findings differ from those upon which current policy is based, however, in the relatively greater importance that we place on understanding formal and informal institutional relationships in the labor market. The historical character of the Jamaican economy, the contemporary social and political relationships which constrain economic decisions, and the role of trade unions and employer associations, must be taken into account along with more traditional economic variables. These institutional forces have shaped both the current structure of the economy, and many of the perceptions concerning policy options which are open to decision-makers. They often are key determinants of success and failure in the implementation of new policies.

Concerns over the accumulated effects of the loss of skilled labor through emigration, and a desire to increase the productivity and employability of the Jamaican work force, have led to an emphasis on expanding programs for vocational education and on-the-job training as the key tools of labor market policy. Our preliminary investigations have suggested, however, that the current strategy for training is unlikely to achieve its objectives because it does not sufficiently address either employers' concerns over the quality of basic education, or workers' needs for greater numbers of new jobs.

Spot skill shortages have been a problem, particularly in professional and managerial positions, but these problems require longer term solutions than are contemplated within the framework of vocational training policy. Second, the most frequent criticism by employers of the education and training system concerns general knowledge rather than specific vocational skills. Jamaican firms are accustomed to providing specialized skill training, but need adequately educated trainees who can learn these skills efficiently.

If the mix of education and training investments is to be re-balanced, steps must also be taken on the demand side of the labor market to ensure that earnings are commensurate with the level of individual and public educational investments. Not only must there be a sufficient increase in job opportunities that can productively employ trained workers, there must also be a increase in employment stability and improvements in industrial relations.

Finally, in planning for an integrated labor market policy, account must be taken of the variations in workplace employment practices in different sectors of the economy. Hiring procedures, patterns of job access, skill requirements of employers, training strategies, job stability, wage structures, wage determination procedures, working conditions, and fringe benefits all differ fundamentally in various parts of the economy. Programs and incentives need to be tailored to fit these specific and distinct sets of employment practices. By taking advantage of these differences through customized programs, significantly greater returns can be achieved on public investments in employment and training programs.

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Despite considerable assistance we received in making the study accurate and comprehensive, we remain painfully aware of the gaps that remain.

Preface

The study of Jamaica is one part of a larger project on labor market institutions and policy, conducted by a group of labor and development economists at Boston University, which is also examining labor markets in Kenya and Indonesia. While the research team had substantial experience in Indonesia and in Kenya, our consideration of Jamaica constituted a fresh start. Therefore, this study was initially designed as a pilot project focusing primarily on a review of available literature, supplemented by brief country visits to assemble current published data and other materials not readily available in the United States.

Our review of these materials was intended to focus on two principal questions:

1. Do we need to know about institutional, social and political arrangements in Jamaican labor markets, as well as traditional economic information, in order to formulate effective policies?

2. If so, over what range of issues is a deeper understanding of the operation of labor market institutions especially important, and what specific kinds of additional information and research are needed to guide successful policy intervention?

Jamaica's prominence within the Caribbean community, and its adverse experience of exceptionally high rates of urban unemployment, coupled with major flows of rural-urban migration and international emigration, make it an obvious candidate for addressing such questions. To our dismay, however, there was remarkably little research on the functioning of the Jamaican labor market. This was all the more surprising in view of large economic and political swings during the 1970s, and Jamaica's renewed emphasis on a combination of free trade and foreign aid to promote economic growth.

Previous research which is available is concentrated in three areas: (i) studies of aggregate economic trends, drawn largely from the principal

government statistical sources; (ii) micro-level case studies of specific communities and aspects of Jamaican society and economy; and (iii) studies of particular segments of the labor market. While this research does provide a considerable insight into the broad outlines of the Jamaican labor markets, most of the macroeconomic and micro-level studies are not oriented toward concerns in the labor market per se. The economy-wide analyses tend to focus on macroeconomic patterns of growth and change in the economy as a whole, and thus only skim the surface of issues in the labor market. The in-depth studies, in contrast, generally constitute highly focused observations of uncertain generalizability. The several studies which do focus on labor markets concentrate on individual submarkets, rather than on the country's entire system of labor markets, and do not provide an adequate overall picture of how the Jamaican labor market functions.

This lack of available research is all the more critical, since Jamaica has been launching a variety of programs directed at remedying unemployment and skill problems. Among the latest efforts is the creation of a multi-million dollar training program which is intended to upgrade the skill base of the labor force. This program is based on the assumption that expanded formal training programs are essential to overcome bottlenecks to industrial growth. This premise, however, remains largely untested. For purposes of understanding the operation of labor markets, and for formulating policies which are effective at addressing the country's most serious labor market problems, the gaps in the existing research base are a critical problem. In order to fill these gaps, our project evolved in a manner not anticipated in our initial proposal. Due to the paucity of either formal data or analytical work in a number of areas, we found it necessary to extend

the field time in Jamaica to conduct a series of detailed, exploratory interviews. Our interview process has led us to commence a more original piece of research than was initially proposed at this stage of our analysis.

During the initial field research, we compiled as complete a set of official, published labor market data as was possible. We also conducted a wide-ranging set of interviews with government officials and leaders in the business, academic and labor communities, to identify labor market issues which are particularly important to these various groups, and to begin developing hypotheses about how various segments of the labor market operate.

We have evaluated available data from the Ministry of Labour, the Department of Statistics, the National Planning Agency, the International Labour Organization, the World Bank, and from a lengthy literature review, to summarize anomalies in the macro-level and inter-industry trends which pose intruiging puzzles for policy. Secondly, we conducted a series of in depth interviews in a sample of larger, "formal sector" employers and with industrial relations specialists, to supplement the already available information on this portion of the labor market. The findings concentrate on three areas:

1. illustrations of important instances in which the underlying assumptions of current labor market policy warrant re-evaluation;

2. identification of specific areas in which more deliberate analysis of labor market institutions is needed; and

3. suggestions for additional research which should be implemented to strengthen our understanding of the links between these social/political/economic structures and effective employment, training, and industrial relations policies.

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Chapter I

INTRODUCTION

Unemployment, underemployment, and poverty have been persistent problems in Jamaica for many decades. The extreme degree of inequality, and the inability of the economy to generate enough productive job opportunities to keep up with the growth of the labor force, are the central challenges faced by policy makers concerned with labor markets and with economic development more generally.

Despite the long-term nature of these problems, there is a tendency among contemporary policy makers to seek remedies through marginal changes in policy. Although there is now a vast literature linking today's problems with Jamaica's colonial heritage, and viewing these problems as being deeply rooted in the very fabric of the society, much of the blame for the current crises of unemployment and foreign exchange shortages is frequently attributed to the policy choices taken during the 1970's which favored greater government intervention over the more market-oriented policies of preceding years.

These policies of greater state ownership and direction of the economy, and of deliberate income redistribution through a variety of social services and programs, coupled with the world-wide macroeconomic pressures and foreign exchange shortages brought on by the formation of the OPEC oil cartel, contributed to the catastrophic economic circumstances of the economy at the time of the 1980 election. The unemployment rate was approximately 27%; inflation was at an annual rate of 30%; the balance of payments current account deficit of U.S. was $213 million; and real gross domestic product (GDP) declined for the seventh consecutive year.[1]

The steady and protracted decline in real GDP is a stunning and extreme manifestation of the broad scope of economic distress in Jamaica in the latter half of the 1970's. Average productivity (per capita GDP at 1970 prices) declined in every year beginning in 1972-73, and real wage rates declined from 1976-77 onward.[2] The impact of economic decline was widely felt in the economy.

These declines in productivity and real wages took a particularly heavy toll on poorer elements of Jamaican society.[3] Severe shortages of foreign exchange arose in 1974-75, and forced the Jamaican government to seek financial aid from the IMF. Austerity measures imposed by the IMF as conditions for several loan agreements during the latter half of the 1970's included stringent wage restraints and major cutbacks in government social spending, and had a predictably severe impact at the lower end of the Jamaican income distribution.[4]

Viewed in terms of per capita growth in domestic product, the poor economic performance of the 1970's was in marked contrast to that of the 1950's and 1960's. During the 1950's, GDP rose at an impressive average rate of 8.5 percent per year.[5] During 1960-65, growth averaged 3.5 percent annually, and in the remainder of the 1960's the average rate of annual growth rose again to 5.5 percent. Moreover, the average annual rate of foreign investment during the 1960's was five times that of the 1950's.[6]

Throughout these years, Jamaica's economic policies were based on a minimum of direct government participation in either planning or production, and on an essentially unrestricted encouragement of foreign investment. The growth process was viewed as one which was to be leveraged through private sector initiatives, supported by industrial promotion laws which provided broad tax relief and other incentives, but with little direct planning and

intervention to shape the composition of investments, employment, and output. Recollection of the rapid growth of the economy in years prior to the 1970's fosters a belief that the resurrection of such policies might resolve Jamaica's current crisis.

Unfortunately, even a cursory review of Jamaica's prior economic history belies this optimistic and simplistic view of the nation's policy problems and needs, particularly in the labor market. What is striking about this period is that even with exceptionally rapid GDP growth, job creation was disappointingly slow and productive employment opportunities were not sufficiently widely distributed to reduce income inequality or significantly improve the living standard of most Jamaicans. The conclusion that employment growth has not been adequate even during recent periods of rapid investment and GDP growth is a compelling reason to look more closely at the labor market origins of these problems, and to search carefully for new strategies which might reverse these past patterns of persistent unemployment and poverty.

Policy Problems in Jamaican Labor Markets

High rates of unemployment despite rapid growth. The 1950's were in some respects a golden age of development in Jamaica. Rapid growth in real GDP, coupled with slow population growth, led to real per capita income increasing by 42 percent between 1950 and 1955.[7] Investment remained at nearly a quarter of GDP, and output per worker rose rapidly as well.[8]

Despite the dramatic pace of growth during the 1950's and 1960's, one of the most striking pieces of information concerning the labor market during this period is the persistence of unemployment. The investment boom, which was concentrated in mining and in tourism, created relatively few

linkages to the rest of the economy except for the financial services sector. Moreover, because mining operations are highly capital intensive, few jobs were created in that sector.

Although no consistent annual or semi-annual unemployment series exists prior to 1962, census data and the available literature indicate that unemployment and underemployment were very high. While unemployment fell from 17.5 to 13.5 percent between 1953 and 1960, it had risen again to 18.5 percent by 1968, and stood at 22.8 percent in 1972. In the nation's first five-year plan for economic development, unemployment was termed "the major social and economic problem in Jamaica."[9] The special difficulties of women and new labor market entrants (school leavers) in finding jobs were emphasized in the plan.[10]

Persistent poverty and income inequality. Despite the marked rise in income per capita during the 1950's, income distribution in Jamaica remained among the most unequal in the world toward the end of the decade.[11] While the most affluent 5% of the population received 30 percent of the nation's total income, the poorest 20% of the distribution (4 times as many persons) receive barely 2 percent of national income. On average, therefore, persons in the highest income bracket receive incomes which are sixty times the average incomes of the poorest fifth of the population.[12] This gave Jamaica one of the highest Gini coefficients in the world at 53. By contrast, Gini coefficients for most industrialized countries were below 40, while those of most less developed nations were below 45.[13]

These numbers suggest that at the very time when macroeconomic indicators of growth looked quite positive, the benefits of growth did not reach most Jamaicans. Paradoxically, rather than creating a widespread increase in standards of living, this rapid increase in productivity

apparently was a source of growing inequality and underemployment. Although the data are only suggestive of this finding, the benefits of rapid growth and rising productivity were so narrowly concentrated that their impact on standards of living in most of the economy may actually have been negative rather than positive.[14]

Reduced rates of emigration, and the "brain drain." In the context of high unemployment rates, and the inability of the Jamaican economy to provide sufficient numbers of productive income-earning opportunities to keep pace with the growth of its labor force, emigration has been an extremely significant factor in shaping labor market outcomes. Most of the emigrants during the 1950's went to Great Britain, which alone absorbed numbers of Jamaican workers in excess of 40 percent of the new additions to the Jamaican work force in some years.[15] Interviews with Jamaicans living in London, and with return migrants in Jamaica, indicate that the lack of job opportunities in Jamaica was a central reason for emigrating initially, a serious problem among return migrants, and a primary reason for many to re-emigrate even in the mid-1950's.[16]

Migration has been an important force in Jamaican labor markets for more than a century. Between 1881 and 1957, more than 1.5 million Jamaicans are estimated to have emigrated.[17] By the late 1970's, it was estimated that fully one half of the world's 4.4 million Jamaicans lived outside their native land.[18] Despite this massive exodus by Jamaicans searching for a more viable livelihood abroad, unemployment has continued to be an unresolved and growing problem at home.

The consistently large outmigration of Jamaicans reflects a deeply rooted difficulty of the economy during the past decade and a half in providing sufficiently productive work opportunities. For current policy

purposes, however, the massive outmigrations of the past carry a different message. Since the early 1960's, when Great Britain altered her immigration laws to block nearly all West Indians from entering Britain, the nature as well as the magnitude of subsequent emigration has been drastically altered. Although both the United States and Canada now absorb more Jamaicans annually than they did in 1962, the selective nature of these North American opportunities has changed the emigration from one which involved a full spectrum of skilled and unskilled occupational and educational backgrounds to one which clearly constitutes a "brain drain."[19]

The effects of these changes on the Jamaican labor force have been profound. Two consequences are particularly important for understanding rising unemployment. First, as the overall level of emigration has slowed, large numbers of young adults who would previously have left the country now remain in the labor force. Therefore, the labor force has been growing at a markedly faster rate than in the decades before 1965. Secondly, the selective nature of on-going emigration has left Jamaica with a relatively less trained, less employable work force than previously.

Declining productivity and employment opportunities in agriculture. While the range of employment opportunities abroad has been declining for those leaving the agricultural sector, prospects for economic subsistence in rural areas has been steadily declining as well. A declining proportion of agricultural employment typically accompanies the expansion of nonagricultural job opportunities in the course of economic modernization and development. However, the decline within Jamaica has been due principally to a deterioration of productivity in agriculture, rather than a by-product of modernization in either agriculture or in the nonagrarian economy.

Population densities per arable acre have always been comparatively high in Jamaica. During recent decades, the decline in opportunities abroad, declining size of family farms, and labor-saving changes particularly on the large sugar estates have led to less and less viable economic options for those Jamaicans who elect to remain in agriculture. Moreover, production costs for most agricultural crops are significantly higher than those of many other countries in Latin America and the Caribbean, making Jamaican export crops less competitive on world markets, and eliminating profit-making opportunities in these key exports. Many Jamaicans have responded by leaving the inland and coastal farming areas for the cities.

These rural-to-urban migrants, however, have tended to be 'pushed' out of agriculture rather than 'pulled' towards better opportunities. The continued subdivision of small family farms has forced most farmers with land to supplement their incomes with wage labor, and has left a far larger number of offspring and siblings landless. At the same time, rural opportunities for wage employment both in and out of agriculture have diminished rather than increased.

Declining acreage, output and profitability of the sugar and banana estates, and labor-saving changes in production methods, have resulted in sizeable reductions in estate labor requirements. A shift to the current system of registered "permanent" workers on the sugar estates also resulted in a sharp reduction in the number of persons hired to meet estate labor requirements.[20] These changes have led to substantial job losses both on the estates and in a variety of activities providing goods and services for the estates and the estate workers. The resulting erosion of employment opportunities has caused growing numbers of rural inhabitants to go to the cities despite clear signals that urban job prospects are also minimal.

Declining productivity and real wages in the 'modern' sector. These various sectoral problems have culminated in serious reductions in income for many segments of the labor force. While agricultural and nonagricultural job opportunities have been declining in the countryside, employment growth has faltered in the more modern segments of the economy as well. Even when the growth of industrial output was rapid, job creation was insufficient to absorb the vast numbers of workers leaving agriculture. Particularly during the latter half of the 1970's, both GDP per worker and compensation per worker declined in real terms in virtually every sector of the economy.

Importance of Institutional Structures in the Labor Market

In evaluating these serious labor market problems, and in considering possible solutions, it is important to look at a variety of "institutional" factors — the historical character of the Jamaican economy, the contemporary social and political relationships which constrain economic decisions, and the role of trade unions and employer associations — as well as more traditional economic variables. These institutional forces have shaped both the current structure of the economy and the perceptions of policy-options open to decision-makers.

For example, one important obstacle to large scale job creation efforts is the unusually poor industrial relations climate which exists currently in Jamaica. Criticisms of union leadership, and of worker discipline and effort, are common among employers. Similarly, complaints about employer attitudes and abusive behavior are common among Jamaican workers and trade union leaders. As a result, distrust and lack of cooperation dampens efforts to create a stable system of collective bargaining. While the overall incidence of strikes is not dramatically different from the

experience of various industrialized countries, the bargaining practices of both labor and management, the political rivalries of the labor unions, and the lack of adequate conflict resolution machinery, all contribute to a volatile and uncertain industrial relations environment which discourages employment-intensive economic growth.

A second example comes from educational and training policy. Concerns over the 'brain drain' and a desire to increase the productivity and employability of the Jamaican workforce have led recently to an emphasis on new programs for skill training. Our preliminary investigations have suggested, however, that the current strategy for training is unlikely to achieve its objectives. In an interview sample of larger firms operating in the 'formal sector,' none of the employers faced shortages of skilled workers. High levels of unemployment and good relationships with existing training institutions assure these employers of relatively reliable access to trained workers. Where shortages appear to be most problematic, particularly in professional and managerial positions, current vocational training expenditures are unlikely to have any impact impact, unless coupled in some manner with improved incentives for training graduates to remain in Jamaica.

Furthermore, the most frequent criticism of job applicants by these employers concerns general knowledge and education rather than specific skills. As is true for a large majority of firms in the United States, these Jamaican firms find are accustomed to providing specialized skill training, but need adequately educated trainees who can these skills learn efficiently. Existing and planned educational efforts in basic education are not adequate to meet the needs of these employers.

Compounding the difficulties of young individuals in making rational decisions concerning schooling and training investments has been the

widespread perception by Jamaicans that "who they know is more important than what they know."[21] This theme of preferential job access emerges in a variety of research reports. In the mid-1960's, Jamaicans returning from abroad were interviewed concerning the problems which a majority had in gaining employment at home. The following comment was typical:

> I've got my school record, but I cannot get a job. Jamaica is short of industry, and I go to the gate of the factory and stay, but you has to know somebody and have somebody carry a recommendation for you.[22]

According to another,

> You have to get a letter from a Minister of the Government or an official to get a job . . . You cannot get to the personnel officer here, and the others have to be paid.[23]

Another source, contrasting hiring practices of multi-national firms with those of traditional Jamaican employers, reported:

> In spite of their lack of skills, (Jamaicans) who want to work with the bauxite companies...assiduously compile 'letters' from clergymen and politicians...on the naive assumptions that at such levels politics, religion, and capital converge.[24]

Plan of the Report

The institutional structure of the Jamaican labor market also demonstrates the importance of customizing labor market policies to the operating requirement of specific sectors of the economy. Hiring procedures, patterns of job access, skill requirements of employers, training strategies, job stability, wage structures, wage determination procedures, working conditions, and fringe benefits all differ fundamentally in various parts of the economy. Therefore, no single model is adequate for assessing employment, earnings, and policy options in all of these work environments. There are at least four separate subsystems of the Jamaican economy in which labor-management and market/allocation rules and relationships are quite distinct: (i) small-holder agriculture; (ii) large agricultural plantations and commercial estates; (iii) rural and urban

'informal' activities (particularly self-employment); and (iv) 'formal,' 'modern-sector' activity in manufacturing, commerce, and other primarily large-scale, urban sectors.

While our review of the published data and existing literature considers all four areas of the economy, we developed first-hand data only on formal sector employment. Although our models of the various sub-sectors of the economy are provisional, they serve to illustrate the importance of learning more about how Jamaican labor markets and labor market institutions actually work.

Chapter II details recent growth and patterns of change in population, labor force participation, employment, and unemployment. In chapter III, some preliminary findings concerning Jamaica's industrial relations system are presented. A detailed discussion of labor market subsystems is contained in Chapter IV and the adjustment practices in the Jamaican labor market are discussed in Chapter V. Chapter VI presents conclusions of the report concerning four major areas of policy concern: skill bottlenecks, labor productivity, youth unemployment, and labor-management relations.

Notes for Chapter I

1 Economic Commission for Latin America, "The Economic Development of Jamaica and Trinidad and Tobago in the 1970s," Economic Survey of Latin America, 1980 (Santiago: United Nations, 1982), Table 1, p. 544.

2 Ibid.

3 Ibid., p. 560. "In addition to its direct consequences, the intensive increase in unemployment made for a deterioration in the already highly skewed distribution of income and created a climate in which crime and other social ills flourished."

4 Ibid., pp. 652-579. For additional discussions of the interactions with IMF, see Girvan, Norman, "Swallowing the IMF Medicine in the 'Seventies," Development Dialogue (2), 1980; Girvan, Norman, Richard Bernal, and Wesley Hughes, "The IMF and the Third World: the Case of Jamaica, 1974-1980," Development Dialogue (2), 1980; Girvan, Norman and Richard Bernal, "The IMF and Jamaica," Monthly Review (33:9), February 1982, pp. 34-48; Levin, Arthur, "The Fall of Michael Manley: A Case Study of the Failure of Reform Socialism," Monthly Review (33:9), February 1982, pp. 49-60; Payne, Anthony, "From Michael with Love: the Nature of Socialism in Jamaica," Journal of Commonwealth and Comparative Politics (14:1), March 1976, pp. 82-100; and Van Horne, Winston, "Jamaica: Why Manley Lost," World Today (37:11), pp. 428-433; and Davis, Stephen, "Jamaican Politics, Economics and Culture: An Interview with Edward Seaga," Caribbean Review (10:4), Fall 1981, pp. 14-17.

5 World Bank, World Tables, Economic Data Sheet 1 (Baltimore, MD: The Johns Hopkins University Press), 1977.

6 Robert K. Girling, "Technology and Dependent Development in Jamaica: A Case Study," Social and Economic Studies (26:2), June 1977, p. 169.

7 H. Austin Peck, "Economic Planning in Jamaica: A Critique," Social and Economic Studies (7:4), December 1958, p. 146.

8 Jefferson, Owen, Post-War Economic Development of Jamaica (Mona, Jamaica: Institute for Social and Economic Research, 1972); Kaplan, Irving, Howard Blutstein, Kathryn Johnston, and David McMorris, Area Handbook for Jamaica; Foreign Affairs Series of the American University (Washington, D.C.: U.S. Government Printing Office, 1976); and Kurian, George Thomas, Encyclopedia of the Third World (New York: Facts on File, Inc., 1982).

9 Government of Jamaica, Ministry of Development and Welfare, Central Planning Unit. Five Year Independence Plan, 1963-1968: A Long Term Development Programme for Jamaica (Kingston, 1963), p. 11.

10 Loc. cit..

11 This conclusion is based on an analysis of 1958 Household Expenditure Survey data for Jamaica, computations of Gini coefficients for a number of countries, and comparisons with Trinidad and Tobago, which are provided in E. Ahiram, "Income Distribution in Jamaica, 1958," Social and Economic Studies (13), 1964, pp. 333-369; and in E. Ahiram, "Distribution of Income

in Trinidad-Tobago and Comparison with Distribution of Income in Jamaica," Social and Economic Studies (15:2), June 1966, pp. 103-120. The conclusion that its Gini coefficient "ranks the island among the countries with the highest recorded rate of inequality of incomes," appears in Ahiram (1964), p. 335.

12 Income inequality is even greater in rural areas than for the country as a whole, and average rural incomes have remained well below those in urban areas. For the 1958 survey data, per capita incomes in rural areas averaged barely 40 percent of the urban average. The Gini coefficient for rural Jamaicans was 56, while in urban areas it was 49. (Ahiram, 1964, pp. 347-349.

13 These 1958 figures are the latest Jamaican income distribution data available in the 1983 edition of The World Bank's published tables. See World Bank, World Tables, Volume 2: "Social Indicators," 3rd edition (Baltimore: The Johns Hopkins University Press, 1983), p. 48. The only later reference on income distribution found in the literature reviewed is an assertion in Lowenthal that "in the mid-1960s, it was Jamaica's dubious distinction to have the world's highest rate of income inequality." See David Lowenthal, West Indian Societies (London: Oxford University Press, 1972), p. 298. Since Lowenthal cites the work by Ahiram as his principal source, the basis for this strong assertion concerning the mid-1960s is not clear.

14 This conclusion is based on a variety of sociological accounts, reporting interviews in various communities and among emigrants. Emigrants, especially, report problems in finding work in Jamaica both before and after spending time abroad. See Betty Davison, West Indian Migrants: Social and Economic Facts of Migration from the West Indies (Cambridge, Ma.: Harvard University Press, 1962); Davison, 1968, op. cit.; and Nancy Foner, Jamaica Farewell: Jamaican Migrants in London (Berkeley: University of California Press, 1978).

15 In 1956 alone 17,442 Jamaicans emigrated. See G.W. Roberts, The Population of Jamaica (Cambridge: Cambridge University Press, 1957), p. 137.

16 R.L. Glass, Newcomers: West Indians in England (London: Allen & Unwin, 1960). Barring health problems or severe recessions which prevent employment abroad, many Jamaicans do not return home until they have accumulated sufficient resources to establish some type of independent business. Edward Taylor, "The Social Adjustment of Returned Migrants to Jamaica," in Frances Henry, ed., Ethnicity in the Americas (The Hague: Monton, 1976), p. 216. Sample surveys of returnees indicate that the average duration of stay aborad is about 7 years, with individual times varying from 2 to 16 years. See Betty Davison, "No Place Back Home: A Study of Jamaicans Returning to Kingston, Jamaica," Race (9), 1969, pp. 499-509. See also Nancy Foner (1978) for details of very similar responses in interviews conducted approximately a decade after the Davison study.

17 For a detailed account of early emigration, see George W. Roberts, The Population of Jamaica (Cambridge: Cambridge University Press for the Conservation Foundation, 1957). In some cases, estimates of other authors differ significantly. Generally, Roberts' estimates are conservative, and

may be thought of as a reasonable lower bound.

18 Joanne Koslovsky, "Going Foreign: Causes of Jamaican Migration," NACLA Report on the Americas (15:1), January-February 1981, p. 2.

19 Even in 1968, when less than one in every 25 workers in the Jamaican labor force was listed in professional, technical and managerial occupations, 1 of every 6 emigrants was classified in these highly skilled categories. See R. Girling, "The Migration of Human Capital from the Third World: The Implications and Some Data on the Jamaican Case," Social and Economic Studies (28:1), p. 92.

20 See Koslovsky, op. cit., pp. 9 and 19-21. Between 1961 and 1964, 10,000 jobs were cut by WISCO alone. Then, during 1965-1970, another 9000 workers were dropped from estate payrolls. The former decline was due principally to changes in the organization of work and in technology, while the latter decline in jobs resulted primarily from declines in cultivated acreage.

21 David Lowenthal, West Indian Societies (New York: Oxford University Press, 1972), p. 296.

22 Betty Davison, "No Place Back Home: A Study of Jamaicans Returning to Kingston, Jamaica," Race (9:4) April 1968, p. 502.

23 Ibid., pp. 502-503.

24 The Church and Unemployment (Kingston: The Unmuzzled Ox, n.d.), cited in Lowenthal, op. cit., p. 297.

Chapter II

TRENDS IN THE JAMAICAN LABOR MARKET

In this chapter, we review the basic quantitative data concerning demographic trends, patterns of employment and unemployment, emigration and wages. These data provide a backdrop for the subsequent analysis, both by demonstrating the basic thrust of economy-wide changes in work opportunities, and by highlighting anomalies that warrant closer examination. This evidence is an important first step in evaluating the underlying nature of present policy concerns and problems.

Prior to the 1970s, emigration reduced population and labor force growth, and relieved some pressures for domestic job creation. In more recent decades, however, opportunities for work abroad have been sharply circumscribed, and the nature of emigration has changed correspondingly. While Jamaica undoubtedly benefited from the broad-ranging overseas job opportunities afforded its population in the past, emigration now constitutes a "brain drain." Receiving countries now limit most entrance opportunities to skilled workers. For Jamaica, this means a reduction in key organizational, entrepreneurial, administrative, and technical talents at home — talents which are needed to promote economic growth and jobs for less skilled Jamaicans.

Among Jamaicans remaining at home, large demographic shifts have occurred as well. Due to technical change, low world prices for sugar and bananas, and the sale of large amount of agricultural lands to mining companies, productive agricultural jobs and other rural income-earning opportunities have dwindled, causing a major migration into the cities. Women have led this movement, as they have left unpaid family work on the

farms and sought paid work as domestics and in lower-level clerical and retail jobs.

Not surprisingly, the data also provide sharp contrasts between the fortunes of men and women in Jamaican labor markets. In a period when female labor force participation rates have risen to four-fifths of male rates, women still hold only about one-third of all jobs and comprised two-thirds of all unemployed in recent years. Both the occupational and industrial distribution of jobs is also quite skewed by sex. Women's jobs are concentrated in commerce, other services, and public administration, and in service, clerical and sales, and professional and technical occupations. Women who do have jobs work primarily in occupational categories where weekly earnings are relatively lower than average.

Finally, the data provide both direct and indirect evidence of the crucial role of self-employment and employment in small, informal-sector establishments. Particularly in periods when employment opportunities have lagged in recent years, self-employment and work in very small firms have provided economic havens, however meager, for workers who are unable to work in the more lucrative formal-sector jobs. The ingenuity of the self-employed and of small producers warrants particularly close scrutiny, because it is an important resource to be tapped by the country as it builds a viable process of productive job creation and economic growth.

Labor Supply

With more than 2 million inhabitants and a population density of more than 400 persons per square mile, Jamaica is among the world's most densely populated countries. It has very high rates of labor force participation,

particularly among women, and has had a long history of high unemployment rates. Emigration has long served as an important escape valve for the island's surplus labor. Jamaica's labor force in 1982 numbered 1,048,600. It has grown at an uneven rate over the decades, rising slowly during the early 1950's, declining in the latter part of the decade, then rising again slowly in the 1960's. Labor force growth has accelerated markedly, however, since 1970, following sharply curtailed emigration opportunities. The key influences on the labor force have been population change, labor force participation, internal migration decisions, and emigration patterns. Understanding these influences is crucial to understanding recent problems of unemployment and poverty.

Population

Jamaica's population at the time of the 1980 Census stood at just over 2.2 million. Table II-1 indicates population changes which have occurred over the past 70 years. (For additional detail concerning 1968-1982, see Appendix Tables A-1 to A-3.) In 1911-1921 population growth was an exceptionally slow (0.3% annually), due principally to massive outmigration, which equalled nearly three-fourths of the country's natural population increase during the decade. During this period, both birth and death rates were much greater than at present. Births between the 1880 and 1920 averaged about 40 per thousand inhabitants, and deaths exceeded 23 per thousand in most years. Infant mortality was also quite high.

Early in the twentieth century, birth rates declined, averaging 36.4 per thousand in the 1920's and 36.2 per thousand by the mid 1950's and by the end of the 1930 death rates began to fall as well, reaching 10.7 per thousand in the mid-1950's. As both mortality and birth rates fell, net

Table II-1
Population Level and Growth, 1911-1980

Year	Population	Change in Population	Growth Rate	Index 1960=100
1911	831,383			52
1921	858,118	26,735	+0.3	53
1943	1,237,063	378,945	+1.6	77
1960	1,609,814	372,751	+1.6	100
1970	1,881,552	254,334	+1.4	117
1980	2,176,700	295,148	+1.5	135

Sources: Population data for 1911,1921, and 1943 are from censes, cited in George Roberts, The Population of Jamaica (Cambridge: Cambridge University Press, 1957), p. 62. For 1960, see Owen Jefferson, Post-War Economic Development of Jamaica (Kingston: Institute for Social and Economic Research, 1972), p. 16. For 1970 and 1970, figures are from Department of Statistics, The Labour Force (Government of Jamaica, annual issues). Other columns are calculated from column 2.

population growth averaged a fairly stable 1.6% per year between 1921 and 1960. Without emigration, this rate would have been approximately a full percent higher. Even with the reduction in emigration in the 1970's, birth rates have also continued to decline, preventing population from increasing more rapidly than otherwise.

Labor Force Participation

The aggregate labor force participation rate among Jamaica's "eligible population" (i.e. ages 14 years and over) was 72.3 percent in 1982, or 46.3

percent of the entire population (Table II-2). This is roughly the same as in the United States, but higher than official participation rates in most other American nations. An important source of this high participation rate, and one of the most striking trends in the Jamaican labor force, has been the rapidly rising participation rate of Jamaican women. Measured as a percentage of the overall population 14 years and older, the female participation rate was already high in 1960 at 49 percent. It had risen to 58 percent by 1968, to nearly 60 percent in 1970, and to just over 65 percent in 1982 (Table A-6).

Age-specific data indicate that female participation rates increased significantly for all categories except youths 14-24 years of age (especially those under 20), many of whom are remaining in school longer, and women 65 years and older. Rates in all other categories rose by 12 to 23 percent in the decade October 1972 to October 1982 (Table A-8).

Male rates, by contrast, declined somewhat in the aggregate between 1960 and 1980, from 85 percent to 80 percent. Male rates remained essentially stable for age groups from 25-34 (97 percent), 35-44 (98 percent), and 45-54 (96-97 percent), and declined among the younger and older eligible population.

Between 1972 and 1982, the sharp rise in female participation rates was essentially offset by the smaller percentage decline in male participation rates, leaving the aggregate rate virtually unchanged. The declining participation of youths staying in school longer was important in explaining this overall stability.

Internal Migration

Internal migration has been an important influence on birth rates and on the composition and size of the domestic labor force as well. Between

Table II-2

Employment and Output, 1943-1982

	1943	1953	1957	1960	1968	1972	1976	1980	1982
Population	1237.1	1403.5	1511.4	1609.8	1839.6	1948.7	2082.8	2176.7	2241.2
Population 14 yrs. +	808.0			975.0	1022.1	1120.7	1259.8	1378.8	1450.4
Population 14+ as % Total	65.3			60.5	55.6	57.5	60.5	63.3	64.7
Labor Force	555.6	634.9	658.1	654.6	727.0	808.9	895.5	1006.9	1048.6
Labor Force as % of Population	44.9		43.5	40.2	39.5	41.5	43.0	46.2	46.8
Labor Force Growth Rate		1.3	0.9	-0.2	1.3	2.7	2.6	3.0	2.1
Labor Force Participation Rates (as % of population 14 years and over)									
Both sexes	68.8			67.1	71.1	72.1	71.1	73.0	72.3
Males					85.4	84.4	80.6	80.4	79.9
Females				49.0	58.2	61.2	62.2	65.0	65.2

Sources: Population data are from Table II-1, and interpolated for 1953 and 1957, using net increase data from Jefferson, op. cit., Table II-4, p. 21. Labor force, employment and unemployment figures for 1943, 1953, 1957, and 1960 from Carmen McFarlane, Education and Employment: An Assessment of the Institutional Response by the Jamaican Education System to the Demand for Skills (M.Sc. thesis, University of the West Indies, 1968), p. 42 and 72. Figures for 1968-1980 are from selected October issues of Labour Force Survey. Rates are calculated.

1943 and 1970, 560,000 Jamaicans moved from rural to urban areas of the country. More than 300,000 of these persons came to the Kingston metropolitan area.[1] During the 1960s alone, the percentage of Jamaicans living in urban settings rose from 33.6 to 41.4.[2]

During the 1960s, a majority (55 percent) of rural-urban migrants were women, many of whom left unpaid work on family farms and joined the enumerated labor force. By 1970, while there were 95.5 males in Jamaica for every 100 females in the country as a whole, the urban ratio was only 0.88.[3] This pattern of female-dominated rural-urban migration appears to have continued through the 1970s, despite the large numbers of male workers who left agricultural jobs and also moved to the cities during these years.

Unemployment

Jamaica's longstanding unemployment problem was only partially remedied by the waves of very rapid GDP growth in the 1950s and early 1960s. While unemployment did decline concurrently with an accelerating pace of economic growth, falling to a low of 13.5 percent by 1960 (Tables II-2 and II-3), this was due more to the effects of emigration on the size of the labor force than on the pace of employment growth.

By 1968, when the range of emigration opportunities had narrowed significantly, the unemployment rate had again increased, to 18.5 percent. In 1969, it declined slightly, but was again increasing thereafter. In 1972 it reached 22.8 percent. Then, concerted efforts to expand public employment reversed this trend briefly, driving unemployment to a low of 20.0 percent in April 1975. By the fall of 1976, following the implementation of a first round of austerity measures required in conjunction with an IMF loan agreement, unemployment began to rise again,

Table II-3
Aggregate Unemployment, 1943-1982

Year	Unemployment (thousands)	Unemployment Rate
1943	139.5	25.1
1953	110.0	17.5
1957	112.6	17.1
1960	88.5	13.5
1968	154.5	18.5
1969	129.5	17.2
1972	184.5	22.8
1973	179.6	22.4
1974	166.5	20.5
1975	181.3	21.0
1976	216.4	24.2
1977	218.7	23.8
1978	247.1	26.0
1979	299.1	31.1
1980	269.6	26.8
1981	261.5	25.6
1982	292.3	27.9

Sources: Data for 1943-1960 are from Jefferson, op. cit., Table 2.9, p. 28. For later years, data are from The Labour Force; see Tables A-1 and A-4 of this report.

reaching 24.2 percent in October 1976 and a peak of 31.1 percent in October 1979. Although unemployment has fallen subsequently, it has continued to remain high (Table II-3).

Unemployment and prior work experience. Among Jamaica's unemployed workers, the largest single category consists of workers who have never had a job. (Tables II-4 and A-16). In 1982, these individuals constituted 42 percent of all unemployed workers, up from 31 percent in 1968. The strong representation of this group in the unemployed pool makes the unemployment figures quite controversial, since workers with no prior employment are counted as unemployed if they indicate that they are willing to work, even if they have not actively sought employment. These so-called "non-seekers" are counted as unemployed in most Caribbean countries, but not in most industrialized countries.

However, even if all workers without prior employment are excluded from counts of unemployment, the unemployment rate in 1982 was still 18.3 percent, compared to 27.9 percent in the official statistics. Excluding persons not seeking work as well and further lowers open unemployment to 11.2 percent (1981).[4]

Various Labor Force Surveys provide disaggregated evidence of the duration of unemployment separately for seekers and non-seekers. Although scarcely conclusive, these data indicate surprisingly similar patterns among unemployed individuals actively seeking work and those listed as 'non-seekers. For males and females combined, 44.5 percent of the unemployed in 1982 had never worked previously (Table II-4 and A-9). For active job-searchers, the figure was 43.1 percent, and among non-seekers it was 45.9 percent. In the remaining 55.5 percent of unemployed workers — those who had been employed previously — over half (29.7 percent) had been unemployed

Table II-4
Distribution of Unemployed "Seekers" and "Non-Seekers" (%)
by Prior Job Status and Duration, 1973 and 1982

	No Prior Employment		Unemployed at Least 12 months	
	1973	1982	1973	1982
All Unemployed				
Both Sexes	31.7	44.5	28.8	29.7
Males	29.1	39.1	15.7	22.7
Females	33.0	44.4	35.4	31.6
Seekers				
Both Sexes	30.5	43.1	20.6	25.4
Males	26.1	37.0	15.1	22.3
Females	35.7	48.0	26.9	28.0
Non-Seekers				
Both Sexes	32.7	45.9	36.0	34.0
Males	38.3	43.8	17.4	21.8
Females	31.7	42.0	39.5	33.9

Source: Calculated from The Labour Force, Table 4.14, annual issues. For additional detail, see Table A-9.

for more than 12 months. Among the 56.9 percent of active job searchers with prior employment experience, 25.4 percent (somewhat less than half) had faced long-term unemployment, while the ratio among non-seekers was somewhat higher -- 34 percent of unemployed non-seekers, 54.1 percent of whom had previous jobs. These figures may well signal a remarkable persistence in job search among the long-term unemployed, rather than a weak attachment to the labor force.

The separate figures for men and women show comparable patterns. Among men, 60.7 percent of the unemployed had prior employment, and 22.1 percent (more than one third of the unemployed pool with experience) had been out of work for more than one full year. Among active searchers, 63.0 percent had worked previously, and 22.3 percent were in the long-term unemployed group. Among non-seekers, the corresponding figures were 56.2 percent previously employed, and 21.8 percent unemployed for more than 12 months. Unemployment rates are higher for women in most categories, though the fraction of unemployed female non-seekers with prior work experience is higher.

Gender and unemployment. Male and female unemployment patterns differed sharply. Although women constituted 46.4 percent of the labor force in 1982, they accounted for 67.3 percent of unemployed workers. Although this was higher than the figures for 1968 (62.4 and 63.2 percent respectively in April and October), the percentage of unemployed workers who are women has fluctuated between a low of 62.4 percent and a high of 70.4 percent during the period (Table II-5). Throughout the period, women also constituted between 68.1 and 76.0 percent of all unemployed workers with no prior employment experience.

Age-specific unemployment patterns. Unemployment rates are highest among the youngest members of the labor force, and decline as workers age

Table II-5
Male and Female Unemployment Rates,
and Female Share of Unemployment, 1968-82

Year	Male Rate	Female Rate	Females as Percent of Total Unemployment
1968	11.9	27.3	63.2
1969	11.1	24.9	63.6
1972	14.4	33.3	64.9
1973	13.4	33.8	66.8
1974	12.5	30.3	66.3
1975	11.9	31.7	69.1
1976	14.7	35.6	66.7
1977	14.6	34.7	67.4
1978	15.7	37.7	68.0
1979	19.9	43.5	66.1
1980	16.0	38.9	68.2
1981	14.2	38.7	70.4
1982	17.0	40.2	67.3

Sources: Unemployment rates are from Tables A-5 and A-6; female share of unemployment calculated from Tables A-1 and A-3.

Table II-6
Unemployment Rates by Age Group and Sex, October 1982

	Both Sexes	Male	Female
All Ages	27.9	17.0	40.4
14-19	58.4	41.8	79.8
20-24	45.0	28.8	61.6
25-34	24.6	12.6	38.8
35-44	17.9	8.5	27.3
45-54	11.9	5.3	18.9
55-64	13.0	8.5	17.9
65+	9.0	6.0	15.2

Source: Tables A-10 to A-12.

(Table II-6). Among 14-19 year olds, unemployment stood at 58.4 percent in 1982, while for 20-24 year olds it was 45.0 percent. Rates for each successive age group decrease: 24.6, 17.9, 11.3, and 13.0 percent respectively for workers of ages 25-34, 35-44, 45-54, and 55-64 respectively. This pattern is matched in every survey month since 1968, for both males and females (Tables A-10 to A-12).

Occupation-specific unemployment. Six occupational groups are distinguished in the Labor Force Surveys: (i) professional, technical, administrative, executive, managerial and related occupations; (ii) clerical and sales occupations; (iii) self-employment and independent occupations; (iv) service occupations; (v) craftsmen, production process and operating occupations; and (vi) unskilled manual and general occupations. Workers who

Table II-7
Unemployment Rate by Occupational Group, 1982

Occupational Group	Both Sexes	Males	Females
Professional, technical and managerial	8.9	3.2	12.8
Clerical and sales	23.0	13.4	28.6
Self-employed	6.3	3.8	11.5
Service	36.2	13.2	43.3
Craftsmen & operatives	24.5	21.3	45.0
Unskilled manual and general	24.9	19.4	35.3
Occupation not specified	29.4	23.1	50.0
Total previously employed	18.3	11.2	27.6
Total Labor Force	27.9	17.0	40.4

Sources: Tables A-13 to A-15.

report their occupation in the "service" category consistently have the largest unemployment rate (Tables II-7 and A-13). In 1982, 36.2 percent of this group was unemployed, up from 29.1 in 1968.

Unemployment rates in 1982 were also extremely high in unskilled manual and general occupations (24.9 percent), craft occupations (24.5 percent), and clerical occupations (23.0 percent). Each of these occupational groups had an unemployment rate above the average for workers with prior work experience, which was 18.2 percent in 1982. Unemployment in service occupations exceeded the unemployment of the entire work force, including those with no prior work experience. As reported above, this figure stood

at 27.9 percent in 1982. The two occupational categories with the lowest unemployment rates were self-employment (6.3 percent in 1982, and 3.0 percent in 1968) and professional, technical and managerial occupations (8.9 percent in 1982, and 2.1 percent in 1968). However, unemployment was significantly higher in all six occupational categories by 1982 than it had been in 1968.

Unemployment rates for women were higher than for men in all six occupational categories, as well as in the group with no specified occupation and among workers with no prior experience (Tables II-7, A-14 and A-15). These female-male differences in unemployment rates within occupational grouping are particularly dramatic, ranging in 1982 from 1.8 times as high in unskilled and general occupations, to 4.0 times in professional, technical and managerial occupations. These ratios were 2.1:1 in clerical and craft occupations, and 3.0:1 and 3.2:1 respectively in self-employment and service occupations.

The distribution of unemployed men vs. women across occupational groups differed sharply (Tables II-8, A-17 and A-18). Among unemployed females, 24.5 percent reported their occupation in the service group, while among men only 4.7 percent were in this category. Unskilled occupations accounted for 18.0 of unemployed males, and only 8.3 percent of unemployed females. In service occupations, 91 percent of all unemployed persons were female (Tables II-8 and A-19). In professional, technical, and managerial occupations, and in clerical and sales occupations, the preponderance of unemployed women is almost as dramatic, at 85 and 80 percent respectively. Women also accounted for 59 percent of unemployed persons identifying themselves as self-employed. Only in unskilled and craft occupations are the majority of unemployed persons male — 51 percent and 76 percent respectively.

Table II-8
Distribution of Unemployment by Industry Group and Sex, 1982

Occupational Group	Distribution of Unemployed			Females as % of Total Unemployed
	Both Sexes	Males	Females	
Professional, technical and administrative	2.4	1.0	3.0	85.8
Clerical and sales	9.1	6.0	10.7	79.5
Self-employed	7.2	9.0	6.4	59.3
Service	18.0	4.7	24.5	91.5
Craftsmen and operatives	9.5	22.0	3.4	24.4
Unskilled manual & general	11.5	18.0	8.3	48.6
Occupation not specified	0.3	0.6	0.2	40.0
Not previously employed	42.0	38.8	43.6	69.9
Total Labor Force	100.0	100.0	100.0	67.3

Source: Calculated from The Labour Force, Table 4.4, annual issues. See Tables A-16 to A-19.

These distributions have remained fairly stable over time. Women, however, accounted for a higher proportion of unemployed persons in the professional, technical, and administrative, and in the clerical and sales categories in 1982 than in 1968, while the proportion of men among the ranks of the unemployed had increased significantly in unskilled and general occupations.

Patterns of Emigration

Emigration has been the most important force in Jamaican labor markets for more than a century. Between 1881 and 1957, more than 1.5 million Jamaicans are estimated to have emigrated.[5] By the late 1970s, it was estimated that fully one half of the world's 4.4 million Jamaicans lived outside their native land.[6]

The initial waves of emigration were concentrated in Central America and the Caribbean. In the forty-year span 1881-1921, 156,000 Jamaicans left their homeland.[7] This was equivalent to about 35 percent of the increase in the country's population during this time. Between 1881 and 1911, more than 43,000 workers are estimated to have gone to Panama alone, to work on the Panama Canal. About 16,000 emigrated to the U.S. during the same period. Smaller numbers went to Nicaragua to work on banana plantations and in construction, and to Cuba to work in the cane fields. Once the Panama Canal was completed, however, the numbers of Jamaicans going to the U.S. and Cuba increased markedly. Between 1911 and 1921, approximately 22,000 Jamaicans left to work in Cuba, and 30,000 entered the United States.[8] In the country as a whole, emigration abroad during the decade was equal to 74 percent of the natural population growth.[9]

The United States Immigration Act of 1924 drastically reduced immigration opportunities, shifting the destination of Jamaican emigrants to the United Kingdom and Canada. This new wave of emigration was short-lived, however. With the coming of the Great Depression, the direction of net migration was abruptly reversed, as many Jamaicans were forced to return to their homeland. In the countries where they were guest workers, most Jamaican migrants "had suddenly become redundant in the labor market."[10] Between 1928 and 1934, 28,000 Jamaicans are estimated to have returned;[11] 12,000 sugar workers returned from Cuba and Panama alone.[12]

Following World War II, emigration began anew, with the Great Britain as the principal destination. Jobs in Great Britain were readily available, and many males enlisted as servicemen for duty in Europe. By the late 1950s, the outflow of Jamaicans to Britain became a flood. Between 1953 and 1962, approximately 163,000 Jamaicans went to Britain.[13] In the four years 1956-1959, 86,000 left Jamaica for all destinations; even after accounting for the now-sizeable return migration, the net outflow was approximately 74,400.[14] Finally, as Britain was contemplating measures to close its doors to colonial immigrants, more than 85,000 Jamaicans entered Britain in the two-and-one-half year period between January 1960 and July 1962.[15] Again, foreign rather than domestic changes interrupted the otherwise steady exodus of Jamaicans in search of better opportunities abroad. In July 1962, passage of the Commonwealth Immigrants Act greatly reduced opportunities for immigration to the Great Britain, and abruptly cut the number of Britain-bound Jamaicans to a trickle. Initially, unskilled workers were refused work permits, but by 1965, all but dependents of prior immigrants were barred from entering the "mother country."[16]

Although eased restrictions on emigration to the United States in 1965 and in Canada in 1967 provided some outlet for Jamaican desires to seek an economic future abroad, these were small by comparison with prior opportunities in Great Britain, and quite different in character.[17] In the subsequent eight years 110,000 Jamaicans became legal U.S. residents,[18] and approximately 30,000 Jamaicans took up residency in Canada [19] But this new wave of emigrants was significantly different. Unlike the pre-1962 flow of Jamaicans to Britain, those moving to the U.S. in the latter half of the 1960s and the 1970s have had to be certified as having skills which are needed in the U.S. labor market. Similarly, Canada's liberalization of

immigration rules in 1967 broadened, but maintained, occupational (or skill) requirements for admission.

Emigration and age. Reduced emigration has also affected Jamaica's population and labor force. The emigrant population was predominately comprised of young adults between the ages of 20 and 39. The concentration of emigrants in these age groups had two important effects, now both largely reversed. First, it meant that the population remaining behind included a higher proportion of children and elderly persons, and so was relatively more dependent. However, substantial remittances sent to Jamaica by those working abroad, prevented a significant reduction in Jamaican living standards. Secondly, because so many of those leaving Jamaica were new or recent labor market entrants, unemployment levels and pressures on the Jamaican labor market to provide jobs were lowered.

At present, far fewer of these young workers are able to leave. While this has led to falling dependency rates, it has also resulted in increases both in the labor force and in unemployment. According to figures from the annual Labor Force Surveys, the percentage of Jamaicans 14 years or older rose steadily between 1968 and 1982, from 56 to nearly 65 percent (Table II-2).[20] During the same period, recorded unemployment rose from 21 percent in mid-1968 to nearly 28 percent in October 1982. Among males, the rate rose from over 13 percent to 17 percent, and for females the initial rate of 32 percent grew at the end of the period to over 40 percent.

Emigration and gender. Emigration has affected the sex, as well as the age composition of the population. In 1953, the ratio of men to women in the population was 0.956. Following the massive outmigration of the middle 1950s, which was predominately male, the male-female ratio fell to 0.925 in 1960. As the pattern of emigration reversed, with a majority of the last

wave of emigrants to Britain in the early 1960s being women, the ratio again rose to 0.955 by 1970, and to 0.991 by 1982.[21]

The sex patterns of emigration affect the population immediately, but also have longer-run effects. Since so many of the female emigrants were peak child-bearing age, their departure helped to reduce further the subsequent growth of the domestic population. The sharp reduction in emigration opportunities since the mid-1960's, however, has reversed these influences. Although the birth rate has continued its long run decline, thereby having a small but significant effect in reducing the growth rate of the population, this impact has been largely swamped by the abrupt curtailment of emigration.

Emigration and labor force growth. Aggregate growth of the labor force, even more than of population, has been affected dramatically by emigration. The large outflows of young adult migrants in the mid-1950s and early 1960s caused labor supply growth to decline from an average of 1.3 percent in the decade 1943-1953 to 0.9 percent between 1953 and 1957. During the remainder of the 1950s, the labor force actually contracted slightly, from 658,100 workers in 1957 to 654,600 in 1960. The growth rate was therefore slightly negative for these years, averaging -0.2 percent annually.

As the last-minute rush of emigrants to Britain continued in the early 1960s, the labor force remained essentially stable. By 1968, however, the closing of Britain's doors had caused more workers to remain in Jamaica. The labor force increased at an annual average of 1.3 percent between 1960-68 and then rose at an even higher rate of 2.6 percent between 1968 and

1972. Although individual annual observations showed some fluctuation during the remainder of the decade, the average between 1972 and 1982 remained just above 2.6 percent. Thus, for the fourteen years since 1968, the labor force has grown at a pace significantly faster than population growth.

Emigration and the labor market. Jamaica's long history of emigration contains several important pieces of information which are useful in understanding the severity of the current employment crisis. The sheer magnitude and persistence of the net emigration historically provides clear evidence that Jamaica has routinely looked abroad for viable economic opportunities when productive jobs have been scarce at home. The flow of emigrants has slowed only when international opportunities have been reduced due to external circumstances — such as wars, high rates of unemployment receiving nations, or changes in immigration laws in the receiving nations. Otherwise, Jamaicans in large numbers have sought to improve their economic well-being by leaving their own country in search of more viable employment opportunities abroad. Both the long-term inadequacy of domestic employment opportunities, and the widespread awareness that work efforts are better rewarded elsewhere, are important factors in evaluating current circumstances.

Equally important is the inability of the economy to generate sufficient numbers of productive jobs to absorb Jamaicans remaining at home has continued, despite the sizable and continual outflow of adult workers. Even during the 1950s and early 1960s, at a time when economic growth was rapid, the country's labor markets were unable to generate enough jobs to keep pace with increases in new labor market entrants. Only the large out-migration prevented the serious unemployment problems from worsening.

Between 1950 and 1968, the 270,000 Jamaicans who emigrated legally to Great Britain, the United States, and Canada constituted more than a third of the increase in Jamaica's population,[22] a proportion almost identical to that which had left during the decades at the turn of this century.

Finally, the changing nature of the emigration movement during the past two decades has also been extremely important to the composition and employability of the remaining domestic work force. Following the revision of British immigration regulations in the 1960s, and the work restrictions imposed by Canadian and U.S. immigration laws, the composition of Jamaican emigrants changed as their numbers shrank. The consequences for Jamaican unemployment, and for the skill composition of the work force remaining at home, have been dramatic and devastating.

While the prior emigrations had served as an important escape valve for the country's crowded population, and had involved persons with a full spectrum of educational and skill backgrounds, subsequent emigration (principally to the United States and to Canada) has consisted almost exclusively of technically skilled and professionally trained Jamaicans. Thus, the cumulative effect of curbs on immigration by the Great Britain, the U.S. and Canada has not only been to cut off a major avenue of employment for many of Jamaica's less skilled workers. It has also transformed the emigration process from one which has served to alleviate domestic employment and unemployment problems, to one which constitutes a detrimental "brain drain."

Labor Demand: Growth and Structure of Employment

While unemployment has been affected prominently by changing opportunities for emigration, the amount and composition of employment has

depended more directly on Jamaica's economic growth and change However, the specific nature of this link is to a large extent masked by aggregation of the data (Table II-9). In the decade 1943-53, when GDP grew at an annual rate of 4.5 percent, employment rose 2.4 percent annually. Then, when the investment boom in mining raised GDP growth to 11.5 percent annually between 1953 and 1957, employment grew by only 1 percent per annum. And as the GDP growth rate slowed in the remainder of the decade to an annual average of 3.8 percent, employment growth actually increased to 1.2 percent annually. By 1970, following a decade when output growth averaged 4.4 percent, employment grew on average at barely one-half percent per year. Nor did the 1970's bring a more consistent and evident link between the aggregate growth rates of income and employment.

During the first half of the decade, the national government undertook deficit spending programs in a deliberate effort to expand employment. This resulted in a sharp rise in the rate of job creation. However, improvement in the pace of job creation was the result primarily of the rapid growth of government jobs, and of government-sponsored resettlement programs and cooperative developments in agriculture. Employment increased at an annual rate of 1.3 percent for 1970-72, then accelerated to 2.4 percent annually between 1974 and 1976 (Table II-9). In October 1975, employment was a 14.3 percent higher than in October 1972, just three years earlier (Table A-1). During this brief period, therefore, job growth averaged 4.6 percent.[23] The number of jobs financed by the public sector increased by 44 percent between April 1974 and April 1975, financed by an increased bauxite levy and a new tax on windfall profits in sugar.[24] In the short span of three years between April 1972 and April 1975, the aggressively expansionary policies of the national government resulted in the creation of 82,000 new jobs (Table A-1).

Table II-9
Growth of Employment and Output, 1943-1981

Period	Employment Growth (% per year)	GDP Growth (% per year)
1943-1953	2.4	4.5
1953-1957	1.0	11.5
1957-1960	1.2	3.8
1960-1970	0.5	4.4
1970-1975	1.9	1.7
1975-1981	1.9	-2.0

Sources: Figures for employment and GDP growth through 1960 are taken from O. Jefferson, op. cit., Table 2.10, p. 29; employment. Subsequently, calculations are based on data for employment from Labour Force Survey, and on GDP data from The World Bank, World Bank Tables, 3rd ed. (Baltimore: The Johns Hopkins University Press, 1983), pp. 96-97.

For 1970-1975 as a whole job growth averaged about 1.9 percent, while GDP grew nearly as fast at 1.7 percent. However, this surge of job creation in the public sector was not to be sustained for long. Just as the national government was launching ambitious programs to generate jobs, the world-wide oil inflation produced critical shortages of foreign exchange. In an effort to solve its balance of payments problems, the Jamaican government attempted to emulate the OPEC model by imposing heavier taxes on bauxite producers in Jamaica, and by leading in the formation of a world-wide bauxite cartel. These measures were met with reduced demand for Jamaican bauxite, and failed to stave off a balance of payments crisis.

By 1976, Jamaica had to borrow from the IMF, putting a virtual end toits program of expanding public sector employment. Job creation again declined during the remainder of the decade, as increasingly stringent

austerity conditions were imposed by the IMF. Between April and October of 1979, the Labor Force Surveys indicate that employment actually fell by more than 51,000, from 714,500 to 663,400. By November a year later, however, directly following the 1980 national election, employment was again above its April 1979 level, at 737,300 (Table A-1). In fact, by 1981, employment was up sufficiently to raise the average rate of job growth since 1975 to 1.9 percent per year, i.e. equal to its pace in the earlier part of the decade. By contrast, real GDP fell an average of 1.1 percent during this six-year period.

Sectoral composition of employment. In 1943, 228,000 persons, or 45.1 percent of all employed Jamaicans, were counted as working in agriculture Table II-10). Nearly two decades later, in 1960, agricultural employment had increased by less than 9,000 jobs, and the percentage of employment in this sector had dropped to 39.0. During the subsequent 12 years, the number of agricultural jobs, as well as their proportion in total employment, decreased; by 1972, only 203,500 jobs were in agriculture, constituting only 31.5 percent of Jamaican employment.

A steady reduction in the share of workers in traditional jobs, and particularly in agriculture, is a common feature of economic modernization. However, in Jamaica, the absolute declines of farm employment were not counterbalanced or induced by a surge of nonagricultural job growth. In the twelve years from 1960 to 1972, as both the relative share and absolute number of agricultural jobs declined, total employment increased by only 31,750 jobs (Table A-1). Some of the contraction in agricultural employment was certainly due to technical change, and to changes in the organization of work on major sugar plantations. However, to a greater extent it was due to

Table II-10
Percentage Sectoral Distribution of Employment by Industry Group, 1943-1982

Industry Group	1943	1960	1968	1972	1974	1976	1978	1980	1982
Agriculture	45.1	39.0	36.9	31.5	34.8	35.1	34.9	36.9	34.3
Mining & quarrying	0.1	0.7	1.1	1.1	1.2	1.2	0.9	1.1	1.1
Manufacturing	11.7	14.8	10.7	12.1	12.2	11.0	11.1	10.9	11.3
Construction	6.8	8.2	7.0	6.7	6.2	5.4	5.0	3.6	4.5
Transport, communications, utilities	2.6	3.7	4.2	4.3	3.8	4.8	4.4	4.7	4.4
Personal & other services	20.3	21.9	18.5	18.9	17.1	13.8	14.2	14.9	15.7
Public administration	9.6	10.8	11.7	12.4	13.0	12.6	14.1	15.0	13.8

Sources: 1943 and 1960 data are from Censuses, cited in Jefferson, op. cit., Table 2.11, p. 30. Data for 1968-1982 are calculated from The Labour Force, Table 3.5, annual issues. For additional detail, see Table A-20.

faltering productivity, a declining ability of Jamaican export crops to compete in world markets, and large reductions of overall acreage under cultivation. In short, agricultural stagnation rather than modernization was the primary reason for this change.[25]

The dramatic post-war growth of the bauxite mining and processing industry, which has been a particularly important component of Jamaica's GDP growth and investment in recent decades, has provided only about one percent of the country's jobs. Public administration, by contrast, has become steadily more important — as Jamaican independence led to a rapid Jamaicanization of these jobs, followed by the deliberate expansion of public employment in the early 1970s. This sector accounted for just under 10 percent of employment by 1968, and rose to as high as 16,5 percent of all employment in October 1979, when the unemployment rate also peaked (Table A-

20). By October 1982, the public administration share of total employment had fallen back to 13.8%.

Employment in transport, communications, and public utilities has accounted for a small portion of overall jobs, slightly increasing from 2.6 percent in 1943 to 3.7 percent in 1960, and to 4.4 percent in 1982. Construction jobs have been both more prominent and more volatile. During the expansion of bauxite mining and alumina processing during the 1950s, construction employment rose sharply, raising the employment share in construction from 6.8 percent in 1943 to 8.2 percent in 1960, and increasing the number of jobs in the sector by 46 percent. The boom in hotel construction which occurred during the late 1950s and 1960s was also an important source of construction jobs. By 1968, however, there were 8,000 fewer employed in construction than in 1960, and the share of employment accounted for by this sector had fallen back to 7.0 percent.

Another sector which has shown steady growth in its relative share of employment is commerce. In 1960, commercial employment was 50 percent above its 1943 level, accounting for just over 60,000 jobs and 9.9 percent of Jamaican employment, up from 7.8 percent. During the 1960s, the expansion of banking, insurance, and a broad spectrum of other commercial activities, accounted for another substantial increase in the commerce sector and by 1972, employment stood at 89,600. A decade later, commerce accounted for a slightly smaller share of jobs — 13.8 percent rather than 14.3 — and an additional 17,000 jobs.

Miscellaneous service employment is the other large block of employment in the economy. This consists of a very wide variety of activities, ranging from personal domestic service to more commercial services. The employment share fluctuated considerably in his sector, from 18.5 percent in 1972 to a

high of 18.9 percent and a low of 13.8 percent during the subsequent decade. In 1982, 15.7 percent of all employed Jamaicans were working in this group of other services.

Employment in both commerce and other services has been quite volatile because each of these sectors constitutes two distinctly different employment systems. Formal sector jobs in the country's larger commercial establishments, and in the larger service establishments, has grown fairly steadily, while the volatility of employment has been concentrated in petty trading and individual services. This latter type of employment, which accounts for much of the self-employment in these two sectors, fluctuates dramatically in response to changing job opportunities in the rest of the economy. Many individuals who are cut off from regular wage employment become self-employed in myriad small-scale trading and service jobs.

Occupational patterns. Occupational data from the Labor Force Surveys show several important trends of change during the period 1968-1982 (Tables II-11 and A-24). The largest shift in the distribution of jobs across six broad occupational groups occurred in unskilled occupations, with the share of unskilled and manual jobs declining by 7 percent. Craft and skilled operative employment also declined somewhat, from 14.9 to 11.3 percent. Service occupations remained largely unchanged, at 12.8 percent in 1968 and 12.3 percent in 1982.

Each of the other categories gained somewhat. The biggest increase was in "self-employment and independent occupations,"[26] which rose from 37.3 percent to 41.6 percent, while professional and technical jobs also expanded to 9.3 from 5.5 percent. The share of total employment accounted for by clerical occupations also rose slightly, from 9.5 percent in 1968 to 11.8 percent in 1982.

Table II-11
Distribution of Employment by Occupational Group, 1968 and 1982

Occupational Group	1968	1982
Professional, technical and administrative	5.5	9.3
Clerical and sales	9.5	11.8
Self-employment	37.3	41.6
Services	12.8	12.3
Craftsmen & operatives	14.9	11.3
Unskilled manual & general	20.0	13.4
Occupation not specified	0.0	0.3
Total	100.0	100.0

Source: Table A-24.

Educational attainment. Data on educational attainments distinguish only four categories: no formal education, primary, post-primary, and other (Table II-12). These data indicate that sharp reductions in the numbers of workers with no formal education occurred between 1973 and 1982, and major increases in those reaching levels beyond primary school. In 1973, 14 percent of men and 20 percent of women working in unskilled occupations reported no formal education. By 1982, this figure had dropped to a mere 2 percent for women, and slightly less for men. Simultaneously, the percentage of workers in these occupations obtaining education beyond primary grades increased from 1.4 percent for men and 4.5 percent for women to 16.5 percent for men and 8.3 percent for women. The figures for self-employed workers are similar. In 1973, 18 percent of self-employed men and

Table II-12

Distribution of Educational Attainments by Occupation and Sex, 1973 and 1982

1973

Occupation	Sex*	No Formal Education	Primary Education	Post-Primary Education	Other	Unspecified
Unskilled	T	14.85	82.57	1.99	0.23	0.01
	M	13.61	84.24	1.43	0.29	0.43
	F	20.38	75.16	4.46	0.00	0.00
Service	T	3.67	92.77	2.84	0.12	0.00
	M	1.46	89.27	7.80	0.00	1.46
	F	4.38	93.90	1.25	0.16	0.31
Self-Employed	T	15.37	82.82	1.28	0.18	0.35
	M	17.60	80.46	1.34	0.20	0.40
	F	11.08	87.37	1.16	0.13	0.26
Craft	T	1.34	90.02	7.58	0.10	0.96
	M	0.95	90.04	7.52	0.11	0.85
	F	0.00	89.80	8.16	0.00	2.04
Clerical	T	0.52	56.27	40.23	0.65	2.33
	M	0.60	58.38	38.32	0.60	2.10
	F	0.46	54.67	41.69	0.68	2.51
Professional /technical	T	0.47	36.30	60.42	0.47	2.34
	M	1.05	23.04	71.73	0.52	3.66
	F	0.00	47.03	51.27	0.42	1.27

1982

Occupation	Sex*	No Formal Education	Primary Education	Post-Primary Education	Other	Unspecified
Unskilled	T	1.87	78.62	14.09	0.20	5.32
	M	1.82	75.80	16.50	0.28	5.59
	F	2.00	85.00	8.33	0.00	4.67
Service	T	0.86	75.65	20.26	1.08	0.01
	M	1.35	62.96	31.99	2.02	1.68
	F	0.63	81.62	14.74	0.63	2.38
Self-Employed	T	2.51	88.24	7.31	0.38	1.56
	M	2.71	87.61	7.80	0.28	1.61
	F	2.07	89.64	6.22	0.62	1.55
Craft	T	0.12	69.81	25.99	1.52	2.56
	M	0.13	68.65	26.97	1.68	2.58
	F	0.00	78.31	16.80	1.20	3.61
Clerical	T	0.11	37.23	56.47	2.02	4.16
	M	0.27	43.21	50.27	1.63	4.62
	F	0.00	33.78	60.15	2.28	3.80
Professional	T	0.14	20.60	72.44	4.69	2.13
	M	0.00	19.54	75.17	3.31	1.99
	F	0.25	21.39	70.65	5.72	2.24

* T=total, both sexes; M=male; F=female.
Source: The Labour Force, Table 3.7, annual issues.

11 percent of self-employed women reported no formal education, and only 1.3 and 1.2 percent respectively had advanced beyond primary school. By 1982, the percentages having no formal education had dropped to 2.7 and 2.1 percent respectively, while those going beyond primary school had increased to 7.7 and 6.2 percent respectively.

Among males, post-primary attainments are more common than among females in service jobs (7.8 vs. 1.4 percent in 1973, and 32 and 15 percent respectively in 1982) and in professional and technical positions (72 vs. 51 percent in 1973, and 75 vs. 71 percent in 1982). In both of these job categories, however, women made relatively larger gains than men, closing the gap somewhat.

In clerical and in craft occupations, the reverse was true in 1973, with women having marginally higher attainments than men. Among those in clerical jobs, 42 percent of women and 38 percent of men report post-primary educational attainments, and in craft occupations the figures are 8.1 percent and 7.5 percent for women and men respectively. This relative difference was sustained in clerical occupations in 1982, with 60 percent of and 50 percent of men having attained post-primary level schooling. In craft occupations, however, the trend was sharply reversed. By 1982, 27 percent of men working in craft occupations and only 17 percent of women in these jobs reported post-primary educational attainments.

Age composition. Age specific employment data are available from the Labor Force Surveys, beginning in 1968 (Tables II-13 and A-29 to A-31). The principal phenomenon which is reflected in these data is an increase in the representation of workers 24-35 years of age. This is the labor force group which increased most rapidly once emigration opportunities contracted sharply in the early and mid-1960s. Slight decreases in the proportion of

Table II-13
Distribution of Employment by Age and Sex, Selected Years

	1968	1975	1982
Total (both sexes)			
14 - 19	22.0	9.1	7.6
20 - 24	22.0	12.7	14.2
25 - 34	19.0	22.3	23.7
35 - 44	20.0	18.4	17.8
45 - 54	19.2	16.8	15.3
55 - 64	12.1	12.1	12.9
65 +	6.9	8.5	8.6
Males			
14 - 19	23.1	10.7	9.7
20 - 24	23.1	12.6	15.1
25 - 34	19.7	22.0	24.1
35 - 44	19.3	17.2	16.1
45 - 54	18.1	15.9	13.7
55 - 64	12.4	12.0	11.5
65 +	7.5	9.5	9.8
Females			
14 - 19	20.2	6.7	4.2
20 - 24	20.2	12.8	12.7
25 - 34	20.2	22.8	23.0
35 - 44	21.0	20.2	20.4
45 - 54	21.0	18.2	17.9
55 - 64	11.5	12.2	15.2
65 +	6.1	7.1	6.7

Source: Tables A-29 to A-31.

workers in all age groups 35 and older occur among men, while for women the portion of women ages 55 and above has actually risen somewhat. Another difference between men and women is among workers aged 20-24. Women in this age range account for a somewhat higher percentage of total female employment in 1982 than they did in 1975, while men of these ages account for a slightly smaller percentage of all male jobs.

Male vs. female employment. Disaggregated labor market data for men and women reveal quite distinct patterns of employment and of change for women and men. While women have expanded their participation in the enumerated labor force, their activities have been highly concentrated in three sectors: public administration, commerce, and other services (Table A-22). In each of these three sectors, female employment outnumbered male employment in 1982, and the three sectors together accounted for 70 percent of all jobs held by women (Table A-23). The fourth sector in which female employment has been concentrated is agriculture, which accounted for 23.6 percent of all female employment in 1968 and for 20.4 percent in 1982, following swings to as high as 24.7 percent in 1978 and as low as 15.5 percent in 1972. Only 8 percent of employed women in 1973 and 7 percent of employed women in 1982 were working in manufacturing jobs. Finally less than 3 percent and one-fourth percent of women's jobs in 1982 were in transportation and communications, and in construction, respectively (Table A-22).

The large increases in public administration jobs during the 1960s and first half of the 1970s benefited women especially. For men, jobs in public administration accounted for 9.4 percent of total male employment in 1968, and for 10.4 percent more in 1982 (Table A-21). After an interim increase to 13.4 percent in 1977, austerity measures forced the government to cut its own payrolls, leaving the share of male employment in this sector

Table II-14
Female Share (%) of Employment By Industry and Occupational Group, 1968 and 1982

	1968	1982
Total Employment	38.2	38.4
Industry Group		
Agriculture & Mining	23.7	22.1
Manufacturing	27.7	23.7
Construction & Installation	3.4	2.0
Transport, Communication, and Public Utilities	16.5	23.5
Commerce	61.0	65.4
Public Administration	39.4	53.7
Other Services	76.7	64.0
Occupational Group		
Professional, Technical and Administrative	49.1	57.1
Clerical and Sales	52.5	59.3
Self Employed	35.5	30.7
Service	78.9	68.0
Craftsmen and Production Operatives	14.1	9.67
Unskilled Manual & General	25.4	29.6

Sources: A-23 and A-27.

essentially unchanged. For women, however, the share of jobs in public administration doubled during the same period. In 1968, these jobs accounted for 9.9 percent of female employment; by 1982, this share had risen to 19.3 percent. As a result of this disproportionate increase in female employment in the sector, women held slightly more than half of all public administration jobs (53.7 percent) in 1982, up from about 40 percent in 1968 (Tables II-14 and A-23).

The other sector in which accounted for a considerably increased share of female employment is commerce, which provided nearly on in every four jobs held by women in 1982, up from 19 percent in 1968. Because female employment grew proportionately more rapidly than male employment in commerce, women held a somewhat larger proportion of all jobs in the sector in 1982 — 65 percent, vs. 61 percent in 1968 (Table A-22).

Jobs in "other services" continued to account for the largest proportion of women's jobs in 1982 (26.2 percent). The relative importance of this sector as a source of women's jobs had declined significantly, from 37 percent in 1968, but women continued to hold 64 percent of all jobs in this eclectic sector. Jobs in domestic service are an important component of work for women in this sector.

The fourth sector accounting for a large block of women's jobs was agriculture, which accounted for 23 percent of total female employment in 1968 and for 20 percent in 1982. While the portion of women's jobs in this sector fell to as low as 15.5 percent in 1972, and rose to as high as 25 percent in 1981, there was no clear trend of change in the decade.

For men, the distribution of jobs across sectors is significantly different. Agriculture continued to account for 45 percent of men's jobs in 1982 — more than twice the share for women. Men held 78 percent of all

agricultural jobs. The second most important source of employment for men was manufacturing, which rose slightly over the 14 year period (from 12.5 to 14.1 percent). For men, however, employment has remained more evenly distributed across the remaining sectors. Although there have been on-going shifts in relative shares of employment, such as the increases in public administration and other services, and the decline in construction, these relative shifts have been much less dramatic than for women.

The data for occupational classifications show similar patterns of distribution and change (Tables II-14 and A-25 to A-27). For both men and women, self-employment is particularly important, providing one third of all women's jobs and 46.8 percent of all men's jobs in 1982. This share has remained fairly stable for women, and has been rising somewhat for men. The second and third largest concentrations of female jobs are service occupations (22 percent) and clerical and sales occupations (18 percent). Professional and technical, and unskilled jobs, account for 14 percent and 10 percent of women's work respectively, while less than 3 percent of all working women hold craft and skilled operative jobs.

For men, although craft employment has declined from 21 percent in 1968 to 17 percent of all jobs in 1982, this key occupational category remains the second most important source of jobs. Unskilled and manual jobs follow closely, at 15.4 percent. The remainder of jobs are divided fairly equally between professional and technical (6.5 percent), clerical and sales (7.8 percent), and service occupations (6.4 percent).

The occupational classifications used in the labor force surveys aggregate jobs which differ widely in training requirements and remuneration. Yet, contrasts between men and women help illustrate the fundamentally different sets of employment opportunities and/or choices for

Jamaican men and women. Women accounted for 38 percent of all jobs in 1982, but held the majority of jobs in professional and technical, clerical and sales, and service occupations (Table II-14). They also accounted for about 30 percent of all self-employment, and approximately the same share of all jobs in unskilled manual and general occupations. In craft and skilled production operative positions, however, women held fewer than one in ten positions in 1982.

Women held 50 percent of all professional and technical jobs in 1968, and 57 percent in 1982. Two important concentrations of these jobs, however, are in nursing, and in teaching. Remuneration in these occupations is considerably lower than in many professional positions held by men.

Because women hold most office clerical positions in both public administration and throughout the private sector, they accounted for 59 percent of all clerical and sales employment in 1982, up from 52 percent in 1968. The decline in the sectoral proportion of women's jobs in "other services" was matched by a decline in share of these jobs held by women — from 79 percent to 68 percent. Yet in 1982, women continued to hold slightly more than two of every three such jobs.

Women also continue to dominate petty trading women, both as "higglers" and as small shop keepers. In 1982, women held 65 percent of all jobs in commerce. However, in both commerce and in services, differences in the remuneration among various subsets of these jobs results a lower earning distribution for women than for men in commerce. These results are discussed below.

<u>The informal sector</u>. Although data sources on informal sector activity are universally weak, all indications are that this sector has grown substantially in Jamaica over the past two decades, as it has in many developing countries. Pressures from increases of population and of the

Table II-15
Self-Employment as a Percent of Employment by Industry, selected years

Industry	Sex	1943	1960	1973	1977	1982
Agriculture, forestry, fishing, & mining	Males	46.4	53.4	74.0	75.6	79.5
	Females	29.7	41.1	73.9	50.1	59.6
Manufacturing	Males	43.3	29.7	13.0	11.2	21.2
	Females	74.3	57.1	19.3	12.2	14.6
Construction and installation	Males	18.5	11.4	5.2	7.5	13.4
	Females	-	9.9	7.7	-	14.3
Transport, storage, & communications	Males	-	12.7	11.0	26.4	24.9
	Females	-	1.0	-	-	1.3
Commerce	Males	56.3	42.8	30.6	35.4	43.2
	Females	81.1	60.0	62.3	62.4	64.6
Public administration	Males	-	-	-	0.5	0.8
	Females	-	-	-	0.2	0.2
Other Services	Males	-	7.6	20.1	27.2	24.8
	Females	-	4.5	15.2	15.9	17.5
Total	Males	36.8	36.9	38.6	42.0	46.8
	Females	30.4	29.6	33.1	30.4	33.3

Source: Table A-28

labor force in Jamaica, coupled with slow growth in modern sector employment and reductions in suitable agricultural land, have led to an increase in informal sector activities in manufacturing as well as other sectors.

Self-employment has accounted for about one-third of women's employment since 1943, fluctuating between 29.6 and 33.3 percent (Tables II-15 and A-28). For men, however, the importance of self-employment has increased significantly during the last decade. In 1943 and 1960, self-employment accounted for 36.8 and 36.9 percent of male jobs respectively. In 1974, this fraction had risen sharply to 44.2 percent. It fell again in 1975 to 38.6 percent amid the surge of public employment programs, then began to

climb again as the growth of more organized employment opportunities fell off and unemployment rose again during the remainder of the the 1970's. By 1980, 47 percent of all male jobs were self-employment.

Agriculture has always provided an important source of own-account income. As plantation agriculture has declined in the post-war period, however, the proportion of self-employment in agriculture has increased, both for men and for women. The share of own-account employment among males in agriculture grew from 46 percent in 1943, to 53 percent in 1960, to 74 percent in 1973 and 80 percent in 1982. For women, the change was equally dramatic until the mid 1970s, rising from 30 percent in 1943, to 41 percent in 1960, to 74 percent in 1973. However, the erosion of rural opportunities and continuing exodus of women from family farming during the 1970's, together with the burst of new public sector job opportunities for women in 1973-1975, caused a reversal of this trend. In 1977, only 50 percent of women's agricultural jobs were through self-employment. The following year, the share of self employment rose to 61 percent, and at 1982 it remained at 60 percent.

Self-employment has continued to be a key source of income in commerce and other services as well. Women in particular have depended heavily on self-employment, as 'higglers' and as small shopkeepers.[27] In 1943, 81 percent of all women working in commerce were self-employed. By 1960, this share had fallen to 60 percent. In 1975, when the expansionary policies of the Jamaican government were most vigorous, own-account employment fell briefly to a low of 58 percent of women's jobs in commerce. Subsequently, however, it rose again, and was at 65 percent in 1982. Among men, a similar trend has occurred. Dropping from 56 percent in 1943 to 43 percent in 1960 and 30.6 percent in 1973, the self-employment share of male jobs in commerce

continued to decline to 29 percent in 1975. Then, with job creation sharply curtailed, self-employment again increased to 43 percent of all male jobs in commerce by 1982.

To a lesser degree, this has been true in manufacturing as well. The dominant trend in manufacturing has been the expansion of factory employment and the corresponding decline in the importance of handicraft production. The increasingly slack labor market conditions in 1976-1979 caused a relative shift back to self-employment. Between 1943 and 1960, the share of self-employment in manufacturing fell from 43 to 30 percent for men, and from 74 to 57 percent for women. By 1973, only 13 percent of men and 19 percent of women working in manufacturing were self-employed. Subsequently, the self-employed share of male and female manufacturing jobs fell to 11 and 12 percent respectively, then increased again, reaching 21 percent and 15 percent respectively in 1982.

The other noteworthy trends with regard to self-employment have been in transportation and in other services. Male self-employment in transportation rose from 11 percent in 1973 to 25 percent in 1982, presumably due to the growth of both taxi and independent trucking services. In other services, male self-employment increased from 20 percent to 25 percent among men during 1973-1982, and from 15 to 18 percent among women. It is also possible to derive more comprehensive estimates of informal sector employment that include the enormous array of small establishments. This can be done by factoring out of total employment that fraction of jobs located in large establishments.[28] These data, available for the years 1976-1979, show that informal employment was also growing rapidly in the service sector during this period of rising aggregate unemployment (Table II-16). Moreover, it appears that, within the informal sector, employment

Table II-16
Percent of Employment in the Informal Sector by Industry, 1976-1979 (a)

Industry Group	1976	1977	1978	1979
Mining	25.1	22.4	(b)	19.4
Manufacture	33.1	38.4	46.3	50.8
Transport, Communications, Public Utilities	—	53.8	60.6	65.3
Construction & Installation	70.1	76.9	80.8	78.3
Commerce	—	64.3	68.1	79.4
Other services (excluding govt.)	—	75.7	74.2	81.3
Total (excl. agric. & public admin.)	—	61.1	64.1	72.3

(a) Informal sector employment calculated as a residual between the number of workers employed in large establishments and the total number employed in each sector.

(b) unreported because of statistical error

Sources: Employment, Earnings and Hours in Large Establishments, Table 1.1, and The Labour Force, Table 3.5 (Kingston: Department of Statistics, Government of Jamaica), various annual issues.

in small firms — which comprises nearly two-thirds of all informal sector jobs — tended to grow even faster, leaving the share of self-employment within this sector in 1979 somewhat reduced from its prior level (Table II-17).[29]

These developments suggest that the informal sector has provided a growing share of employment opportunities during the 1970s in a number of areas, as the growth of overall employment opportunities has slowed. During the economic crises of the late 1970s, self-employment and jobs in very small firms appear to have been a refuge for workers unable to find

Table II-17
Self-Employment as a Percent of Informal Sector Employment
by Industry,* 1976-79

	1976	1977	1978	1979
Manufacture	30.7	21.5	27.0	23.7
Construction	18.4	9.4	12.0	19.6
Transport, Communications, Public Utilities	n.a.	43.4	33.1	26.6
Commerce	n.a.	53.7	51.0	44.7
Other services	n.a.	11.4	12.1	10.8
Total	—	42.7	39.3	36.3

*Not including mining, agriculture, or public administration. Informal sector employment calculated as a residual between the number of workers employed in large enterprises and the total employed in each sector.

Source: Employment, Earnings, and Hours in Large Establishments, Table 1.1, and The Labour Force, Table 3.6 (Kingston: Department of Statistics, Government of Jamaica), various annual issues.

employment in the more organized economy. As these small-scale and individual activities have absorbed a growing share of workers, productivity and real earnings have declined. In this sense, the informal sector has in part been a source of disguised underemployment.

Employment in large establishments. Data from the large establishment surveys, available in the preparation of this report only for years 1976-1979, detail employment patterns at the extreme opposite end of the organizational scale. Excluding agriculture and public administration, 38.9 percent of all employment by 1977 was in large establishments (Table II-18). As economic conditions worsened, this fraction declined markedly, to 35.9

Table II-18
Percent of Employment in Large Establishments by Industry,* 1977 and 1979

Industry Group	1977	1979
Manufacturing	61.6	49.2
Transport, communications, public utilities	46.2	34.7
Construction and installation	23.1	21.7
Commerce	35.7	20.6
Other services, excluding government	24.3	18.7
Total	38.9	27.7

*Calculated as enumerated employment in large establishments by sector as a percentage of total enumerated employment in each sector.

Sources: Employment, Earnings, and Hours in Large Establishments, Table 1.1, and The Labour Force, Table 3.5 (Kingston: Department of Statistics, Government of Jamaica), various annual issues.

percent in 1978, then continued to fall more precipitously to 27.7 percent in 1979. This decline in the large establishment share of overall employment occurred in almost every enumerated sector; the only exception was mining. (See Chapter V for additional discussion.)

Compensation and Wage Structure

Analyses of developing country economies frequently are faced with substantial shortcomings of wage data. Jamaica is somewhat unusual,

however, in the degree to which its published information on the level and distribution of earnings is incomplete. While there are several sources of data which can be used to get some insights into the wage structure, there is no regularly published series which serves this purpose adequately.

There are four principal publicly available sources of information concerning wages, earnings, and total compensation: (1) semi-annual data on median weekly labor income, reported by the National Planning Agency from the labor force surveys;[30] (2) aggregated information on weekly earnings ranges in the publications from the labor force surveys;[31] (3) evidence from the large establishment surveys which is published irregularly;[32] and (4) data from the national accounts concerning total compensation.[33] Each of these fragmentary sources of information allows some insights into income trends, but each is seriously incomplete as a basis for understanding the level and structure of wages in sufficient detail for policy assessments.

While the data therefore need to be interpreted with caution, they do provide useful evidence of some of the key aggregate trends in recent years, and suggest the importance of obtaining more comprehensive wage data for all types of work. For example, the reports on median weekly earnings provide trend information for males and females (Table II-19). They indicate that between 1974 and 1982, median worker incomes trebled in current Jamaican dollars, for both men and women. However, using an aggregate price index for the same period to convert these income data to constant (1974) dollars produces quite a different picture. While incomes trebled, prices within Jamaica rose by a factor of four, thereby cutting worker purchasing power to approximately three-fourths of its 1974 level for men, and to about four-fifths for women.

Table II-19
Median Weekly Labor Income Indices by Sex, 1974-1982

Year	Index of Nominal Weekly Labor Income		CPI	Index of Real Weekly Labor Income	
	Males	Females		Males	Females
1974	100.0	100.0	100.0	100.0	100.0
1975	135.6	130.2	118.5	114.4	109.9
1976	141.2	159.0	131.5	107.4	120.9
1977	148.9	171.8	143.2	104.0	120.0
1978	166.7	177.2	168.1	99.2	105.4
1979	195.3	197.9	248.6	78.6	79.6
1980	232.4	238.5	306.2	75.9	77.9
1981	271.7	265.7	366.9	74.0	72.4
1982	299.5	310.0	392.2	76.4	79.0

*World Bank index of international prices.

Source: Nominal indices of labor income are from National Planning Agency. Economic and Social Survey (Kingston: Government of Jamaica), various annual issues; cited in J. Buttari, "Employment Issues in Jamaica" Washington, D.C.: The World Bank, 1982, unpublished), p. 80.

In the early 1970's, real wages rose sharply as a result of the liberalization of minimum wage laws, equal pay provisions for women, a rapid expansion of relatively high-wage public sector employment, and economic policies directed at reducing unemployment through a broad-based expansion program. Throughout the last half of the 1970s and into the early 1980s, however, the economic crises precipitated by OPEC price increases, and later by world-wide recession, caused a steady fall in real wages. Thus, for employed workers as a whole, inflation in the latter part of the decade, coupled with the deepening recession and slackness in the labor market, eroded the income gains made prior to 1977 even for those workers remaining

employed. This is consistent with the overall trends in employment and unemployment, and with the shift of many workers into lower-income self-employment.

Another, closely linked, source of published data on worker incomes comes from the labor force surveys, and is reported in summary form in the semi-annual labor force reports. Drawing from the same raw data, these reports provide frequency distributions of workers by income group, rather than simply medians. However, the data are reported in intervals which have not been adjusted for inflation. Nor is there a way to make much sense of these data by rescaling the intervals in real terms. Thus, as one would expect in a period of rapid and sustained inflation, there has been a dramatic drop in the proportion of workers' earning nominal weekly incomes in the lowest ranges, and corresponding increases of the proportions in higher income ranges (Table II-20 and A-31 to A-33).

The third source of information on trends in labor remuneration is the national income accounts. Based on reports from all registered businesses, national accounts data summarize "compensation of employees" for the economy as a whole and by industry. The advantage of these data is that they are comprehensive in their reporting for covered workers, since they include social insurance payments and other fringe benefits. Their weakness for purposes of gauging per-worker trends is that the number of workers covered by these data is not clear from the secondary sources from which these figures were available.[34]

Table II-20
Percentage Distribution of Employment by Income Group,
Selected Years (Jamaican $ per week)*

Total (both sexes)

Year	$ 0	< $30	$30-50	$50-100	> $100
1968	9.3	86.6	3.6	0.7	0.1
1972	3.9	82.1	9.2	3.9	0.9
1975	5.6	59.0	18.3	13.5	3.6
1979	7.4	43.4	20.7	19.3	9.2
1982	7.9	27.4	21.1	21.8	21.8

Males

Year	$ 0	< $30	$30-50	$50-100	> $100
1968	6.9	87.9	4.1	1.0	0.0
1972	3.5	79.9	10.1	4.2	1.2
1975	4.3	54.5	21.9	15.1	4.2
1979	3.5	35.2	24.2	24.5	12.6
1982	5.7	29.2	18.9	23.3	22.9

Females

Year	$ 0	< $30	$30-50	$50-100	> $100
1968	0.0	83.8	2.6	0.2	0.1
1972	0.0	84.3	7.6	3.3	0.4
1975	0.3	65.6	13.0	22.1	2.7
1979	0.9	41.0	25.4	16.5	8.9
1982	24.4	24.5	19.5	20.4	2.0

*Percentages do not sum to 100% due to non-responses.

Source: Tables A-31 to A-33

One solution to not knowing the number of employees covered by the compensation data is to form a longitudinal index using employment figures

from the labor force surveys. Because the labor force surveys include workers in the smallest firms, even when self-employment is excluded, the resulting measure may understate compensation per worker in the registered firms for which compensation data are reported. This would not affect changes in the longitudinal index unless the ratio of covered workers to total employment varies. We have demonstrated, however, that this is precisely the case.

As economic growth accelerates, workers switch both from self-employment into more established employment, and from small-scale, informal sector establishments (which may be omitted from the accounting process) into larger firms. In periods of economic decline, the process is reversed. Because overall employment therefore fluctuates less rapidly than employment in larger-scale firms, the compensation index is likely to overstate the decline in real earnings during a recession for workers remaining in covered employment.

As expected, this index (Table II-21) does falls somewhat more precipitously in the late 1970's than does the index of median weekly labor income, dropping to 56 percent (vs. about 77 percent, Table II-19). The compensation index also peaks in 1974, three years earlier than the median labor income index, presumably because of the extremely rapid increases in employment (thus, also the ratio of covered to total employment between 1974 and 1975.[35] Therefore, while compensation data may serve as a substitute in the absence of more proper wage information, the problem of its

Table II-21
Index of Annual Compensation per Worker (1974 dollars), 1972-1981

Year	Compensation Index
1972	93.7
1973	97.2
1974	100.0
1975	90.8
1976	90.3
1977	87.4
1978	90.8
1979	72.4
1980	61.0
1981	56.1

Source: Compensation per worker calculated as total compensation (from national accounts, reproduced in World Bank, "Jamaica: Structural Adjustment, Export Development, and Private Investment," Report No. 3955-JM, 1982, Table 2.13, p. 167); divided by employed workers other than self-employed (from The Labour Force, Table 3.6, annual issues). Price deflation based on onsumer price index from World Bank Tables, 3rd ed., (Baltimore: Johns Hopkins University Press, 1983), pp. 95-96.

interpretation is likely to arise whenever major fluctuations occur in the economy and in the relationship between covered and uncovered employment. This is important, as we shall see, because compensation data are available every year at the industry group level while detailed median earnings data are not.

The aggregate evidence from both national income accounts and labor force surveys suggests quite clearly that the forces of stagflation at the end of the decade more than eroded away gains which workers had made prior to 1977. As one would expect in the presence of competitive market forces,

the pressures of recession and inflation affected those who remained employed in registered establishments in similar ways to those in marginal and less visible employment. Although they were fortunate in comparison with those who became entirely unemployed, both sets of workers suffered a major erosion of real earnings.

Sectoral changes in real wages and total compensation. There were important sectoral differences in the impact of these declines. Workers in some industries were more able to maintain real wage levels in the face of inflation than workers in other activities. Both the total compensation data from the national accounts, and the income-group data from the labor force surveys, provide evidence of differences in pay across sectors of the economy.

They also indicate the pervasiveness of the real earnings declines which were seen in Tables II-19 and II-21. In all seven major industrial categories, real compensation per worker was significantly lower in 1981 than it had been in 1974, declining by between 34% and 60% (Table II-22). Employees in agriculture and commerce activities — the two sectors with the largest shares of self-employment — suffered the sharpest average declines (more than half) in real compensation. Workers in more urbanized, 'modern-sector' activities — manufacturing, public administration, communications, transportation, public utilities — generally experienced distinctly smaller percentage reductions in real compensation, with declines between 34 and 40 percent. Finally, compensation in miscellaneous services fell less than in commerce or agriculture, but more than in the modern-sector activities. Note

Table II-22
Real Compensation per Worker (1974=100)
and Share of Self Employment (%) by Industry Group, 1973-1981

Industry Group	1973	1974	1975	1976	1977	1978	1979	1980	1981
Agriculture & Mining									
Compensation Index	107.3	100.0	70.4	66.6	67.9	83.3	79.6	53.9	48.2
Share of Self-Employment	74.0	76.8	67.4	67.9	68.9	72.8	75.9	73.8	72.6
Manufacture									
Compensation Index	98.6	100.0	112.0	112.1	107.9	110.4	87.3	70.7	65.9
Share of Self-Employment	14.3	14.7	13.0	13.5	11.5	16.7	15.6	15.9	18.9
Construction & Installation									
Compensation Index	86.2	100.0	91.5	89.6	72.4	81.1	100.1	70.0	63.4
Share of Self-Employment	5.3	11.5	8.2	13.5	7.5	9.1	18.5	16.7	18.7
Commerce Distributive Trade (Wholesale & Retail)									
Compensation Index	87.0	100.0	80.9	74.2	70.4	64.0	51.5	44.4	40.1
Share of Self-Employment	51.2	54.9	46.7	51.4	53.2	53.0	55.0	54.4	55.8
Producers of Gov't. Services									
Compensation Index	103.0	100.0	94.4	89.1	92.2	98.6	69.9	68.4	66.4
Share of Self-Employment	0.0	0.2	0.5	0.0	3.6	2.9	1.8	1.1	1.8
Transport, Communication & Storage									
Compensation Index	82.3	100.0	81.1	95.1	106.7	102.5	82.9	73.8	60.5
Share of Self Employment	8.2	12.9	11.5	19.1	22.0	19.1	17.5	23.6	20.6
Misc. Services & Households									
Compensation Index	102.8	100.0	94.0	121.5	116.5	111.0	72.0	60.1	55.4
Share of Self Employment	16.6	18.4	16.4	19.3	19.3	21.4	19.2	17.8	20.0
All Sectors									
Compensation Index	97.2	100.0	90.8	90.3	87.4	90.8	72.4	61.0	56.1
Share of Self Employment	36.5	40.1	34.6	37.1	37.4	39.9	39.1	41.0	41.1

Sources: Real compensation per worker calculated as total sectoral labor compensation in 1974 Jamaican dollars (from national income accounts, reproduced as Table 2.13 in World Bank, "Jamaica: Structural Adjustment, Export Development and Private Investment," Report No. 3955-JM, p. 167) divided by total employment excluding self-employment (from The Labour Force, Table 3.5, annual issues).

that with one major exception — i.e. commerce — sectors with higher shares of self-employment in total employment had higher relative drops in compensation per worker. Real earnings in commerce had already declined by one-fourth from 1974 to 1976, and by 1981 had experienced the largest decline in relative earnings. This sector is comprised of many very small, and often family-owned firms as well as own-account activities. Such activities absorb labor readily, often providing income earning opportunities for friends and relatives who have lost jobs in other sectors as aggregate economic activity declines. Thus, they are among the first (along with agriculture) to show signs of earning reductions in a recession. In the downturn which begain in 1975 with the OPEC oil price increases, energy-intensive activities such as transport were also hit particularly hard.

Reductions in real GDP per worker also occurred in nearly all sectors (Table II-23), as the consequences of fiscal austerity measures and international currency constraints affected output levels throughout the economy. The sharpest declines were in construction, where per-worker output levels fell in most years despite substantial absolute reductions in employment. By 1981 employment in the industry was 20 percent below its 1974 level, and output per worker had fallen by more than 40%. A sharp decline in investment throughout the economy was responsible for these dramatic reductions in construction employment, and in GDP per worker among those remaining employed in the industry.

In commerce, the general economic decline and accelerating inflation affected price-adjusted outputs per worker equally severely. A majority of employment in this sector is own-account employment in petty trading, which is

Table II-23
Ratio of 1981 to 1974 Real Compensation and GDP per Worker by Industry (1974 J$)

Industry Group	Compensation Ratio	GDP Ratio
Agriculture, forestry, & fishing	.48	.88
Mining & quarrying	.72	.82
Manufacturing	.66	.72
Construction & installation	.63	.58
Transportation, communications, public utilities	.60	.76
Commerce (distributive trades, financing and insurance services, real estate and business services)	.40	.67
Public administration (producers of govt. services)	.66	1.07
Other services	.55	.59
All Sectors	.56	.75

Sources: Index of real compensation per worker from Table II-22. Real GDP per worker calculated as GDP in 1974 Jamaican dollars (from national income accounts, reproduced as Table 2.5 in World Bank, "Jamaica: Structural Adjustment, Export Development and Private Investment," Report No. 3955-JM, p. 159) divided by total employment averaged for April and October (from The Labour Force, Table 3.5, annual issues).

least amenable to rapid technological improvements in the face of pressures on productivity and prices. This sector also acts to absorb workers in whose job opportunities decline in other sectors, leaving it most vulnerable to erosion of output per job as well as earnings.

Only in government services is this downward trend in output per worker not apparent. In this sector, however, such measures are meaningless, since the valuation of output is based entirely on factor costs.

Industrial and occupational wage structures. Wage fluctuations have varied across industries, with workers in the more traditional, competitive sectors losing ground more rapidly in recent years than those in more urbanized, unionized, and capital-intensive activities. Nevertheless, relative rankings of workers in the wage heirarchy have been remarkably stable in most cases across more than two decades, a period which has included major economic cycles and changes.

This can be seen in the report from quarterly large establishment surveys,[36] which is the richest source of published wage and weekly earnings data for the few years for which it is available. The large-establishment survey provides information only for firms with ten or more employees,[37] for 1976-1979 (Table II-25), and earlier with somewhat different industrial groupings for 1957-1962 and 1965 (Table II-24). These firms operate in the higher-wage portion of the labor market, where wage rates, and to a lesser extent jobs, are relatively more insulated from the effects of major changes in demand. For this part of the employment system, the surveys provide detailed breakdowns by industry, though not by occupation or skill level.

The data indicate that in these larger, generally higher-wage establishments, mining workers have consistently received the highest rates of pay, increasing from just over three times the average textile wage in 1957 to nearly five times in 1976. Textile rates have remained consistently among the lowest, along with agriculture. Agricultural estate workers, particularly sugar workers, earned barely more than half the wage rate of textile workers in the late 1950's. By 1965, the average agricultural wage was four-fifths of textile wages — a figure which was quoted in several of our interviews as a

Table II-24
Average Weekly Earnings (J$) as a Percentage of Textile Earnings by Industry, 1957-1979*

	1957	1960	1965	1976	1979
Mining					
Wage	25.6	30.0	42.4	176	240.65
Index	329	385	441	495	413
Manufacture					
Wage	7.4	8.8	15	63.7	90.52
Index	97	113	156	179	155
Food & Drink					
Wage	6.6	8.0	15.8	66.73	94.33
Index	87	103	165	189	162
Transport & Communication					
Wage	9.0	16.0	19.8	—	161.39
Index	118	205	206	—	277
Construction					
Wage	12.4	14.4	20.6	72.51	89.8
Index	163	185	215	204	154
Agriculture					
Wage	4.1 (1958)	4.4	7.8	—	—
Index	54	56	81	—	—
Textiles					
Wage	7.6	7.8	9.6	35.5	58.23
Index	100	100	100	100	100

*Data are from Large Establishment Surveys, and therefore reflect only wages for large (generally higher-wage) establishments. Reported wage rates are averages of quarterly observations.

Sources: Data for 1957, 1960, and 1965 (converted from $U.S. to $J) are from ILO Statistical Yearbook (Geneva: International Labour Office), various annual issues; based on Employment and Earnings in Large Establishments, 1957-1962 (Kingston: Department of Statistics, Government of Jamaica,1965). Data for 1976 and 1979 are from Employment, Earnings, and Hours in Large Establishments (Kingston: Department of Statistics, Government of Jamaica), various annual issues.

reasonable approximation of the current wage ratio between agriculture and textiles. Other noteworthy trends are the abrupt increase in the absolute wage level, and in the relative ranking, of transport workers between 1957 and 1960; and the precipitous decline of construction workers in the wage hierarchy during 1976-1979. The meteoric rise in transport wages in the late 1950's may be due to the upsurge in urbanization, in tourism, and in construction during that period; the decline in the relative well-being of construction workers has already been alluded to above. Finally manufacturing, and food and beverage production, have experienced wage increases relative to textile workers. The parallel movement of these two indices presumably reflects the growing capitalization of these industries, and the structural linkages between labor market segments in these two closely related categories of activity.

The year-to-year data provided in Table II-25 summarize even more frequent (quarterly) observations, and provide a good picture of relative wage movements in the economy's larger non-agricultural establishments during these troubled economic years. Wage data of this type are useful monitoring relative scarcities in industrial labor markets, though the brief four-year span for which the series is published in the late 1970's is too short to be of much use in human resource planning. A more regular availability of this series, coupled with a different presentation of income data from the labor force surveys, would go a long way toward improving this currently weak link in Jamaica's publicly available labor market data.

The grouped income data from the labor force surveys provide some evidence of differences between men and women by industry as well. Disaggregations by industry group show that agriculture, miscellaneous

Table II-25
Average Weekly Earnings (J$) as a Percentage of Textile Earnings, in Large Establishments, 1976-1979*

Industry Group	1976	1977	1978	1979
Mining				
Wage	176.02	211.27	223.17	240.66
Index	495	475	455	413
Manufacture				
Wage	63.70	70.74	80.58	90.52
Index	179	159	164	155
Food, Drink & Tobacco				
Wage	66.73	70.66	85.43	94.33
Index	189	159	174	162
Electricity				
Wage	147.05	169.66	189.23	227.05
Index	414	382	385	390
Construction				
Wage	72.51	83.66	81.65	89.8
Index	204	188	166	154
Distribution				
Wage	—	66.46	73.1	92.7
Index	—	150	149	159
Transport & Communication				
Wage	—	107.96	132.61	161.39
Index	—	243	270	277
Financial & Business Services				
Wage	—	117.05	136.42	158.09
Index	—	263	278	271
Other Services (excluding Govt.)				
Wage	—	83.46	93.76	99.95
Index	—	188	191	172
Textiles				
Wage	35.34	44.43	49.09	58.23
Index	100	100	100	100

Sources: Employment, Earnings, and Hours in Large Establishments, (Kingston: Department of Statistics, Government of Jamaica), various annual issues.

Table II-26
Percentage of Employed Earning $50 or More Per Week
by Industry Group, 1982

Industry Group	All Workers	Males	Females
Agriculture & Mining	19.9	23.9	7.0
Manufacturing	70.1	74.4	57.0
Construction & Installation	76.7	66.0	100.0
Transport, Communications and Public Utilities	87.8	87.7	83.0
Commerce	47.8	57.9	42.8
Public Administration	85.0	87.7	57.0
Other Services	39.0	57.4	30.4
Total	43.6	46.2	39.9

Note: Data based on 84.1% of survey respondents who provided earnings information.

Source: Calculated from The Labour Force, Table 3.12 annual issues.

services, and commerce had the smallest proportions of workers earning $J 50 or more per week in October 1982 (Table II-26). In every industry group except construction, where a majority of women may be in white collar positions, a smaller percentage of women than of men earns in excess of $J 50.

Recall that women's jobs are most heavily concentrated in commerce and other services, two of the three areas with the smallest percentage of workers receiving higher-level weekly incomes at the workplace. Nearly two-thirds of all jobs in these two categories are held by women, and together they account for half of female employment. The combination of relatively lower pay among women in each industry, and the concentration of women in low-paying

industries, help to explain why women earn less than men. In October 1982, 58 percent of all males employed in commerce, and only 42 percent of all women working in the sector, were identified as earning more than $50 per week. At this time, 32 percent of men working in commerce, and only 12 percent of women, earned more than $100 weekly.[38]

The same is presumably true in services, an eclectic mix of activities. In this sector, October 1982 weekly earnings data indicate that only 8 percent of women and 23 percent of men earned $100 or more, while 30 percent of women and 57 percent of men earned $50 or more.

In many developing countries, wage differentials by skill and education have tended to be than in more industrialized countries. Although there is only anecdotal information concerning occupational and skill differentials, Jamaica appears to be no exception, with skilled industrial workers earning as much as four to five times the earnings of workers in agriculture. Within manufacturing as a whole, skilled workers seem generally to earn between two and two and one half times the pay of the average unskilled worker.[39] More effective documentation of these inter-industry, occupational, and skill differentials would be particularly useful for planning purposes.

Summary

Amid the detail presented here, several central themes emerge. Despite major swings in the composition of the economy and of employment, and through some periods of strong economic growth, unemployment — and with it, underemployment — has been a persistent problem in Jamaican labor markets. Unemployment, and low productivity account for the unusually unequal distribution of income within the country, and for the massive outlows of migrants in a nearly steady stream over the past century.

Emigration, which for many decades served as an outlet for surplus workers, has been transformed since the 1960's into a selective process which allows only higher-skilled Jamaicans to emigrate. In effect, Jamaica has become an exporter of skilled workers. Although educational attainments of the remaining labor force have increased dramatically during the past fifteen years, some of these exported skills are in short supply at home. Where skilled labor is a crucial complement to less skilled work, this "brain drain" may create a serious deterrent to economic growth. This premise, upon which current training policies are based, is considered in chapters IV and V.

As emigration has waned, larger numbers of young adult workers have entered Jamaica's labor force. Extensive rural-urban migration within Jamaica, and a large proportion of unmarried and self-supporting women in the population, have helped encourage the unusually high labor force participation rate of Jamaican women. Regretably, rising educational attainments and increased eagerness to work have not been matched by job opportunities for women. Contrary to a simple competitive market model, in which increased skill acquisition leads almost automatically to improved employment opportunities and higher incomes, the growing Jamaican labor force has faced growing disappointment and hardship in the search for productive work.

In agriculture, estate owners have for more than a century expressed concerns over an insufficiency of farm labor. Yet, the extremely low wages, and to some extent the stigma of working in environments associated with past slavery, have created an artificial shortage amid very high concentrations of surplus labor. With official unemployment often exceeding 25% — a level slightly higher than U.S. unemployment rate in the Great Depression of the 1930's — job shortages rather than labor shortages are by far the most serious problem facing the economy. Widespread underemployment accompanies

high rates of official unemployment, and there appeared in our interview sample to be significant surpluses of available workers even in most skilled job categories.

As in many economies which must ration scarce income-earning opportunities, one's position in the labor market is crucial to his or her standard of living. Interviews conducted over three decades with Jamaicans both at home and abroad indicate that historical mechanisms of job access — through kinship ties and patronage as well as skill qualification — remain important in determining who gets higher-wage, higher-security, higher-opportunity jobs in the formal sector or the minimal security of employment in the informal sector.

The quantitative dimensions of the labor market show the results of these market and institutional processes, but they do not reveal how the processes work or what are the important mechanisms for change. In the remainder of the study, we turn to these crucial institutional factors which affect individual well-being as well as the implementation of labor market policies.

Notes for Chapter II

1 The Kingston metropolitan area is defined as including St. Andrew, and usually Port Royal. In recent decades, the population of Kingston proper has actually declined somewhat as residences in the capital have been pushed from the increasingly commercial central city into the peripheral areas, particularly St. Andrew. Data from 1943 and 1960 Censes were obtained from Owen Jefferson, op. cit, Table 2.1, p. 16. Data for 1970 are from Department of Statistics, Demographic Statistics, 1982 (Kingston: Government of Jamaica, 1983), Table V, p. 4.

2 Urban settings here are defined as asreas having 2500 persons or more and having 'urban facilities.' See the 1970 Census for details. Data from the 1980 Census were not yet available for comparison at this writing.

3 Demographic Statistics, p.4

4 Juan Buttari, "Employment Issues In Jamaica," (Washington, D.C.: The World Bank, 1982, unpublished), Table 1, p. 69.

5 George W. Roberts, The Population of Jamaica (Cambridge: Cambridge University Press for the Conservation Foundation, 1957). In some cases, estimates of other authors differ significantly. Generally, Roberts' estimates are conservative, and may be thought of as a reasonable lower bound.

6 Joanne Koslovsky, "Going Foreign: Causes of Jamaican Migration," NACLA Report on the Americas (15:1), January-February 1981, p. 2.

7 Ibid., p. 3.

8 Estimates of the emigration to Cuba run as high as 60,000. See Edward Taylor, "The Social Adjustment of Returned Migrants to Jamaica," in Frances Henry, Ethnicity in the Americas (The Hague: Mouton Publishers, 1976), pp. 213-230.

9 Clarence Senior, "Demography and Economic Development," Social and Economic Studies (7:3), September 1958, pp. 9-23

10 Taylor, op. cit., p. 218.

11 Ibid.

12 Kaplan, Irving, Howard Blutstein, Kathryn Johnston, and David McMorris, Area Handbook for Jamaica (Washington, D.C.: U.S. Government Printing Office, 1976), p. 79. Taylor notes: "The returnees simply swelled the teaming masses of unemployed, even as the latter clamored to attain the minimum level of existence. A whole wave of unrest swept the country." (op. cit., p. 218).

13 Koslovsky, op. cit, p. 4.

14 George Cumper, "Population Movements in Jamaica, 1839-1950," Social and Economic Studies (5), 1956, pp. 261-280

15 Koslovsky, loc. cit.

16 Ibid.

17 The prior U.S. quota of 100 West Indian immigrants per year was replaced by the significantly larger quota of 120,000 persons annually to be admitted from the entire Western Hemisphere. Prior to 1967, Canada has permitted only entry of Jamaicans who were either temporary farm workers or private household workers. These occupational restrictions were significantly broadened by the 1967 changes.

18 This number is in addition to the 148,028 Jamaican guest workers recruited as temporary agricultural laborers between 1963 and 1976, among whom approximately 100 per month became illegal U.S. residents illegally by failing to return home on schedule. By 1974, 300,000 Jamaicans were estimated to be living in the U.S. as "overstays." (See NACLA Report on the Americas (11:7) Nov-Dec., 1977.)

19 Approximately 22,000 Jamaicans immigrated to Canada in 1970-74, or slightly more than had been admitted to Canada in the entire preceeding decade. (See Koslovsky, op. cit., p. 4.)

20 This trend contrasts noteably with the increasing dependency rates experienced by most developing nations in recent years. See, for example, comparative data in Table 3.2 in Charles Taylor and David Jodice, World Handbook of Political and Social Indices, (New Haven: Yale University Press, 1983), pp. 95-97.

21 Calculated from Tables II-1 and A-1 to A-3.

22 Koslovsky, op. cit., p. 4.

23 This figure is somewhat misleading, since employment had fallen by 26,000 between April and October 1972. Nevertheless, concerted government job creation efforts account for most of the rise in employment during these years.

24 Economic Council on Latin America, "The Economic Development of Jamaica and Trinidad and Tobago in the 1970's," Economic Survey of Latin America, 1980 (Santiago: United Nations, 1982), p. 561

25 For more detail concerning the decline of agricultural investments, and the substantial reduction in cultivated land, see Chapter IV of this report.

26 The diversity of occupations characterized as self-employment is indicated somewhat by the fact that self-employed persons represent a significant portion of total employment in all sectors of the economy except public administration. (See Tables II-16 and A-28).

27 For an excellent account of Jamaican female "higglers," see Melvin Edwards, Jamaican Higglers: Their Significance and Potential; Center for Development Studies Monograph Series, No. 2 (Swansea, U.K.: University College of Swansea, Wales, 1980).

28 Department of Statistics, Employment, Earnings, and Hours in Large Establishments (Kingston: Government of Jamaica), 1976-1979 issues.

[29]Due to the short time period involved, and the unusual circumstances in which employment was cut through severe austerity measures, some caution is warranted in drawing inferences from this result within the informal sector.

30 National Planning Agency, Economic and Social Survey (Kingston: Government of Jamaica), annual issues.

31 The Labour Force annual reports, which are the principal source of labor force, employment, and unemployment data drawn on in early portions of this chapter.

32 Employment, Earnings, and Hours in Large Establishments, cited above.

33 This portion of national accounts data is reproduced in World Bank, "Jamaica: Structural Adjustment, Export Development, and Private Investment," Report No. 3955-JM, 1982, Table 2.13, p. 167.

34 The World Bank report from which these data were obtained compiled information on total compensation as a percentage of GDP, focusing on the labor share of output by sector. Figures for 1978-1981 are available in United Nations, Industrial Statistics Yearbook 1982, Volume 1: Industrial General Statistics, pp. 321-323, at the 3-digit ISIC industry level for mining, manufacturing, and utilities. However, this source covers the period 1978-1982 but provides figures on numbers of establishments and average workforce only for 1978, suggesting that such information is not available for other years. Figures are for number of establishments registered with the Factories Inspectorate of the Ministry of Labour and Employment.

35 Recall that 82,000 new jobs were generated through the expansionary programs of the national government between April 1972 and April 1975, with public sector employment rising 44 percent in the final year preceding April 1975 (Table A-1).

36 Department of Statistics, Employment, Earnings, and Hours in Large Establishments (Kingston: Government of Jamaica), 1959-1962 and 1976-1979.

37 In surveys for 1957-1962 and 1965, data were for industrial firms with 15 employees or more, and for agricultural estates of 500 acres or more. See Havelock Brewster, "Wage, Price and Productivity Relations in Jamaica, 1957 to 1962" Social and Economic Studies (17:2), June 1968, p. 109.

38 Department of Statistics, The Labour Force (Kingston: Government of Jamaica), Table 3.11, annual issues.

39 Guy Standing, Unemployment and Female Labour: A Study of Labour Supply in Kingston, Jamaica (London: MacMillan Press, Ltd., 1981), p. 178.

Chapter III

EMERGENCE, CHARACTER, AND PROBLEMS IN JAMAICA'S INDUSTRIAL RELATIONS SYSTEM

Labor markets need to be characterized in terms of their institutions as well as by the trends in employment, unemployment, and earnings which they exhibit. The most important formal labor market institutions affecting the labor market in Jamaica are those of the industrial relations system.

One of the weakest links in recent efforts to increase the pace of productive job creation has been the lack of emphasis on the industrial relations and human resources concerns of employers. One manifestation of industrial relations problems are strikes and labor violence that disrupt production. A second set of industrial relations issues has to do with pay and productivity.

In countries where productivity and wages have been low, workers' economic demands often escalate regardless of productivity growth as a result of rising expectations and increased political awareness. Where these demands are articulated by unions, bargaining pressures, and the potential for disruptive industrial conflict, often leave employers with a great deal of uncertainty about future costs and the dependability of production. Uncertainty and undependability can inhibit investment and encourage capital intensive work methods.

Improved labor-management relations and sound practices for resolving industrial disputes, are, therefore, especially important tools for counteracting these problems in countries such as Jamaica, where volatile and sometimes violent relations signal a relatively high risk environment for employers. In addition, there are management responsibilities for strengthening communications between workers and management, and on regularizing sound practices for resolving grievances and settling disputes.

In order to design programs which may improve the quality and stability of labor-management interactions, it is essential to understand the underlying objectives, strategies, and procedures of labor and management organizations. These traits of the contemporary Jamaican system can only be understood as part of an historical process in which interactions between workers and employers, dating back to before the Emancipation, have gradually evolved. This chapter reviews the evolution of Jamaica's industrial relations system, and considers aspects of the contemporary system that are especially important in shaping employment-creation incentives.

Emergence of the Trade Union Movement

Jamaica's industrial relations system today is based on the British system, though a number of aspects of its development and character are uniquely Jamaican. The labor movement is concentrated in two large union federations which are linked closely with the country's principal political parties.[1] In addition, labor organizations include a smaller federation of independent unions, a large union of public sector employees, and a number of still-smaller unaffiliated unions.[2] Employers have two organizations which support their collective interests in relations with labor.[3] The Ministry of Labor's industrial relations machinery, designed to help resolve disputes when private negotiations reach an impasse, consists of a conciliation service and an arbitration tribunal with broad legal authority. The emergence of these industrial relations institutions, however, traces back to the early part of the twentieth century.

Prior to 1919, employer-labor relations in Jamaica were governed by the provisions of the Masters and Servants Ordinances, which viewed unions as conspiracies in restraint of trade, and as treasonable.[4] In 1919, Jamaican trade unions were legalized and permitted to conduct legal and financial affairs, but financial liability for any damages due to strikes, and restrictions against picketing, remained in force.[5] These legal obstacles, which effectively prohibited significant collective worker action in the Jamaican colony, had been removed in Great Britain earlier by the Act of 1906.[6]

Like much of the early social legislation in the United States, the 1919 law was an attempt to limit destabilizing forces among workers. It was enacted specifically in response to a number of strikes at the ports, on some of the sugar estates, and at cigar and match factories.[7] In 1922 the Longshoremen's Union and the Jamaican Federation of Labour were formed, but it wasn't until the middle 1930's that union organization gained any real momentum. The International Labor Organization was instrumental in changing the Masters and Servants Ordinances, and the British Trade Union Council sought to foster unionization in Jamaica. Conditions at the time were characterized by

> extremely low wages for workers on the sugar plantations (rates for dock and factory workers were only slightly higher), seasonal employment, massive unemployment, and inadequate public works or relief measures.[8]

In 1935 the Jamaica Workers' and Tradesmen's Union, the precursor to one of the two major contemporary trade union federations, was formed. Already, rising unemployment and plummeting standards of living brought about by the mounting crisis of the Depression, were spurring workers

throughout the Caribbean to engage in protest demonstrations and violence. In Jamaica, the protests began in earnest in early 1938, the 100th anniversary of the emancipation. Government austerity measures and layoffs, combined with the refusal of employers to grant significant wage increases on the sugar estates, precipitated a number of strikes and protests. The most violent of these occurred at the end of April on the Frome Estate, a large sugar plantation which had just promised to invest in modernization and expand employment. As Phelps recounts,

> The Frome dispute was not a peaceful work stoppage. A mob armed with the standard equipment of sticks and cutlasses stopped traffic, set canefields on fire, charged the general offices, and attacked company officials. Within two days, 4 were dead, 13 in the hospital, and 105 in jail.[9]

The violence and the scale of protest in Jamaica, drew the immediate attention of London as well as the colonial government.[10] Despite the formation of commissions and councils of inquiry and the show of official concern, protests, many of them violent, continued throughout May and June. What impressed observers of the day was the spontaneity with which disturbances occurred, and the extent of local support which they gained in most cases.[11]

The scope and intensity of grievances made clear to officials at the highest level, both in Jamaica and in Great Britain, the need to address the issues carefully and to provide some visible reform. As one official noted, "Bullets and bayonets will not settle island conditions. Government must find other means of coping with the 'terrible poverty' among the people."[12]

At the time, Jamaica lacked any machinery, public or private, for the orderly settlement of management-labor disputes. There were five independent trade unions with a total membership of less than 1000 workers;

no employer organizations other than the Sugar Manufacturers' Association, which was not organized for bargaining; and no private or government agencies for mediation and conciliation.[13] Such unions as existed were bitterly challenged by employers. Lewis describes their vehement distaste for, and aggressive opposition to, the budding trade union movement:

> As for the employers, in general they detest the unions and their leaders. they withhold recognition as long as possible, and only the threat of strike action is able to wring concessions from them...the employers' principal weapon is victimization, and they use it mercilessly.[14]

The 1938 disruptions led to prompt formation of a local Board of Conciliation to get people back to work and to recommend appropriate machinery for handling future grievances and disruptions.

Once the trouble began, union membership rose very rapidly despite vigorous attempts by employers to undermine union strength. Given the harshness of blacklisting, loan foreclosures, and other forms of 'victimization,' Lewis notes,

> it is surprising that the unions have met with such response from the workers. Indeed, in many of the newer unions the leaders are faced with the problem that their members, with a bitter sense of generations of injustice, are over-militant, and anxious to strike on the flimsiest pretext.[15]

The intensity of antagonism on both sides was an extremely important feature of Jamaican labor-management relations in the late 1930s. The bitter animosity of that period remains embedded in the conduct of industrial relations, and the current system is marked by distrust and conflict.

Antagonism and conflict also emerged within Jamaica's trade union movement shortly following its inception. In early 1938 Alexander

Bustamente began to defend the cause of the striking workers and rapidly became their most popular leader.[16]

> In 1938 for the first time in their history, the mass of the Jamaican people united behind a leader who directed their energies against immediate material conditions and thereby against the current social order itself...Bustamente led them along the streets of Kingston and through the sugar estates, and his offer was their demand: a better life, here and now, in a country of which they formed the majority, but from whose society they had hitherto been actively excluded.[17]

By July 1938 Bustamente had formed his own group of unions, called the Bustamente Industrial Trade Union.[18] His enormous popularity totally dominated the labor movement, and within a year his general union, with its seven occupational divisions, claimed more than 50,000 members.[19] Official figures reported below, however, show only about one-sixth this number as dues-paying members.

During this period, Norman Manley became a key labor advocate as well, heading numerous negotiations with employers, colonial authorities, the courts, and various councils and commissions of inquiry convened to determine how to resolve the problems which surfaced in 1938. As Manley said of himself in early 1938,

> I have not pretended to be a labor leader. I am a lawyer and my work is in the courts...when the time comes that organizations are to be formed by labourers to protect themselves and their rights, I do not say that it will be possible for me to form these organizations, but I am prepared to give my services free.[20]

Praising his efforts to negotiate industrial peace, the Moyne Commission Report described Manley as "one of the best brains in the country and one of the most disinterested."[21]

Bustamente concentrated his efforts and power base in the BITU, while Norman Manley established Jamaica's first major national political party,

the People's National Party (PNP), to work for increased self-rule and independence. Manley also created the Trade Union Council (The) in February 1939 as an advisory group to maintain links between the PNP and the rapidly expanding labor movement.[22] Bustamente and Manley cooperated with each other for a time, but

> Bustamente always found co-operation difficult, and there was never any basis for agreement between the logic of the barrister's thinking and the kaleidoscopic contradictions of Bustamente's personality and programme.[23]

In late 1939, Bustamente resigned form the executive body of the TUC, and relations between the two leaders became strained. A year later, in September 1940, the colonial government arrested Bustamente.

During his imprisonment, Manley ran the union, and membership more than doubled, from 5,200 to over 13,700. When Bustamente was released from jail in February 1942, however, he accused Manley of treachery, fired a number of BITU officers, and urged BITU members not to support the PNP. The Bustamente-Manley cooperation was abruptly and permanently terminated, and immediately turned to bitter and open rivalry.[24]

Bustamente established the Jamaican Labour Party in March 1943, and succeeded in beating Manley's PNP soundly in the island's first election following the granting by the Crown of universal adult suffrage, in 1944. In response, Manley sought to strengthen the TUC by merging its twenty-one union affiliates into a single blanket union. The TUC was registered as a formal union in July 1949, and formally affiliated with the PNP. Squabbles within the TUC caused its effective break-up in 1952. Four key leaders were ousted as communists, and for engaging in political activities in opposition to the PNP. Later in 1952, the PNP established its own new union, the

Table III-1
Union Membership, 1939-1957

Year	BITU	NWU	TUC	Other	Total
1939	6500	-	-	n.a.	n.a.
1940	10007 (81)	-	-	2317 (19)	12324
1941	8133	-	-	n.a.	n.a.
1942	20612	-	-	n.a.	n.a.
1943	28762 (88)	-	-	3907 (12)	32669
1944	37112 (81)	-	-	8828 (19)	45940
1945	46538 (85)	-	-	8534 (15)	55072
1946	47671 (82)	-	-	10539 (18)	58210
1947	52331 (82)	-	-	11846 (18)	64177
1949	59722 (85)	-	4045 (6)	6259 (9)	70026
1950	63576 (71)	-	12405 (14)	13484 (15)	89465
1951	64859 (73)	-	23513 (26)	1228 (1)	89600
1952	64679 (69)	-	26560 (28)	2388 (3)	93627
1953	69692 (70)	5025 (5)	20540 (21)	3309 (4)	98566
1954	66689 (66)	10633 (11)	18670 (19)	4797 (4)	100789
1955	64164 (62)	24361 (24)	12840 (12)	2183 (2)	103548
1956	65154 (53)	41517 (34)	12840 (11)	3015 (2)	122526
1957	74109 (48)	66013 (43)	11230 (7)	3000 (2)	154352
1957	74343**	82723**			

* Numbers in parentheses are percentages of total unionized labor force.

** Figures include non-paying members. In 1959, for example, BITU had 54,943 and NWU had 22,140 dues-paying members.

Sources: O. W. Phelps, "Rise of the Labour Movement in Jamaica," Social and Economic Studies (9:4), December 1960, Tables 3, 6, and 7 (pp. 457, 560, and 463), 1939 through 1957. Data for 1959 are from Ministry of Labour, Annual Report, 1959 (Kingston: Government of Jamaica, 1960), cited in Jeffrey Harrod, Trade Union Foreign Policy: A Study of British and American Trade Union Activities in Jamaica (Garden City, N.Y.: Doubleday & Co., Inc., 1972), p. 185.

Table III-2.

Union Membership as a Share of Employment, 1918-1957

Year (Dec.)	Estimated Wage Earners	No. of Active Unions	No. of Union Members	Percent Union Members
1918	199,300	0	0	—
1933	245,500	2	80	0.03
1937	261,700	4	1,080	0.4
1938	266,300	7	8,500	3
1937	270,900	11	12,600	5
1940	275,500	11	10,700	4
1941	280,100	13	24,000	9
1942	284,600	16	35,000	12
1943	289,200	23	46,000	16
1944	293,800	34	56,400	19
1945	298,400	27	57,700	19
1953	337,644		98,566	29
1957	363,000		154,352	42

Source: Data through 1945 are from Trade Unionism in Jamaica (Kingston: Government Printer, 1946), Table 6, p. 7. Data for 1953 are from the Census, and data for 1957 are from Ministry of Labour, Annual Report, 1957.

National Workers Union, which readily captured as new members a lion's share of the TUC's former membership.

Thus, Bustamente and Norman Manley each led a labor union linked to a political party.[25] With these organizations behind them, they engaged in various political clashes which became the basis for the contemporary rivalry of these two unions and political parties. The deep-seated rivalry between these two men has been carried forward through their political parties and through their unions in an on-going and increasingly violent conflict which focuses more on the struggle for national political power than on differences in ideology.

Although the actions of these two men helped to resolve the large

number of disputes which broke out throughout the island in 1938, little was done to improve the overall industrial relations climate or to build government machinery capable of mediating disputes between the parties. In late 1943, a Committee on Industrial Relations found little basis for confidence in voluntary bilateral bargaining between management and labor. They cited "the absence, in many instances, of an enlightened policy of the part of both workers' and employers' organizations in matters affecting industrial relations,[26] and despaired of "the imminent danger of complete breakdown of such loose forms of voluntary bargaining as do exist.[27]

The colonial government had acquiesced in the formation of unions, and had established a weak governmental apparatus to backstop the private bargaining process. However, little or no leadership was taken is attempting to achieve a stable industrial relations climate for growth.

As Tables III-1 and III-2 indicate, the union movement grew steadily in both absolute and relative terms throughout the 1940s and 1950s. In 1933, fifteen years after labor organizations had been made legal, less than one third of one percent of the wage earning labor force belonged to unions. As late as 1937, the year before the most intense labor disturbances in Jamaica, union membership remained below half of one percent. In 1938, membership rose to 3 percent, and by 1939 it had reached 5 percent of the wage earning work force. In 1943, total union membership of 32,669 represented about 11.5 percent of the 283,433 employed workers enumerated in the 1943 census. In 1953, with a work force of 337,644 recorded in the Census, 98,566, or about 29 percent, were officially union members, and estimates are that union membership rose to 42 percent by 1957.[28] Unfortunately, more recent comprehensive membership data are not available,

but by 1983 the membership of the BITU and NWU were both purportedly at approximately 100,000, while the TUC had grown to approximately 26,000 members.[29]

The highest concentration of unionization in 1945 was in transport, including especially the dock and marine workers, with 57 percent of wage earners registered as union members. (Table III-3.) Perhaps more surprising, given the obstacles to organization, was the fact that more than a quarter of Jamaican agricultural workers — the sugar cane workers in particular — were unionized. About one fifth of manufacturing workers and one tenth of construction workers also belonged to unions.

The political and economic dominance of the two major unions, and of their party affiliates, has remained a feature of the political and industrial relations systems in Jamaica to the present. Grounded initially in the bitter personal conflict between the two founders of these institutions, the vehemence of this rivalry has intensified over time. Through the achievement of independence, and through successive periods of national political dominance of each party in turn, this two-party rivalry has become increasingly heated. The incidence of violence has increased as well.

> Each election has been more violent than the preceding one. At first the electoral contests were accompanied by name-calling and rock-throwing; soon there were beatings and knifings; next, guns were brought into play; now there is widespread arson, bombing, and assassination.[30]

Table III-3
Unionization Rates by Industry Group, 1945

Industry	Wage Earners	Union Members	Percent
Agriculture	115,000	31,230	27
Services	77,150	5,282	7
Construction	28,900	2,724	9
Manufacturing	23,300	4,486	19
Trade, finance	12,100	1,305	11
Transport, communications	10,600	6,082	57
Electricity, gas, water	1,300	311	2
Unspecified	30,050	6,280	21
Total	298,400	57,700	19

Sources: 1945 data are from Trade Unionism in Jamaica, 1918 to 1946 (Kingston: Government Printer, 1946), Table 6, p. 7. (cited in Phelps, op. cit., p. 458)

Nature and Dynamics of the Current Trade Union Movement

The practices and impact of the current trade union movement are shaped largely by three central features which developed from its inception: (i) the continuing strong links between the two largest trade unions and their respective political parties; (ii) the highly centralized control and direction of these unions, which are managed with very little worker input in decision making;[31] and (iii) the so-called "blanket" form of the largest unions.

The linkage between unions and political parties. The association of the two strongest rival unions, the Bustamente Industrial Trade Union and the National Workers Union, with the two principal political parties, the Jamaican Labour Party (JLP) and the People's National Party (PNP), has a profound impact both on the conduct of labor-management relations, and on political decisions which affect labor.

While the importance of these political links and of the rivalry in shaping both industrial relations and national economic policies is undisputed, there is considerable disagreement about the precise nature of this relationship. Most would agree that this linkage limits the scope of government policy decisions; that it creates an inflationary and anti-growth orientation of these policies; and that it increases the volatility of labor-management disputes by promoting strikes and violence. The major area of disagreement concerns the specific dynamics of these forces between the two unions and their two respective parties.[32]

The limitation of government action, in particular the inflationary bias of policies emerging from this system of political unionism, results from government's attempt to satisfy distributional demands of the unions

while encouraging rapid economic growth.[33] Jamaica's extreme inequality, and the low standards of living of most Jamaicans, have led historically to demands for "fairer" distribution of the economy's resources. Jamaican worker organizations have vigorously opposed deferring consumption in the interest of immediate economic growth. Their skepticism about obtaining greater future rewards in exchange for current abstinence is based on an historical experience in which "'equitable distribution'...means indiscriminate redistribution from the 'haves' to the 'have less.'"[34] Workers' political demands for redistribution, which might well have emerged due simply to the extreme degree of inequality in Jamaica, have been exacerbated by the powerful demonstration effects brought by tourism and by the large numbers of workers who have lived abroad and have returned.

Centralized control and limited member participation. Jamaica's principal unions were formed by white-collar political leaders rather than by workers emerging from among their peers. Control is quite centralized, with union leaders providing wage bargaining and lobbying services for their members in exchange for political support and payment of dues. Hart notes: "Jamaican trade unions, with few exceptions, provide no machinery whereby members can exercise control."[35]

Some observers assert that the unions serve primarily vehicles for procuring working class votes, and act only secondarily as champions of labor issues.[36] According to this view, the domination of the labor organizations by white collar leaders with national political agendas, and the lack of systematic mechanisms for articulating member needs and objectives, causes Jamaican trade unions to pursue narrowly defined economic

goals and demands rather than a broader set of work-place and working-class objectives.[37]

"Blanket" unions. The effects of highly centralized union control are accentuated by the fact that the major Jamaican unions include any worker groups who are willing to be members, regardless of occupation. Workers in extremely diverse circumstances are represented by a small, dedicated group of advocates whose knowledge of detailed occupation- and plant-specific problems and grievances of their members is inevitably limited. With a highly centralized administration attempting to address the problems of such a diverse membership, these largest unions are most effective as bargainers in the areas of common concern to all their members: money and real wages, and national economic policy affecting wages and costs of living.[38] They are inherently less able to address the hundreds of detailed plant-specific issues which develop in work environments.

As a result the union leadership may be a distinct, third party in an industrial dispute, seeking to negotiate a settlement on behalf of its member workers with considerable uncertainty about what kind of compromises these workers will find acceptable. This separation contributes to a degree of instability in bargaining which apparently is evidenced in frequent 'wild cat' strikes,[39] and greatly complicates the negotiating process.

Employer organizations

There are two island-wide employer groups: the Jamaican Employers Federation (JEF), and the Private Sector Organization. In addition, there are several industry-specific organizations such as the sugar Manufacturers Association of Jamaica. Jamaican Employers Federation principal function is

as an advisory agency on contract bargaining and labor relations for its members. It consults regularly with chief executives and personnel officers of local companies, and keeps them informed of precedents in other labor settlements on the island. It also monitors wage and fringe benefit agreements of its members, and provides a clearing house for this information among its members.[40]

Government Machinery for Resolving Industrial Disputes

The industrial disputes machinery of the Ministry of Labour consists of two principal agencies: the Conciliation Service, and the Industrial Disputes Tribunal. The Conciliation Service provides mediation services for interest and rights disputes, but does so only when the direct bilateral efforts of employers and workers reach an impasse.[41] Its staff is purportedly underpaid and has therefore lost most of its more qualified and experienced mediators. Informal assessments in interviews confirmed a general impression that this is a surprisingly ineffective agency for mediation. As one analyst concludes, "too often the parties treat conciliation as just a necessary way-station enroute to their final destination, the Industrial Disputes Tribunal."[42]

The more important component of Jamaica's labor relations machinery is its Industrial Disputes Tribunal (IDT), which is the final administrative arbiter of interest and rights disputes, and of jurisdictional and representational issues between labor and management. The IDT consists of five three-person Divisions, each with representation from government, employers and workers. Its power to shape outcomes at the work place is almost unlimited. Its tri-partite composition, and its range of authority,

make the IDT a potentially powerful force for industrial order, reason, and peace. Unfortunately, staffing and procedural shortcomings have instead made the Tribunal a little-respected body which is viewed increasingly as a captive of the broader political arena. Its decisions, are widely criticized for being passed down without explanation, and for apparently lacking any systematic reference to precedent.[43]

Industrial Conflict: Evidence from the Disputes Data

Data on industrial disputes in Jamaican are kept in accordance with definitions and standards established by the International Labour Organization. Total numbers of disputes, workers involved, and working days lost are reported annually.[44] The summary data for the economy as a whole are presented in Table III-4. Comparisons with several other countries with industrial relations arrangements similar in some respects to Jamaica's — Puerto Rico, the United Kingdom, and the United States — confirm the relative seriousness of strike frequencies in Jamaica. On the other hand, over the 1970s, Jamaica's experience with respect to days lost due to strikes and numbers of workers involved in strikes is not out of line with these other countries. (See Table III-5.)

These data indicate two principal features of labor-management conflicts in Jamaica: first, levels of disruption which are in many respects comparable to those in major industrialized countries such as the U.S. and Britain; and secondly, there is a great deal of irregularity from one year to the next. Given the lack of exceptionally intense strike

Table III-4. Industrial Disputes, 1937-1979

Year	Number of Disputes	Workers Involved	Working Days Lost
1946	110	15,605	238,540
1947	27	13,414	258,700
1948	23	3,185	10,347
1949	7	356	2,656
1950	58	12,705	75,212
1951	53	13,357	166,060
1952	42	6,328	79,126
1953	18	4,641	71,035
1954	25	3,186	39,854
1955	28	8,2191	32,271
1956	15	5,680	49,900
1957*	105	20,336	612,146
1958*	61 (48)	20,468	181,804
1959	59	38,731	443,317
1960	69	11,921	64,522
1961*	61 (53)	13,298	98,951
1962	108 (83)	16,081	123,831
1963	45	10,728	204,056
1964	41	8,560	67,846
1965	37	25,316	290,162
1966	69	29,563	180,628
1967	95	17,849	173,587
1968	84	37,742	224,781
1969	107	16,419	—
1970	71	23,081	335,432
1971	50	18,623	76,069
1972	34	39,043	344,564
1973**	90	18,873	236,800
1974	137	21,194	769,140
1975	205	10,993	112,580
1976	142	12,169	139,620
1977	163	12,557	81,688
1978	—	—	—
1979	182	19,824	82,093

*- Data on workers involved and days lost are incomplete. Where available, number of disputes for which data are reported is indicated in parentheses next to total reported disputes.

**- For 1973 onward, excludes disputes involving less than 10 workers, and excludes disputes with less than 100 working days lost.

Source: International Labour Organization, Statistical Yearbook.

Table III-5

Indices of Industrial Disputes per Thousand Employees:
Jamaica, Puerto Rico, the U.K. and the U.S.

	1972	1973	1974	1975	1976	1977	1978	1979	Average 72-79
JAMAICA									
employed (hundreds)	611.3	629.5	646.3	682.3	679.1	699.2	702.1	663.4	--
# disputes/100	.009	.014	.021	.030	.021	.0233	na	.027	00.02%
workers involved/100	4.9	2.9	3.3	1.6	1.8	1.8	na	3.0	02.8
working days lost/100	43.6	37.6	119.0	16.5	20.5	11.7	na	12.4	37.3
PUERTO RICO									
employed (hundreds)	743	746	728	676	691	700	730	745	--
# disputes/100	.014	.01	.01	.01	.005	.005	.005	.004	00.009
workers involved/100	3.2	2.4	3.0	17.8	1.2	2.1	1.6	.48	04.3
working days lost/100	30.0	18.9	40	54.3	48.1	46.5	95.7	6.6	34.9
U.K.									
employed (hundreds)	24020	24696	24785	24704	24492	24523	24681	25010	--
# disputes/100	.01	.01	.012	.009	.008	.01	.01	.008	00.009
workers involved/100	7.2	6.2	6.6	3.3	2.7	4.7	4.2	18.4	07.0
working days lost/100	99.5	29.1	59.5	24.3	13.4	41.4	38.1	117.8	55.0
U.S.									
employed (hundreds)	82153	85064	86794	85846	88752	92017	96048	98824	--
# disputes/100	.006	.006	.007	.006	.006	.006	.004	.005	00.006
workers involved/100	2.1	2.6	3.2	2.0	2.7	2.2	1.7	1.7	02.4
working days lost/100	32.9	32.9	55.3	36.4	42.7	38.9	38.4	35.2	39.2

Source: ILO Yearbook of Statistics

activity, why do Jamaican workers have a reputation among employers as relatively undisciplined and militant workers?

For example, if one considers total worker days lost due to disputes as a good summary indicator of the intensity of industrial conflict, one sees enormous fluctuations. The tenfold increase in 1974 compared with 1971 is hardly exceptional. Larger proportional increases have occurred (e.g. 1949-50 and 1956-57), as have large and abrupt declines (e.g. 1948-49; 1959-60; and 1974-1977). Comparably dramatic shifts are evident as well in the number of disputes and in numbers of workers involved. There are large fluctuations in strike activity in individual industries as well.

Explanations for the volatility of conflict are not obvious from the data, even when disaggregated to the industry level (see Appendix Tables A-35 to A-39). If asked about a surge in the strike data of a particular industry in a particular year, however, many Jamaicans can describe an event (or confluence of events) which explains the change. Causes include such factors as weather (in the case of agriculture), the pattern of export and import prices, contract renewal schedules, pressures in one industry to match the wage gains of workers in another, despite differences in productivity growth; and various swings in macroeconomic activity and policy.

Another reason for the apparent volatility of these data is the high degree of industrial concentration in Jamaica's unionized sector, especially in manufacturing. With industry- specific employment concentrated among several employers, a dispute between the workers and management of a single firm may have a noteworthy impact on the level of strike activity in the industry as a whole during any given year. It therefore seems fair to

conclude that there does not appear to be any simple model which fits these data well.

Problems and Solutions in Industrial Relations

For many employers, as well as workers, labor-management relations appear to have generated considerable distrust and disillusionment. Worker perceptions of injustice are matched by employer beliefs that trade union leaders agitate to gain personal power rather than due to concern for members' long term well-being. While there is ample evidence to indicate that this distrust is deeply imbedded in historical Jamaican relations between workers and managers,[45] there is also significant evidence that a strengthened industrial relations system could rectify many of these problems.[46]

The industrial relations system is based on voluntary collective bargaining, with as little government involvement as possible. Most bargaining has been on a plant-by-plant basis historically, though industry-wide settlements have been encouraged in recent years through government-sponsored Joint Industrial Councils, are bargaining forums composed of union employer and government representative.

The conventional wisdom is that Jamaican workers have not been very accepting of foreign capital, or of employers generally. In the Manley years, especially, Jamaica won a reputation as a country with both government and workers hostile toward business. Both international and domestic investment eventually dried up almost completely.

Jamaica's reputation for volatile industrial relations and violence has a long history. There are frequent reports of worker disputes reaching back

into the slavery period. Yet, the disputes data do not reveal a country which is terribly strike-prone. Why then do Jamaican workers retain an international image as militant and 'anti-business?'

Determining the nature of the problem, and the appropriate scope of a solution, requires a detailed analysis of industrial relations procedures and practices beyond the resources of this study. There are, however, a number of hypotheses which the study suggests, and which deserve particular consideration.

The first is that comparisons of strike data with measures of industrial conflict in the U.S. and other industrialized countries may be inappropriate, for a number of reasons. Given the considerable array of other costs of operating in a less developed country — e.g. poorer infrastructure, a less educated and trained work force, and fewer economies of scale due to lower market densities for most commodities — it may be that labor must be exceptionally low-wage and well-behaved to be attractive to most industrial investors.

Another explanation to evaluate emerges from evidence provided by Gordon, indicating that workers in the most favored positions in the Jamaican work force tend to be the most politically active and militant.[47] In the United States, both employers and workers have benefited from conditions in internal labor markets. Advantages for workers have been balanced by cost-saving benefits for employers: reductions in turnover, training efficiencies, regularized work rules and bargaining procedures, and a steadily declining incidence of strike activity as individual employer-union relationships develop. Workers gain training and promotion opportunities, greater job security, improved work conditions, and other

attractions of internal labor markets partly because the stability which they help assure is consistent with greater profitability. If workers in Jamaica's better jobs are more militant, perhaps employers are not getting normal, cost-effective returns (in stability, worker discipline, and other efficiencies) for their investments in human resource and working conditions.

A third explanation is that while the average level of industrial disputes is not particularly high, the degree of unpredictability in labor-management relations makes the conduct of business in Jamaica unusually difficult. Lewis's comment in 1939 that workers were "anxious to strike at the flimsiest pretext"[48] epitomizes contemporary feelings of some analysts.[49] The nature of unions, and the weakness of the governmental industrial relations machinery, contribute to conditions of uncertainty, volatility, and in some instances apparent irrationality.

Historically, there has been a long tradition of animosity and distrust between employers and workers. The sociological literature is filled with discussions of worker perceptions that wages and working conditions are "unfair," and of employer perceptions that workers do not work hard enough to earn even the meager wages paid for their services. This aspect of industrial relations is explored further in Chapters IV and V.

The strongly political orientation of the largest unions, and particularly the violent competition and party links of the BITU and the NWU, detract from their ability to engage in stable industrial relations. Most union leaders do not emerge from among the membership, nor is there any consistent set of problems with working conditions which solidifies the membership. The relentless competition for members leads to actions which

are not in the members best interests, including violent take-overs, demands sometimes based on political grandstanding rather than on workers' immediate needs. Even in the United States, where unions generally have chosen to remain independent of political parties, there is a considerable academic literature now concerning ways in which union leaders' interests may conflict with those of their members. In an environment where union activities are highly politicized, such as in Jamaica or India, such distinctions lead much more frequently to combative industrial relations.

A final dimension of this matrix of uncertainty and volatility is the government's own inadequate machinery for the resolution of industrial disputes. Despite the good intentions and capability of a number of key government mediators and arbitrators, the government industrial relations machinery remains exceptionally weak and does less than it might to improve the the overall level of trust, stability, and orderly functioning of labor-management relations. Regardless of which major party is in office, there is a conflict of interest between the party's political objectives and smoother functioning of industrial relations. Neither party has incentives or inclinations to detach from the intense inter-union rivalry. Their involvement in this struggle makes it extremely unlikely that a politically tied arm of government could effectively improve this situation.

Notes for Chapter III

1 The Bustamente Industrial Trade Union (BITU) is affiliated with the current government party, the Jamaican Labour Party (JLP), and the National Workers Union (NWU) is affiliated with the principal opposition party, the People's National Party (PNP).

2 The Trade Unions Council (TUC) is about one fourth the size of the two principal unions, but has grown rapidly in recent years and is considered an important force in the labor movement. The largest public sector sector employee group is the Jamaican Association of Local Government Officers (JALGO). In addition, there are a number of independent unions such as the Dockers and Marine Workers.

3 The principal employer organizations (in addition to several industry-specific associations are Jamaican Employers Federation (JEF), which is primarily an industrial relations advisory organization, and the Private Sector Organization (PSO).

4 Referring to the colonial governments of the West Indies in general, Lewis reported in 1939 that even after official pronouncements by the colonial government that trade unions would be fostered, "the colonial administrations have yet to rid themselves of the notion that trade unionism is treasonable." See W. Arthur Lewis, Labour in the West Indies: The Birth of a Workers' Movement (London: Fabian Society, 1939, p. 30

5 Kaplan, Irving, Howard Blutstein, Kathryn Johnston, and David McMorris, Area Handbook for Jamaica (Washington, D.C.: Government Printing Office, 1976), p. 79

6 Lewis, loc. cit.

7 Kaplan et al, loc. cit.

8 op. cit., p. 80

9 O.W. Phelps, "Rise of the Labour Movement in Jamaica," Social and Economic Studies (9:4), December 1960, p. 423

10 In 1938, the population of the British West Indies was about 2.5 million, and Jamaica's population alone stood at approximately 1.1 million.

11 Lewis, op. cit., p. 28, reported that "the whole island was seething with discontent."

12 Mayor of Kingston, quoted in Gleaner, May 12, 1938; cited in Phelps, op. cit., p. 424

13 op. cit., p. 428. A June 1938 survey indicated the existence of twelve

unions,

> "mainly very small organizations on a craft basis. Only two were of any significant size, the Jamaica Workers' and Tradesmen's Union and the Jamaica United Clerks' Association. The former claimed to have a membership of 5,000 and was organized so as to embrase every class of labor, but the majority of its members were agricultural labourers and waterfront workers. the United Clerks' Association catered for shop assistants, and was very strong in Kingston. (Lewis, op. cit., p. 26)

14 Lewis, op. cit., pp. 30-31

15 Ibid.

16 According to Richard Hart, a contemporary of Bustamente and rival labor organizer whose constituent workers were include a large proportion of white collar and government employees, this was something of an "historical accident." Hart recounts,

> Mr. Bustamente, a middle class userer and political adventurer,...had not intended to be a trade union leader. A short flirtation some two years earlier with persons attempting to organize agricultural workers had led him to reject trade unionism as a means of achieving publicity and popularity. In 1937 and again in 1938 he offered his services as 'a mediator between capital and labour,' not as a representative of the working class. But the course of events, the stubborness of the employers, and the desperate determination of the workers, left him with no alternative but to organize a trade union. Forced to take that decision, he proceeded to stamp the Busmamente Industrial Trade Union which he formed with his own peculiar non-working class characteristics.

See Richard Hart, "Review" of Michael Manley's A Voice at the Work-Place, in Race (8:2), 1976, pp. 44-45

17 M. G. Smith, "The Political Implications of Jamaican Social Structure" (unpublished M.S. dissertation, 1957); cited in Phelps, op. cit3., p. 435

18 Lewis, op. cit., p. 28, refers to the BITU initially as Bustamente Trade Unions.

19 Ibid. The union's initial divisions were general workers (the largest, including agricultural labor and shop assistants), marine, workers (including dockers and seamen), transport, municipal workers (including all municipal and government employees, and road construction workers), factory workers, artisans, and commercial clerks.

20 Daily Gleaner, May 27, 1938; cited in Jeffrey Harrod, Trade Union Foreign Policy: A Study of British and American Union Activities in Jamaica (Garden City, N.Y.: Doubleday & Co., Inc., p1972), p. 194

21 Report of the Commission Appointed to Enquire into the Disturbances which Occurred in Jamaica Between the 23rd May and the 8th June, 1938 (Kingston: Government Printer, 1938), p. 3 (often referred to as the Moyne Commission Report, so named for its chair)

22 Manley's advisory organization was actually called the Trade Union Advisory Council initially, but its name was changed to Trade Union Council two months later, in April 1939

23 Phelps, op. cit., p. 439

24 For a good discussion of this period, see Phelps, pp. 446-451

25 The NWU was not officially affiliated with the PNP until 1962, but it was organized by PNP leaders, and the strong (if informal) association was known and understood by all parties from its inception.

26 Interim Report of the Committee on Industrial Relations (October 1943), p. 3; cited in Ken Post, Strike the Iron: A Colony At War: Jamaica, 1939-1945 (Atlantic Highlands, N.J.: Humanites Press, with The Hague: Institute of Social Studies, 1981), p. 389

27 Ibid.

28 Phelps, op. cit., p. 466

29 Interviews with various labor representatives in BITU, NWU, and JRCLIR.

30 Arthur Levin, "The Fall of Michael Manley: a Case Study of the Failure of Reform Socialism," Monthly Review (33:9), February 1982, pp. 49-60

31 Hart, op. cit., p. 44

32 Is the incumbent party's union affiliate or the opposition party's union affiliate more likely to strike when its demands are not satisfied? Is government more or less likely to intervene to settle a dispute involving its own affiliated union? The influence of workers on policy depends on the threat of transfering large blocks of votes to the opposition. Do incumbent parties concern themselves more with maintaining support of those who have voted for them already, or for expanding their membership and voter bases by reaching out to workers in the opposing union? In interviews, and in the literature, a number of strong and conflicting opinions on thes questions have been voiced. It is too early in the development of this reserach effort to reach firm conclusions without added information.

33 This point is made by Caswell Johnson, in his discussion of "Political Unionism and the Collective Objective in Economies of British Colonial Origin:" The Cases of Jamaica and Trinidad," American Journal of Economics and Sociology (34:4), October 1975, pp. 365-379

34 Ibid., p. 370

35 Hart, op. cit., p. 44. Although initially a supporter of Norman Manley's PNP, and a leader in the Trade Union Congress, Richard Hart was among the four principal leaders ousted in 1952 (along with Frank Hill, Kenneth Hill, and Arthur Henry) for alleged communist activities and attempts to undermine the PNP.

36 Ibid.

37 Ibid.; see also Johnson, op. cit., pp. 368-371

38 These are precisely the objectives which the analysts cited above refer to as "narrowly economic."

39 Independent strike actions were mentioned as a problem in three separate interviews. No corroborative data nor more systematic interview results are available at this writing to indicate the extent and importance of this phenomenon.

40 Information concerning the Jamaica Employers Federation and the Private Sector Organization was gathered through interviews, primarily with the head of the JEF.

41 Findings concerning problems facing the Tribunal and the industrial relations machinery more generally, are summarized in John Stepp, "Jamaica's Industrial relations system: An Assessment and Recommendations for U.S.-Provided Assistance," (unpublished advisory report to the Ministry of Labour, March 1982); and L. Lawrence Schultz and Robert D. Helsby, "Mission Report on the Industrial Relations Tribunal," (unpublished advisory mission report to the Ministry of Labour and the Public Service, Government of Jamaica Government of Jamaica, February 1983)

42 Stepp, op. cit., p. 3

43 Problems with the legal quality of Tribunal determinations are mentioned in Stepp, op. cit.; Schultz and Helsby, op. cit.; and in interviews with both labor and management negotiators.

44 Disputes data appear in Ministry of Labour Annual Report (Kingston: Government of Jamaica) and International Labour Organization, Statistical Yearbook (Geneva), both annual series.

45 Worker and employer attitudes of distrust are discussed, for example, in Madelaine Kerr, Personality and conflict in Jamaica, revised edition (London: Collins, 1963); and in Melanie Dreher, Working Men and Ganga: Marihuana Use in Jamaica (Philadelphia: Institute for Humanistic Studies, 1982). These also provide excellent accounts of work attitudes and social relations more generally.

46 Employer observations concerning Jamaican agricultural workers in the United States, and as factory workers in Great Britain, have generally

be quite favorable. Jamaicans in these overseas roles are viewed as dilligent and capable workers. These workers cite wage rates and due process as strong attactions of these jobs.

47 Derek Gordon, "Working Class Radicalism in Jamaica: An Exploration of the Privileged Worker Thesis," Social and Economic Studies (27:3), September 1978, pp. 313-341

48 Lewis, op. cit., p. 31

Chapter IV

MICRO STUDIES OF LABOR MARKET SEGMENTS

Having described the Jamaican labor market in terms of its statistical dimensions and its industrial relations institutions, we now turn to the dynamics of the labor market. Because the decision criteria and procedures for determining employment and pay differ among the employment sub-systems, there is no single model that can capture the complexities of labor market operation. Instead, the labor market must be analyzed in terms of separate sectors — large and medium farms and small farms; small non-agricultural enterprises and self-employment; and large non-agricultural establishments — each with its own pattern of response to economic change, and each leaving its own distinctive imprint on aggregate labor market outcomes.

Each of these segments offers different kinds of employment and earnings opportunities, and each plays a unique role in economic development. Each sector also has distinctive institutions and practices which affect worker and employer decisions concerning education and training, employment, productivity, and pay. The particular configuration of employment and pay in each sub-system, and the way in which the labor market segment adjusts to changing economic conditions, varies considerably among these sectors, depending on how their institutional arrangements respond to changing labor market conditions.

For example, in large-scale manufacturing establishments, pay generally is set through collective bargaining. Employment levels will vary according to the demand for labor, depending on the characteristics of the particular firm or industry, but there also may be labor hoarding which inhibits demand responsiveness. Under collective bargaining, money wages tend to be downwardly rigid, and wage differentials among job classifications and labor grades tend to be stable. Employment in these firms may fluctuate widely

since there are no compensating wage cost adjustments, or it may be stabilized by union pressures to prevent layoffs. In other segments of the labor market, skill differentials in wage rates fluctuate to a greater degree as relative skill supplies and needs change, and there is no labor hoarding. In small family farms and businesses, work and income may be shared informally among all family members, and family employment obligations may lead to under-employment.

While information on the operation of the different segments in the Jamaican labor market is spotty, we have tried to portray a general picture of these systems and how they interact with one another. Because the availability of information on the large establishment segment is particularly limited, we used field research to develop original materials on this sector. The following sections of this chapter examine the key sectors of the Jamaican labor market.

Agricultural and Rural Sectors

The agricultural sector declined from after World War II through the 1960's. Total land in production fell by about 20% between the early 1940's and the late 1960's. (Table IV-1). During this period, the agricultural labor force declined by about 7%, and the share of agriculture in national output fell by 25%.[1] The downward trend in agricultural employment reversed during the early 1970's, however, as labor flowed into the industry despite declines in export crops such as sugar and bananas. The growth was partially attributable to government endeavors to stimulate agricultural employment of workers displaced from jobs elsewhere in the economy.

Table IV-1
Distribution of Land by Farm Size and Acreage in Use

Farm Acreage	1938*	1942	1954	1958	1961	1968
			Number of Farms			
0-4 acres	118,143	117,897	139,043	141,224	112,626	149,703
5-24	(36,919)	22,813	53,024	53,300	41,053	36,881
25-99	( )	4,045	5,603	4,012	3,785	3,004
100-499	1,223	878	881	639	766	699
500+	807	540	332	314	347	295
Total farms	157,092	146,173	198,883	199,489	158,577	190,582
			Percentage of Farms			
0-4 acres	75.2	80.7	69.9	70.8	71.0	78.6
5-24	(23.5)	15.6	26.7	26.7	25.9	19.4
25-99	( )	2.8	2.8	2.0	2.4	1.6
100-499	0.8	0.6	0.4	0.3	0.5	0.4
500+	0.5	0.4	0.2	0.2	0.2	0.2
Total farms	100.0	100.0	100.0	100.0	100.0	100.0
			Total Acreage by Size Group			
0-4 acres	262,688	157,363	249,074	270,781	198,000	223,818
5-24	(493,736)	254,376	502,924	546,300	398,441	333,548
25-99	( )	170,209	232,178	176,872	167,607	125,104
100-499	280,542	187,223	214,131	130,994	185,596	148,501
500+	1,128,688	1,067,497	716,068	697,796	770,786	676,426
Total farms	2,165,654	1,838,668	1,914,375	1,822,743	1,711,430	1,507,397
			Distribution of Farm Acreage by Group			
0-4 acres	12.1	8.6	13.0	14.9	11.6	14.8
5-24	(22.8)	13.8	26.3	30.0	22.8	22.1
25-99	( )	9.5	12.1	9.7	9.8	8.3
100-499	13.0	10.2	11.2	7.2	10.2	9.9
500+	52.1	58.1	37.4	38.3	45.0	44.9
Total farms	100.0	100.0	100.0	100.0	100.0	100.0

*For 1938, data for 5-99 acres are aggregated.

Sources: Agricultural Census (Kingston: Department of Statistics, for 1938, 1943, 1954, 1958, 1961, and 1968-69). Data for 1938 from Ken Post, Arise Ye Starvelings: The Jamaican Labour Rebellion of 1938 and its Aftermath (Boston: Martinus Nijhoff, 1978), p. 115; data for subsequent years from Shirley Jeanne Smith, "Industrial Growth, Employment Opportunities, and Migration Within and From Jamaica, 1943-1970" (Pittsburgh: University of Pennsylvania Ph.D. dissertation, 1975), p. 353; cited in Joanne Koslovsky, "Going Foreign: Causes of Jamaican Migration," NACLA Report on the Americas (15:1), January-February 1981, p. 16

Currently, somewhat more than half the Jamaican population lives in rural areas and depends in whole or in part upon agriculture for its livelihood.

As Table IV-1 shows, Jamaica's agricultural sector is characterized by a relatively small number of large estates, many of which are carry-overs from the period of plantation slavery, and a vast majority of farms which are too small to provide for economic self-sufficiency. In 1968, the most recent year for which land use data were available for this report, nearly four fifths of the farms were of less than 5 acres, while only 2.2 percent exceeded 24 acres. While the number of farms in all categories has fallen consistently since the early 1950s, the percentage of large farms has remained quite stable. This has not been true for middle-size farms between 25 and 100 acres, which have fallen from 2.8 percent in 1954 to 1.6 percent in 1968, or for the more marginally self-sufficient plots, between 5 and 24 acres, which have declined from 26.9 percent to 19.4 percent. During this period, the share of very small farms (under 5 acres) rose from 69.9 to 78.6 percent.

As acreage under cultivation has declined, what remains is increasingly held by the larger estates. A comparison of percentage distributions of farm acreage in 1954 and 1968 illustrates this. The largest estates accounted for 37.4 percent of the agricultural lands in 1954, and for 44.9 percent in 1968. During the period, the percentage of lands accounted for by the smallest farms also increased slightly, from 13.0 to 14.8 percent, but for an entirely different reason. The total land owned by farms of this size actually fell somewhat, from 249,074 to 223,818 acres, and the average acreage per farm declined from approximately 1.8 to 1.5 acres per farm. This increase in proportion of acreage held by the smallest category of farms was offset by a general reduction in control of land by the farms in

the next larger categories, as many farmers with somewhat greater land (and therefore means) left the agrarian sector.

As farm size and total acreage under cultivation declined, so did opportunities for economic well-being in rural areas. Relatively few children born in rural areas could expect to inherit sufficient amounts of land to engage in own-account farming as a primary means of support. At the same time, rural workers faced limited numbers of wage-earning opportunities, and declining real wage rates.

Our understanding of the labor market processes operating in response to these changes in the agricultural sector is based upon a series of anthropological studies conducted during the 1960's and 1970's;[2] a study of rural-urban migrations which focuses on changing work rules and technology in sugar production;[3] and a survey of small enterprises in the mid-1970's.[4] These studies suggest that each of these main components of the agricultural sector — plantations, commercial farms, and family farms — has a distinct set of labor market processes.

Plantations. Sugar and banana plantations have constituted the principal large-scale agricultural activity historically in Jamaica. Competition in world commodity markets, and the inability of Jamaican plantations to keep up with productivity growth in other countries, have gradually reduced the importance of Jamaica's sugar and banana plantations in agricultural production.

Labor relations in the Jamaican plantation system appear to have been shaped principally by two factors: (i) the large seasonal component in labor demand; and (ii) shortages of laborers who are attracted to working for the low wages and strenuous working conditions of the plantations. Since the years immediately following the Emancipation of 140,000 slaves in

1838, labor shortages have plagued the plantations. Many workers left Jamaica altogether, and many others sought economic independence through alternative means of support elsewhere in the country. Within seven years, 30,000 of the newly freed slaves had migrated from the coastal plantations to the mountainous interior, to establish family farms.

As a result, Jamaican plantations have traditionally had difficulties in attracting and retaining labor. Employment is dependent upon the workers' relationship with the overseer or owner, upon the workers' attitude toward menial labor and upon alternative jobs available nearby. Workers are hired for the day or week, and less frequently, for the season.

> Work is allocated on a piece rate basis and labour recruited at the discretion of farm overseers who thus assume extraordinary powers over the underemployed labourers.[5]

The traditional casual labor system, which had been in place essentially since Emancipation, distributed peak-harvest employment in a more or less random way among all workers who wanted to work. Workers were hired and paid on a task (or piece-rate) basis, with no job security. While this system made it necessary for workers to find supplemental sources of income, through own-account farming or nonagricultural jobs, it also left them in charge of their work schedules. This had often proved unsatisfactory for the estates, which had no guarantee of an adequate work force when needed, and no effective way to match workers and specialized tasks.

While wages have been low, plantations have more recently begun to focus employment opportunities on a smaller number of workers who are assured of somewhat more regular employment and income. For example, in 1961 the West Indies Sugar Company (WISCO), a Tate and Lyle subsidiary whose

estates produced 35-40 percent of the country's output, fundamentally altered its labor system. WISCO established a smaller registered work force of workers who were "permanent" in the sense that they were permanently on call to WISCO, and were guaranteed top priority in hiring when work was available. This also meant that registered workers could not make any other work commitments which might conflict with the company's needs, such as engaging in own-account farming or in other activities requiring regular attendance. Annual employment for the registered labor force increased, although the company made no commitment concerning the regularity of available work.[6]

This reorganization of work, coupled with a more rapid method of harvesting, caused the number of people on sugar estate payrolls to drop by 10,000 between 1961 and 1964.[7] This decline also decreased the demand for a large array of commodities and services previously purchased by cane workers. These elements of security (or insecurity) have helped the plantations to secure a labor force of "attached" workers available despite continuing low wages.[8] There has, however, always been a problem with the "alienation" of the plantation work force. Stone reports, for example, that "many sugar workers self-consciously talk of their condition as 'wage slavery.'"[9]

In addition to "attached" workers, plantations continue to employ more casual labor during peak seasons. This casual labor is hired soley on a "wage-for-services" basis and acquires neither the privileges nor the obligations of the labor that is attached more permanently to the plantation.

Plantations increasingly became a focus of government policy as their markets declined. During the 1970's, for example, a number of production

cooperatives were formed on three of the largest sugar estates. In the view of one observer, this experiment "presents a mixed picture of failures and successes." The large plantations survived because they were vertically integrated and were able to obtain a committed labor force at low wages.[10] Carving out farming activities from this vertically integrated production system proved economically unfeasible, and the current government has adopted a policy of returning these cooperatives to private hands.[11]

Commercial farms. Commercial farms range from 50 to over 100 acres. These medium-sized farms raise a variety of crops — livestock, fruits and vegetables, and coffee. Separate data on such farms is not available, but this sector may well have benefited from growth in domesticated processing.

There is considerable occupational multiplicity in the workforce of the commercial farm sector. Proprietors of commercial farms, for example, often own small rural enterprises such as retail shops, trucking operations, or bakeries. Commercial farms rely upon a hired labor force for planting and harvesting and these workers are drawn from the family farm sector and from workers who are also employed by the same types of rural enterprises that commercial farmers own. Little more, however, is known about the labor practices and prospects in this sector.

Family farms. Because employment opportunities on plantations, commercial farms, and in non-farm rural activities are limited and seasonal, small farms continue to play a major role in the rural economy. While the total number of farms has declined over time, the number of farms which are too small to provide for family self-sufficiency has increased. These very small farms have grown primarily through intergenerational subdivision, even though a great deal of land — more than 100,000 acres in parcels of all sizes — has been taken out of cultivation entirely through sales to the bauxite companies.[12]

In the early 1960's, 25 acres was considered a minimum viable size for a farm that would feed a family and also provide a reasonable marketable food surplus and profit.[13] Only 2.2% of family farms exceeded this threshold in 1968. (Table IV-1). Nearly 80% of farms were less than 5 acres. Even these small-scale holdings might be scattered in several plots around the community.[14] In 1954, a slightly larger share of farms - 3.4% - was 24 acres or greater. However, 70 percent were less than 5 acres, and 28 were less than one hectare. In addition, 10 percent of rural farmers were landless. As the agricultural census data shows, average farm size has continued to shrink, and the amount of land in production is declining. Between 1954 and 1968, total farm acreage fell by more than 20 percent, from 1.9 million acres to 1.5 million acres.

In 1958, 77% of the small farmers owned the land they worked[15], although the exact form of ownership is unclear. One prevalent form of property is "family land" -- land held without proper legal title, and without precise personal distribution of rights. Land to which title is held is inherited by only one child, usually the oldest son. Many plots are considered too small to divide, although a farmer could accumulate several plots for his use by claiming rights based on kinship or marriage.[16] During the 1970's, the government experimented with various lease and tenancy arrangements to expand small farms.

Lack of proper deeds for many parcels, and the inability to transfer family lands without the agreement of <u>all</u> members of the extended family, makes it difficult to consolidate parcels through purchases into farms which can be operated more efficiently. Moreover, the land-holdings of many small farmers are marginal, suffering from problems of soil erosion and poor irrigation. Consequently, farmer incomes remain low, and fewer individuals remain in agriculture than with a more rational use of available lands.

The institutional arrangements governing employment and earnings among small farm families depends upon a combination of kinship work relationships and village commercial relationships. Agricultural production is a shared responsibility of family-members — they are both required to share in work on the farm and are entitled to share in the income which such work generates. Men on small farms exchange some farm labor among themselves, and the women exchange marketing skills.

In rural areas, female "higglers" provide an informal, and quite sophisticated, marketing network for the collection and sale of produce from family farms.[17] Higglers regularly visit neighboring client farms to collect produce for sale in the towns and cities. They record or remember the amount and type of produce collected from each farm; they package the produce in baskets and transport it to the nearest market; they check the availability of various commodities, and from changes in supply, estimate the like selling prices and they market the produce during the day; and they also shop for other items for themselves and the other families that are part of their supply network. At the end of the market day the higglers return to their villages and payoff their suppliers at the market price minus a sales "commission" and the cost of any items purchased in the market on behalf of these suppliers.[18]

This role as a market intermediary is highly sophisticated in that it involves regular dealings with a decentralized supply network, the ability to estimate prices and to achieve these prices through an aggressive bargaining process. Since both the buying of produce from other family farms and the selling of produce in the market often takes place on short-term credit, an ability to maintain accounts and the maintenance of a reputation for honesty are also important.

By combining their marketing operations with other functions, such as delivery and communications, the higglers have created an extremely efficient and competitive marketing network. They also reportedly act as an important component of the rural welfare system, typically charging poorer customers slightly lower prices, and providing loans and grants occasionally to customers with exceptional needs due to illnesses and other calamities.[19]

Rural wage labor. A common theme in anthropological descriptions of work patterns among small farmers is the highly eclectic manner in which individuals as well as families earn a living. A study in one community reported that income differentials for two-thirds of the residents without adequate land were determined largely by the number of other income sources.[20] Access to short-term jobs is shared by groups within the community. These group job-sharing networks are keys to determining income distribution in this employment subsystem.[21]

Data from the 1960's (the most recent available at the time of this writing) suggests that men who are small-holders, independent or "own-account" farmers, farm full-time or combine farming with farm labor, trade or small factory labor. Rural women who do "own-account" jobs are engaged in housekeeping, farming marketing, dressmaking, shop keeping (see Table IV-2). Only 8% of the women did farm labor part- or full-time for wages; over three-fourths of these working in domestic service. For men, farming dominated own-account activities. Wage work was in road building, transport or farm labor. Underemployment, low wages and poor returns from own-account farming led most rural residents interviewed by Smith in 1955 to say that they were continually "looking for (additional) work."[22] For landless

Table IV-2
Percent Distribution of Rural Adults Ages 15-39,
by Employment Status 1955

	Men		Women	
	15-24	25-39	15-24	25-39
Own-account work only*	24.8	17.4	52.5	67.0
Wage work only	32.7	13.5	21.5	26.4
Wage and own-account	36.7	66.6	21.5	26.4
No job	6.5	2.5	15.7	1.1

*Includes unpaid family labor.

Source: M. G. Smith, "Education and Occupational Choice in Rural Jamaica," Social and Economic Studies (9.3), September 1960, Table 1, p. 334

workers, underemployment and a perpetual quest for additional work seem to persist today.

Since the late 1960's there have been changes in the rural economy that provide a greater variety of employment possibilities for rural workers. Employment in the plantation sector and in related activities has contracted, but there are more government services and jobs (teaching, nursing, post office jobs), some local industry (handicrafts, garments, footwear, repairing and servicing, commodity trading), and better markets for cash crops. Tourist industries on the north coast have also provided some jobs. Non-agricultural jobs are considered of higher social status than farming and are sought after by farmers for their children.[23] Most provide higher levels of earnings. Levels of non-agricultural wage employment in rural communities still remain low, however.[24]

Employment in the Small-Scale Sector[25]

There have been few studies of the informal sector in Jamaica, and most of those have concentrated on statistical descriptions of its component industries and businesses, rather than upon the labor market processes found within the sector. According to a 1978 survey by Davies et al.,[26] for example, 38,000 small establishments, with an average employment of 2.1 workers, accounted for 11% of total employment in Jamaica.[27] Of these small establishments, roughly one third were in manufacturing and half were associated with some form of distribution.

Industrial and demographic composition of informal sector activity. Within manufacturing, the largest informal sector industry was apparel, followed by various craft and artisanry activities, repairs, woodworking, food processing, and metalworking. In the apparel industry, the most important sectors are dressmaking, tailoring, and shoemaking and repair. Craft and artisanry activies are dominated by basket-making and weaving, which comprised over four-fifths of activity in this industry, with bamboo crafts accounting for most of the remaining work. Informal-sector food processing consists of bakeries and the processing of spices. Areas of importance in the wood products sector are cabinet making, upholstery, and saw mills. Small-scale metal fabrication includes bolt manufacturing, welding, and blacksmithing. Automobile repair accounts for almost all of the repair sector.

The largest industry in the informal sector, commerce, consists largely of grocery stores, followed by other kinds of retail shops such hardware stores and flower shops. The other major non-manufacturing industry in the informal sector is food services — bars and restaurants.

Half of all small enterprises are one-person operations, and about 70% of the small enterprise workforce consists of proprietors and family

workers. Only one fourth of the informal sector workforce is hired labor. The smallest scale enterprises are found in apparel, craftwork, and distribution, whereas food production (principally bakeries) and to some extent metalworking and repairs have a significant number of firms with six or more workers, many of whom are hired wage labor.

Both survey data and case studies of small enterprises suggest that the informal sector has been able to accumulate considerable amounts of capital equipment, much of which equipment is power driven.[28] In fact, the 1978 survey (Davies et al., 1979) of small enterprises found that 40% or more of the establishments in food processing, woodworking, metalworking, and repairs had one or more power machines.[29] Only in craft work was the proportion below 25%. Even in the distribution sector, almost one fourth of all small enterprises had some form of power equipment.

Informal sector proprietors tend to be somewhat older than the average worker and generally have family responsibilities. Based on the 1978 survey, Fisseha and Davies reported that the average small business proprietor was about 40 years old with four children.[30] More traditional craft businesses tend to have older proprietors while more modern businesses such as auto repair and metalworking have younger proprietors.

Proprietors of small businesses are rarely uneducated. Roughly three fourths have completed primary education and almost another fifth have completed secondary education. Moreover, almost two thirds had received some kind of vocational training. Formal education is often supplemented through an active network of informal training in skills such as marketing, management and production methods (provided by friends, customers, suppliers and other proprietors).[31]

In urban areas, males account for most of the informal sector workforce, and for most of the proprietors. Only 14% of the informal sector

workforce in Kingston, for example, is female. In rural areas, however, females constitute almost two thirds of the proprietors (mainly in higgling) and almost half of the informal sector workforce.

The typical pattern of small enterprise creation is for a proprietor to acquire initial capital by working as hired labor. Once the business is established, usually with minimal equipment (and often in rented quarters in urban areas), there is a gradual process of capital accumulation over time. Almost half have been in business for 10 years or more and their average age is about 13 years. These statistics are misleading, however, since the most long-lived firms are concentrated in rural areas whereas those in urban areas, and particularly Kingston, have a much shorter life.

To a certain extent, these urban-rural differences reflect a different mix of business activities. Rural businesses operate in traditional areas such as tailoring, dressmaking and straw work. In contrast, urban areas tend to have newer businesses that are connected more to modern manufacturing and service activities and are conducted on a somewhat more organized scale of operations. Urban-rural differences in the age of enterprises may also reflect higher rates of business turnover in urban areas.

Flexibility and survival of informal sector establishments. The ability of small enterprises to survive, and their capacity to accumulate capital, is all the more remarkable because of the apparent widespread excess capacity in the informal sector, the difficulties in obtaining material and parts, and the practice of selling goods and services on credit. One reason for their durability lies in their flexibility. For example, small businesses are often available to customers at all times and are willing to produce upon demand. They carry little in the way of

inventory, and much work is custom or "job" in nature. Raw materials and intermediate inputs are obtained on short notice, often upon the payment of an initial deposit by a customer.

Flexibility is also reflected in their labor practices. Proprietors and family workers provide a "standby" labor supply which is ready to be tapped at a moment's notice, and which imposes few additional costs when not working. Case studies of these businesses suggest that the proprietor and often members of his family, are regularly at work but continually underemployed. Similarly, small establishments that hire labor maintain workforce flexibility either by laying workers off when there is no work to be performed, or by retaining workers but compensating them through piece rates or fee sharing so that pay commitments exist only when work is done, and often only after payment from the customer has been received. Hired labor as well as family labor may be routinely on-call, and thus unemployed or underemployed between episodes of business activity. Survey results, however, indicate that few proprietors express concern over worker productivity.

Major spells of unemployment, and extensive underemployment, help to explain why informal sector earnings average about half of formal sector levels. Workers whose principal income sources are through the informal sector often make their living by taking on a very eclectic set of part-time and short term jobs. Dreher, summarizing this phenomenon in one of three communities she studied, noted: "The most realistic strategy for obtaining economic security is to have as many sources of income as possible, no matter how small."[32] Apart from labor demand, the most serious business problems reported were bottlenecks in access to finance and intermediate inputs.[33]

Despite the large numbers of small firms, informal sector firms report few problems arising from competition. Almost one quarter of the small enterprises surveyed could cite no other firms with which they were in competition; even in Kingston, this fraction only rose to one third. Where there was competition, however, it seemed mostly to come from other small enterprises and not from the formal sector.[34]

Labor market processes in the informal sector. While the literature on the informal sector provides little insight into the dynamics of workplace employment and pay practices, we can draw certain inferences from what is known about the composition of business in the informal sector. For example, the importance of small, family-owned businesses and self-employment is consistent with easy entry into informal work. Enterprises are frequently characterized by work- and income-sharing, either informally or through fee splitting arrangements, and employment is often gained through family, kinship, or friendship ties to existing proprietors.

There is, therefore, an elastic capacity to absorb labor in this sector and often even a commitment to absorb family members. However, the price of easy access to jobs often is chronic underemployment of workers in this sector. Thus, the informal employment sector tends to expand when workers quit jobs as farm laborers and seek alternative work, or when workers displaced from employment in the formal sector obtain last-resort employment in lower-paying informal sector jobs. Work in the informal sector also expands rapidly when this sector experiences demand for its products and services. When demand contracts, earnings fall far more rapidly than employment. Piece-rate and fee-splitting distributes the cost of falling revenues among workers, and makes labor retention far less costly for employers.

Even in those situations where the informal sector enterprises are somewhat larger and organized along more impersonal, hire/fire labor arrangements, the prevalence of fee-splitting and piece-rate payment systems can still encourage labor retention. Moreover, even when workers are displaced from one set of informal sector jobs, they may simply exercise "bumping" rights into some other set of easy entry jobs such as self-employment or jobs to which they have some kinship entitlement. Dreher found that the income sources of many Jamaicans, particularly in rural areas, are often quite eclectic. For those whose income derives from a stream of very diverse, short-term jobs, this pattern of shifting among income sources may be particularly applicable. Thus layoffs can occur in some informal sector firms while leaving aggregate employment in the sector unchanged. Alternatively, redundant informal sector labor may move into employment on a family farm (or, far less frequently, to a government project for the unemployed). As a result, the aggregate consequences of economic change in the informal sector are determined partly by market opportunities, and partly by institutional and kinship arrangements within the informal sector and between that sector and the rest of the economy.

These adjustment processes may partly explain why open unemployment rates vary so much among various age, education, and sex groups which presumably have different access to informal sector jobs in Jamaica. These processes also highlight the connection among easy entry, underemployment, and cyclical shifts in labor productivity by industrial sector.

The Formal Sector

Apart from studies of collective bargaining, two surveys,[35] and a few isolated examinations of specific industries, the literature on the formal

sector labor markets and labor relations is even more sparse than that on the informal sector. During this project, we undertook to update and expand upon these findings by conducting an exploratory survey of ten medium and large establishments located in Kingston and covering a range of industries. Combining our wide-ranging interview findings with the available literature give our findings some basis for generality and allow for some sense of change over time in formal sector employment practices.

Internal labor markets. The most striking feature of the formal sector is the existence of highly structured "internal labor markets" within medium and large private sector establishments. Firms in this sector tend to have a limited number of entry or hiring positions which are filled from the external labor market. Most other jobs are filled through internal promotion. For example, unskilled laboring or sweeping positions would be a typical entry job for blue collar production workers in a metal fabricating plant. Cleaning, assembly, or packaging jobs are common entry positions for production work in other light manufacturing industries. Thereafter, other production jobs are filled by workers who have been hired previously. In clerical occupations, clerk and low level typist classifications are the typical entry jobs from which workers are upgraded. Key clerical positions, such as an executive secretary or a chief accounting clerk, might also be recruited from outside the firm. Management and technical positions tend to operate in the same manner. First or second line supervisory positions are typical entry positions from which supervisors are promoted to higher level management jobs. Alternatively, first line supervisors are promoted from production workers, usually after having served as a "group leader". Key management positions and managerial and technical jobs requiring specialized skills, however, are often filled from outside the firm.

Once hired, workers can acquire "permanent" status. They are then advanced within, and laid off from, and recalled back to their internal labor markets according to various combinations of merit and seniority. On paper, Jamaican management has strong prerogatives with respect to selection, advancement, and layoff, appearing to give strong weight to "merit" factors. Because we did not collect individual data on workers, however, it was difficult to assess the extent to which seniority is a de facto consideration in such decisions.

The workforce of many formal sector establishments includes "casual" workers. Casual workers are hired by the day or the job, and have no rights to continuing employment. These workers are used to fill in for temporary absences, to complete special maintenance or production assignments, and to run occasional errands. The casual labor force is also often used as a pool from which to recruit additional permanent workers when entry vacancies occur within the firm.

While internal labor markets are a widespread feacure of the formal sector, there are some variations in the proportion of jobs that are filled from the external labor markets. For example, in the telephone company almost all jobs are filled internally within various departments. These include such positions as field installers and repairmen, clerical workers and operators, technical workers, and most managers. Workers are hired directly out of school into these areas and almost all vacancies are filled through internal promotion. The Jamaican railroad is another illustration of a company with a strong reliance upon internal promotion. The firm-specific nature of these technical jobs, and the large size of these two firms, makes internal training and promotion both necessary and cost-effective.

In contrast, apparel firms have a more open job structure. Almost all production jobs — stitching, pressing, packing, and cutting — are filled directly from the external labor market. These skills are available in sufficient quantitites from the large labor pool working in lower-paying informal sector shops and in home production. Other positions are filled through a combination of internal and external sources, depending upon the external availability of trained labor and the earning potential of incumbent employees.

In addition to differences between "closed" and "open" internal market structures — i.e. those with higher vs. lower proportions of jobs filled through internal promotions — there are distinctions in the extent to which such structures provide opportunities for promotions and career employment. Because most formal sector internal labor markets in Jamaica are in light manufacturing and services, production work involves a relatively narrow range of skills. The shortest job ladders are found in apparel firms where the bulk of the jobs require stitching skills, and where there are few opportunities for internal transfer and promotion. A somewhat wider range of skills is found in light metal fabricating where there are laboring jobs, semi-skilled grinding and metal-forming work, and some set-up and maintenance of equipment. Since much of the work is done in teams in this sector, there are also group leader positions that carry extra pay and responsibility, and which can lead to line supervisory jobs.

Training in the internal labor market. The corollary to the presence of internal labor markets in the formal sector is that considerable skill development takes place through employment. Typically, companies with internal labor markets depend upon formal school systems to provide the skills required for entry level positions, and rely heavily upon informal,

on-the-job training for the bulk of the jobs filled by promotion or transfer. For some jobs that are filled internally, more formal skill development programs are needed. Companies may seek the assistance of schools and training institutes to meet these needs, but the skills provided are generally tailored to the specific needs of the company rather than to the more general needs of the labor market.

Reliance upon training by the employer, both informally on-the-job and through these company-specific school-based programs, was evident throughout our interview sample. Entry level jobs for production work required virtually no specialized education or training. Subsequent job skills for most positions in these firms were developed through day-to-day knowledge acquired informally from foremen, group leaders, and co-workers. Companies often imposed education requirements, and sometimes relatively simple employment tests, as a condition of employment, but the skills being tested were of the most basic and general nature. For production jobs, literacy was tested; for clerical jobs, entry criteria — typing and stenographic skills — were skill-based, but these skills were again seen as the foundation for more specific learning about the company's operating needs through on-the-job experience.

The apparel industry again appeared to be an exception. A greater reliance was placed on hiring workers with prior skills and experience, perhaps because sewing skills are so easily transferable among competing employees. Apparel firms often looked for some sewing or stitching experience among new hires for production jobs. In the larger-scale firm where we interviewed, even sewers with considerable previous experience in stitching required firm-specific training to assure smooth production sequence and adequate quality control. Therefore, internal training is a

key component of the employment system even in the apparel market, despite the more competitive nature of this labor market and the greater transferability of skills.

The firms we interviewed generally relied upon a four-part strategy for developing a skilled internal labor force. For the bulk of the employees, they relied upon informal, on-the-job training as the exclusive mechanism for efficient skill development. Where more substantial craft skills were needed, some companies operated small apprenticeship programs. These had a heavy on-the-job training component built around the company's particular skill needs. In those few cases where some special entry training was necessary for a substantial group of employees, or where classroom training could be used to upgrade the skills of incumbent employees, employers would turn to a specific school and commission the desired training program.

When a critical skill was needed, such as maintenance skills on a new technology, that could not be met through on-the-job training or through classroom training at a local school or training agency, the company would send one or two workers out of the country for instruction with another manufacturer or with an equipment vendor. Only when some unavailable skill could not be developed through any of these means would companies turn to the external labor market. In some cases this would lead to recruitment from abroad.

Thus, the vast majority of workers hired by these firms were trained informally by their companies, except for a select group receiving formal training commissioned by their companies. External recruitment of skilled, job-ready workers was held to a minimum.

This portrayal of the training strategy of employers also accords with research in the mid-1970's by Standing. In his sample of firms interviewed

in 1974, most of the firms relied exclusively upon informal on-the-job training, although some firms also "pirated" skilled labor such as machine sewers from other firms.[36] The importance of informal training is further confirmed by labor force survey data for both 1974 and 1977 showing that almost ninety percent of the labor force had received no formal training (except for on-the-job training) and that vocational, professional, and apprenticeship training accounted for the balance of training in the economy.[37] This represents a far greater reliance upon on-the-job training than in the United States, where informal training is also the major component of skill development.[38]

Recruitment. Emphasis upon on-the-job training and other company-initiated training arrangements for skill development, carries implications for recruitment and retention. Since both vocational training and prior work experience were of only limited importance for many entry jobs, firms placed little emphasis upon formal skills in their recruiting activities.

Many companies in the high-wage formal sector of the labor market appear to avoid recruiting immediate school leavers, except for clerical employees. Instead, they typically recruit somewhat older, out-of-school workers. Schools are, therefore, less important in the recruitment processes of such companies and they tend to utilize informal recruitment procedures — principally referrals from incumbent employees and workers recommended to managers by other managers and friends. In addition, a number of the companies interviewed recruited from their pool of casual workers with whom they had previous experience.

This reliance upon informal sources of labor recruitment coincides with the findings of earlier survey research.[39] Among a group of job seekers interviewed in the mid 1970's, about forty percent relied exclusively on

friends or direct job application. Informal job search methods clearly dominated formal sources of job information.[40] Some companies did recruit heavily from among recent school leavers and therefore relied heavily upon schools in the recruitment process. Such firms, however, had certain distinctive features. They generally provided stable, continuous career job opportunities. Their pay and career prospects appeared to place them in a good position to recruit from the "best" local schools, and to screen new recruits carefully on the basis of formal education and school recommendations in order to ensure labor quality. Thereafter, they relied upon probationary periods of employment and discharges as devices for weeding out unsatisfactory employees.

Companies hiring school leavers reported no problems with the employment and subsequent training of relatively young workers. There were, however, complaints about the general level of educational preparation in basic, general skills. Complaints about the quality of clerical training were also encountered, even though these companies were able to be highly selective in terms of schools and students. Despite these reservations about the quality of basic and clerical education being provided by schools, the firms surveyed were generally pleased with the ability of schools to provide post-graduate skill preparation when specifically commissioned by the business community.

Turnover and labor retention. Heavy company involvement in training also carries with it a concern for problems of turnover among workers in whom training investments have been made. The conventional wisdom in Jamaica has been that the workforce has problems of commitment to industrial employment and that it exhibits high quit rates.[41] These reported difficulties in retaining labor have often been used as an explanation of

why there is so little reliance upon apprenticeship or other formal training activities at the workplace in Jamaica since turnover of labor is a deterrent to training investments by employers.[42]

Research in the mid-1970's, however, suggests that labor turnover was becoming less of a problem. It was more limited than in the past and affected mainly smaller firms and those lower-wage companies remaining uncompetitive in the external market for skilled labor.[43]

In the current interviews among formal sector firms, the turnover situation seems to be further improved. Company experience has been generally good with respect to retention. The levels of pay and compensation provided by the formal sector firms interviewed, along with other personnel practices, appeared to be sufficient to ensure against high rates of labor turnover in most firms.

The ability of formal sector employers to retain employees seems to extend to workers on layoff status as well. Historically, there are some indications that employers were reluctant to layoff redundant workers. Sometimes this reluctance has been attributed to the paternalistic practices of employers who have sought to provide employment security to workers in an unstable economic environment.[44] A second explanation is that high turnover of low wage labor encouraged a business strategy of "overmanning" in order to ensure that there would be enough workers available on any particular day rather than strategies to reduce turnover.[45] Jamaica's unions have also resisted layoffs vigorously, and there are severance pay penalties in many collective bargaining agreements.

More recently, however, our interviews indicate that employers have shown a greater tendency to adjust employment to output by laying off redundant workers. At the same time, they have been quite successful in

recalling these workers when business improved. This ability to recapture employees who have been laid off partly reflects the relatively higher pay of formal sector jobs compared to other alternatives. It is undoubtedly connected also to the economic recession, which has made job opportunities in the formal sector far more scarce.

The one industry that seemed to have a slightly different experience with respect to labor turnover and retention was again apparel. The apparel industry traditionally has had somewhat more turnover among its production workers than other industries, has tended to terminate workers readily when demand for its product was curtailed, and has had the lowest rate of successful recall of workers when business improved.

A combination of factors seems to explain these differences. Pay in the textile and apparel industry is the lowest in all manufacturing industries. (See Tables II-24 and II-25). Textile and apparel earnings averaged only 20% above those in agriculture in 1965 (the last year for which comparable data was available). Moreover, the labor force in apparel is largely female. Some turnover may have been connected to family and child rearing responsibilities, even though surveys show that female turnover rates in general are lower than those for males.[46]

Most important, however, is the fact that the piece rate pay system in apparel has the affect of shifting many of the costs of training and retraining on to employees, since workers who are less skilled and less productive are automatically paid less. As a result, labor costs are automatically adjusted for skill and productivity. Apparel industry employers therefore have fewer incentives to retain labor during business downturns than employers paying hourly or weekly wages. Apparel work also offers fewer attractions to encourage the return of previously trained labor

during periods of recovery. Recalled employees may find their earnings reduced as a result of losses in speed and dexterity during their period away from work. In addition, the greater range of alternative employment in numerous large firms, and in many more medium and small scale firms, reduces the ties between industrial workers and employers in this more competitive labor market and industry.

Wages and wage structures. Accompanying the structured set of internal labor market arrangements within medium and large firms are a second set of institutional arrangements which affect pay. These pay arrangements focus on job classifications and job grades, rather than upon the direct assessment of the "market value" of the particular individuals holding these positions. Formal sector firms typically have a series of labor grades to which each job is assigned. These labor grades are based upon the skill and complexity of job content. Wage rates for individual jobs are set to assure appropriate differential rewards for the relative skill requirements of jobs within the firm. There may also be wage ranges within individual grades to reflect seniority, though promotions to higher job grades are the principal source of higher average wages among more experienced workers. Collectively, the ranking and grading of jobs defines internal wage structure of the establishment.

The major exception to these formal sector pay arrangements is found in firms that rely on straight piece rate compensation such as those in the apparel industry. Even in these firms, however, piece rate pay arrangements apply only to production workers, while the pay of lower-level managerial, clerical, and technical workers follows the more general pattern.

While wages in a majority of positions in these firms are determined primarily within rigid, job-based wage structures, key positions in

production, maintenance, clerical, and management positions are generally exempted. In jobs involving supervisory or training experience, or certain scarce and highly transferable skills, the firm's concern over competition from other employers for these workers may lead to greater discretion in setting wages and salaries. For these positions, compensation is determined to a much greater degree by competitive factors in the external labor market.

The combination of rigid and flexible components of the wage structure within particular firms are reflected in the formal sector labor market at large. Particularly for blue collar and lower level clerical personnel, the occupational wage structure consists of a set of relatively rigid, firm level pay segments that define occupational "prevailing rates" in the formal sector. Only toward the upper end of the occupational distribution — the highly skilled, key clerical, technical, and managerial and professional workers — are relative wages more flexible, and more responsive to changing market conditions.

Within individual firms in the formal sector, however, the picture is more mixed. Institutional pay policies within formal sector companies may or may not lead to wide intra-firm differentials by skill. An examination of pay scales in large-scale establishments suggests a diverse pattern of wage differentials, even within a single industry. While job classifications in different companies often are not directly comparable, the differences in occupational pay differentials among companies seems to depend somewhat more on variations in minimum pay for entry level jobs than upon variations in more highly paid jobs. Firms that have high entry-level wages often pay higher maximum wages for skilled work than do firms with lower starting pay, but at the same time, the relative differential can be

sharply compressed. Thus some firms in an industry may pay their highest-rated workers two or even three times the unskilled rate whereas others would pay only thirty percent more.

Pay differentials by job classification are also influenced by the way in which across-the-board pay increases are handled. Uniform pay increases in Jamaica are often granted as a company pay strategy, as part of a collective bargaining settlement, or from a pay award made by a public arbitration tribunal as a result of general price inflation. Uniform increases are sometimes calculated in percentage and sometimes in absolute terms. The former preserves relative pay differentials while the latter compresses them.

Pay and collective bargaining. The earnings structure by sector among large establishments undoubtedly reflects some differences in the mix of skills and labor grades. Nevertheless, limited data from collective bargaining agreements suggest that approximately the same ranking of earnings occurs after controlling for such differences to the extent possible.

While occupational wage ratios within firm-level pay segments tend to be rigid, and the ranking of earnings by industry somewhat stable, the levels of pay at the firm level are subject to a number of influences that introduce variability into the structure of pay by firm, occupation, and industry. The most important of these influences is unionization. Production, maintenance, and much of the clerical work in the formal sector is largely unionized, and pay for such work is determined through collective bargaining. In the public sector, and in public enterprises, unionization has also penetrated into managerial and professional areas. Many "casual" workers in the formal sector, however, are not covered by collective

bargaining agreements until they are hired into regular employment. Since Jamaicans unions compete aggressively with one another for membership, there tend to be similarities in the bargaining outcomes achieved by the different federations within each industrial sector.

While factors such as inflation, skill, and bargaining power are general influences on pay in Jamaica, the conventional wisdom is that "ability to pay" is a widely accepted pay principle as well. Because of the narrowness of domestic markets in many product lines, a lack of export markets, and high levels of international concentration in some industries, firms and unions develop pay policies in more or less oligopolistic market settings. In determining pay increases, it is alleged that both sides take into account the profitability of the company and the probable impact of pay increases upon its competitiveness. These assessments then become the basis for differentiating pay settlements at the company level.

A second feature of labor negotiations in Jamaica is "pattern bargaining." Under pattern bargaining, early negotiations in one company establish the pattern of settlements for the industry, and bargaining in certain industries tends to set a pattern that is applied, with minor modifications, to other industries. Thus the earliest negotiations in any bargaining "round" establish the norm or standard for changes in the wage level that will then be gradually generalized throughout the formal sector. The principle of pattern bargaining applies to fringe benefits as well as to pay.

Pattern bargaining and ability to pay are somewhat contradictory influences upon wage determination. Pattern bargaining is a force for uniformity in wag changes among firms and industries while the criterion of ability-to-pay criteria imply pay settlements that are differentiated by firm and industry.

At the level of the industry in Jamaica, there is much less year-to-year stability in wage structure than characterizes industrialized countries (see Tables II-24 and II-25). This may reflect shifts in employment between formal and informal sector firms, and corresponding changes in the intra-industry mix, or it may mean that ability to pay explains more of the year-to-year wage differentials between sectors than does pattern bargaining.

When pay changes are examined at the level of the firm, however, the data reveal a more complex picture. According to both management negotiators and union representatives, pattern bargaining is the dominant feature of wage changes in the highest-paying industries such as bauxite and petroleum. There is high uniformity in year-to-year pay changes within these industries. Among the lower paying industries such as apparel or food processing, by contrast, there is little year-to-year uniformity of company settlements. In these more competitive, lower-wage industries, our interviews suggest that the variability in settlements reflects the ability-to-pay principle.

Productivity. The conventional wisdom in Jamaica is that the labor force has serious productivity problems.[47] Apart from lack of training, the most commonly-mentioned symptoms of poor productivity in Jamaica are connected to poor worker attitudes — labor turnover, absenteeism, worker militancy, and generally low levels of effort and commitment to industrial work. These problems are attributed to Jamaica's history of paternalism, first on plantations and later in industrial establishments; to a vicious circle of low pay/high turnover which diminishes incentives for training and upgrading; and to militant unionism, which leads to inefficient work practices, strikes, and pressures on employers (both directly and through the political process) to retain redundant employees.

Employer surveys in the mid 1970's suggested that these problems have been diminishing in recent years. For example, turnover seemed to be falling in both large and small enterprises during the late 1960's and early 1970's. Absenteeism, however, was characterized as "endemic", although it was sometimes attributed to problems of personnel and pay administration (such as readily available sick leave and a failure to provide adequate earnings incentives), rather than to basic worker attitudes.[48] Paternalistic management practices and a poorly-committed labor force were singled out particularly as causes of the various remaining symptoms of low productivity.[49]

Whatever the historical accuracy of these various characterizations of the labor "problem" in Jamaica, our interviews support the view that current productivity problems are rooted more in management practices than in worker skills or attitudes, and that these practices are improving in the formal sector. Except for deficiencies in basic educational preparation and shortages in certain specialized and highly skilled occupations, we see no evidence of low skill and inadequate training as a cause of low productivity. In fact, the interview results suggest strongly that benefits in labor productivity which might be obtained through changes in education and training are dwarfed by the contribution to improved labor productivity that was being made by more cost conscious workforce management.

In all of our company interviews we found that there had been a change in management personnel in the past three or four years that had been coupled with dramatic improvements in labor productivity. The new managers invariably attributed the improved productivity to a fresh commitment of the company to modernize and rationalize human resources management. This included a greater tendency for layoffs, rather than to "hoard" and a

greater emphasis upon effort and efficiency. Moreover, these managers often had first hand experience with, or second hand knowledge of, other companies in Jamaica where management practices in this area remained backward and where labor morale and productivity consequently remained low. Interviews with union representatives also confirmed the growing management emphasis upon improved labor productivity, and the need to respond to these productivity pressures to minimize layoffs.

These apparently sweeping changes in management strategy and approach were occurring for several reasons. In some companies, it seemed to reflect a "changing of the guard" as old line managers accustomed to paternalistic treatment of the labor force, the retention of redundant labor, and the toleration of inefficient work practices, were being replaced by younger, more cost-conscious managers. In other companies, a similar change was traceable to a "Jamaicanization" of management, as white managers were being replaced by black managers. Among public enterprises, the change in management was attributed to government policy which was demanding that the public sector adhere to the same standards of efficiency and cost consciousness that were being urged upon the private sector to improve the country's international competitiveness, and which was therefore more supportive of the recovery strategies based in part on layoffs.

While we could not obtain hard data to back up claims of increased productivity as a result of rationalized employment practices, every employer surveyed claimed improvements in productivity ranging from 50% to more than 100%. These gains in output seemed consistent with reports from government officials indicating unexplained increases in output:labor ratios in manufacturing in recent years. We take these findings as supportive of the thesis that management practices directed at the rationalization of work

and improvements in labor-management relations can have positive effects on employed workers productivity.

Further support for this interpretation comes from a broad-based survey of formal sector workers in 1982, designed to identify the root causes of low productivity and labor relations problems in Jamaica. This study reported that labor-management relations continued to rank far ahead of pay, working conditions, and job content as sources of worker dissatisfaction.[50]

The survey contradicted earlier notions that either the character of industrial work or the pay levels in the formal sector were a major source of workers alienation and low effort. This is further corroborated by a study showing that worker militancy in Jamaica has been positively rather than negatively correlated with wage rates.[51] Instead, it indicated that management practices were an important influence upon work effort. Higher levels of work effort were generally found in firms where management was taking positive steps to motivate production and where work attitudes were favorable.[52] Furthermore, there was a willingness on the part of the formal sector workforce to expend greater work effort, even within the current structure of management practices, if financial incentives were to be provided.[53] In an environment of deep recession, the commitment of management to protect jobs by securing adequate increases in productivity has in itself been an important motivating factor for workers. This aspect of recent management gains has paralleled a similar pattern in the United States.

Based upon management interviews and survey results, we believe that labor adjustment processes within the formal sector are undergoing substantial changes as management practices are reformed and modernized. Paternalism, and the labor hoarding practices associated with paternalism,

are being replaced by more modern management practices under which the labor force will be varied more readily with changes in output. There is likely to be more attention paid to the incentive effects of various pay systems, and to the tailoring of pay systems to reinforce the motivation and productivity of labor. Worker resistance to eliminating restrictive or wasteful work practices will be moderated through better "human relations" at the workplace and more forthright dealings with union representatives. Problems of absenteeism will be more tightly controlled. Finally, internal training and human resource development will be emphasized more as a responsibility of management.

Summary

This chapter has examined the operation of three distinct segments of the Jamaican labor market — agriculture, the small-scale enterprise sector, and the formal sector. It has shown how workplaces in these three sectors have reacted to change in the Jamaican economy, particularly with respect to employment and earnings.

The shift of labor out of agriculture has been accompanied by a decline in both plantation-type employment systems (based upon low pay, paternalism, and an attached and loyal labor force) and self-sustaining family farms. In their place have come a diverse set of commercial farms, and in increase in family farms that are too small to be economically self-sustaining. The result has been the growth of the rural wage labor force, a rise in non-farm self employment, and increasing occupational-multiplicity among the rural labor force. Many workers also left rural areas, going either to urban areas or emigrating to other countries.

Most of those that found urban employment were absorbed into Jamaica's growing small-scale enterprise sector. This sector bridges the modern and

the traditional in the Jamaica economy. The bulk of the jobs are in retailing and food services, followed by manufacturing. The main manufacturing industries are apparel and craft and artisanry activities.

Self-employment is very important in the small-scale enterprise sector and almost three fourths of all jobs are in family businesses. Family businesses provide highly elastic employment opportunities for family members and are often based on income and work-sharing arrangements. Because such businesses often share work among family members, they appear to be unusually labor intensive. Nevertheless, many of them are able to accumulate capital equipment, much of which is power-driven. These businesses tend to be highly flexible in their production and sales arrangements.

In contrast, formal sector employment opportunities are much more structured and rigid in terms of their pay and employment relationships, and unionization is an important factor governing economic relationships at the workplace. Pay is usually fixed for a period of time, and is based on job classifications rather than on measured output. Fluctuations in output are reflected in change in employment levels, rather than in wage flexibility or work-sharing.

Formal sector employment has been affected by considerable structural and cyclical change in recent years, both of which have translated directly into employment change. The major structural changes in manufacturing has involved the rationalization of production methods and the consolidation of employment. As a result, many firms have shown dramatic increases in labor productivity.

This improvement in labor productivity through better management practices in the formal sector has had both benefits and costs for the

Jamaican economy. It demonstrates how workplace initiatives can help to make jobs and workers more productive, without additional capital investment. At the same time, it creates problems of labor displacement from the economies more remunerative work. As will be demonstrated in the next chapter, such displacement poses hardship not only for workers who have lost their jobs, but the effects may be felt more generally in reduced income and productivity throughout the small-scale employment sector.

Notes for Chapter IV

1 See Carl Stone, "An Appraisal of the Cooperative Process in the Jamaican Sugar Industry," Social and Economic Studies (27:1), March 1978, pp. 1-20; and "Political Aspects of Postwar Agricultural Policies in Jamaica (1945-70)," Social and Economic Studies (23:2), June 1974, pp. 145-175.

2 See, for example, Edith Clarke, "Land Tenure and the Family in Four Selected Communities in Jamaica," Social and Economic Studies (1:4), August 1953, pp. 81-118; M. G. Smith, "Education and Occupational Choice in Rural Jamaica," Social and Economic Studies (9:3), September 1960, pp. 332-354; M. G. Smith, The Plural Society of the British West Indies (Berkeley, Ca: University of California Press, 1965); Carl Stone, "Political Aspects of Postwar Agricultural Policies in Jamaica," Social and Economic Studies (23:2), June 1974, pp. 145-175; and Melanie Cregan Dreher, Working Men and Ganga: Marihuana Use in Jamaica (Philadelphia: Institute for Humanistic Studies, 1982).

3 Joanne Koslovsky, "'Going Foreign:' Causes of Jamaican Migration," NACLA Report on the Americas (15:1), Jan-Feb 1981, pp. 1-31

4 Results of the survey are reported in two working papers: Omar Davies, Jacob Fisseha, and Claremont Kirton, "Small-Scale, Non-Farm Enterprises in Jamaica: Initial Survey Results," No. 8 (East Lansing, Michigan: Michigan State University Rural Development Working Papers, 1979); and Jacob Fisseha and Omar Davies, "The Small-Scale Manufacturing Enterprises in Jamaica: Socioeconomic Characteristics and Constraints," No. 16 (East Lansing, Michigan: Michigan State University Rural Development Working Papers, 1981).

5 Stone,1978, pp. 18-19

6 Koslovsky, op. cit., p. 20

7 Loc. cit.

8 See Koslovsky, op. cit.; also, see Guy Standing, Unemployment and Female Labour: A Study of Labour Supply in Kingston, Jamaica (London: MacMillan, 1981), pp. 39-44; and George Beckford, Persistent Poverty (New York: Oxford University Press, 1972), pp. 26-28. Standing documents a deliberate colonial strategy to restrict non-plantation income-earning options, to encourage workers to accumulate debt obligations, and in other ways to keep labor attached and available in sufficient quantitites to meet plantation needs. According to Beckford, the ability of the larger plantations to offer more regular work encouraged worker attachments despite low hourly wage rates.

9 Stone, 1978, p. 2

10 Loc. cit.

11 Carl Stone, 1978, p. 3; and Carl Stone, "Socialism and Agricultural Policies in Jamaica in the 1970's," Inter-American Economic Affairs (35:1), Summer 1981, pp. 3-29. Stone notes that private ownership of land has a

particularly important social meaning in Jamaica, dating to the time of Emancipation: "land ownership has therefore become associated with personal freedom and independence." (p.23)

12 Sherry Keith and Robert Girling, "Caribbean Conflict: Jamaica and the U.S.," NACLA Report on the Americas (12:3), May-June 1978, p. 12

13 Carl Stone, 1974 op. cit., p. 166. Following 1962, loans were extended to focus on developing these middle size holdings.

14 Edith Clarke, op. cit., p. 88

15 Carl Stone, 1974 op. cit., p. 167

16 For an excellent early discussion of land ownership and transfer, see Edith Clarke, op. cit., pp. 81-118. See also M. G. Smith, 1965, p. 180.

17 For an excellent recent account of the higglers, see Melvin Edwards, Jamaican Higglers: Their Significance and Potential; Center for Development Studies Monograph Series, No. 2 (Swansea, U. K.: University College of Swansea, Wales, 1980).

18 Ibid. See, for example, pp. 29 and 38.

19 Ibid., p. 48.

20 Melanie Cregan Dreher, Working Men and Ganga: Marihuana Use in Jamaica (Philadelphia: Institute for Humanistic Studies, 1982), p. 13.

21 Dreher, pp. 136-147

22 M. G. Smith, 1960, p. 334. Smith notes the existence of "institutional arrangements which give local employers the main initiative in recruiting those workers they want as need arises. Preferred workers may have work offered them without their seeking it; but the same men may also seek work elsewhere, or, knowing of its local availability, may feel their applications fruitless, since the farmers involved have their own 'regular' labour supplies."

23 Nancy Foner, 1972, pp. 20-25

24 M. G. Smith, 1960, p. 342; and Melanie Dreher, 1982, pp. 10-33

25 This section draws heavily on three studies of the informal sector: Omar Davies, Jacob Fisseha and Claremont Kirton, "Small-Scale, Non-Farm Enterprises in Jamaica: Initial Survey Results," no. 8 (East Lansing, Michigan: Michigan State University Rural Development Working Papers, 1979); Jacob Fisseha and Omar Davies, "The Small-Scale Manufacturing Enterprises in Jamaica: Sociological Characteristics and Constraints," No. 16 (East Lansing, Michigan: Michigan State University Rural Development Working Papers, 1981); and Programa Regional del Empleo para America Latina y el Caribe (PREALC), "Guidelines for Action in the Informal Sector of Central Kingston," Working Paper No. 101 (Santiago, Chile: PREALC, International Labor Organization, September 1976)

26 For a description of the survey, see Davies et al., 1979, pp. 9-13

27 Ibid., p. 15

28 See, for example, p. 14 and the following case studies in PREALC, 1976. Although that study identifies capital shortages as one of the key constraints in this sector, the study notes that these informal sector establishments are able to accumulate significant amounts of capital.

29 Fisseha and Davies, 1981, Table 5, p. 34

30 Ibid., Table 1, p. 13

31 Ibid., pp. 76-81

32 Dreher, pp. 12-13

33 Fisseha and Davies, 1981, pp. 29-31

34 Ibid., Table 10, p. 34, and pp. 35-37

35 The first of these surveys was conducted in 1974 for Guy Standing's work (1981)on female labor force participation and unemployment. See especially chapter 5, pp. 110-149. The second, conducted by Carl Stone, is reported in his Work Attitudes Survey: A Report to the Jamaican Government (St. Anne, Jamaica: Earle Publishing, Ltd., 1982)

36 Standing, op. cit., pp. 129-130

37 Ibid., p. 132

38 For discussions of counter-part on-the-job training programs in the United States, see U.S. Department of Labor, Formal Occupational Training of Adult Workers; Manpower/Automation Research Monograph No. 2 (Washington, D.C.: U.S.D.O.L., 1964); Seymour Lusterman, Education in Industry (New York: Oxford University Press, 1972); and Ernst Stromsdorfer, "Training in Industry," in Peter B. Doeringer, ed., Workplace Perspectives on Education and Training (Boston: Martinus Nijhoff Publishing, 1981), pp. 39-54

39 Standing, op. cit., pp. 66 and 118-125

40 Ibid., p. 163

41 Ibid., p. 112

42 Ibid., pp. 126 and 129

43 Ibid., pp. 112, 129, and 130.

44 Ibid., p. 16

45 Ibid., p. 45

46 Ibid., p. 142

47 Ibid., ch. 1 and pp. 111-113 and 121

48 Ibid , pp. 112-118 and 126-133

49 Ibid., pp. 45 and 140

50 Stone, 1982, pp. 10-11

51 Derek Gordon, "Working Class Radicalism in Jamaica: An Exploration of the Privileged Worker Thesis," Social and Economic Studies (27:3), September 1978, pp. 313-341

52 Stone, 1982, pp. 19-20

53 Ibid., pp. 20-22

Chapter V

SECTORAL ADJUSTMENTS, MANPOWER REQUIREMENTS, AND SKILL PLANNING

The preceding chapter has described a set of workplace practices governing employment, pay, and other work arrangements in the major segments of the Jamaican economy. In this chapter, we focus on the character of more aggregate sectoral and intersectoral adjustments in the labor market. The implications of these sectoral adjustment processes for employment forecasting and educational planning are then examined in the final sections of this chapter.

Formal Sector Adjustments to Economic Change

In the large-scale establishment sector, occupational pay differentials are less determined by market forces of supply and demand than by job content and historical compensation patterns. Once pay is established for various grades of labor, skill differentials remain relatively fixed within companies for long periods of time. Competitive forces are a major consideration only for critical bottleneck skills, and for those highly transferable skills requiring long training times (and for which there is often an international market).

The structure of earnings by firm and industry show somewhat more flexibility but market forces are often subordinated to bargaining processes in which political considerations, pattern bargaining, and ability to pay are more important considerations. In particular, differences in ability to pay and pattern bargaining appear to be important factors controlling interfirm wage differentials in Jamaica's large-scale manufacturing sector.

Since wages do not adjust readily to changes in the supply and demand for labor in the formal sector, labor market adjustment must occur in other ways. Our interviews suggest that the major forms of labor market

adjustments in medium and large establishments are in the quantity and quality of labor employed.

The relative importance of quantity adjustments is supported by the limited data available on employment, hours, and earnings in large manufacturing establishments. Data on quarterly changes in these variables during the late 1970's show that average absolute variations in employment are greater than those in individual earnings, whereas hours worked show the least variation. These statistics, however, tell a much more compelling story when contrasted with comparable date for the United States, where the combination of wage rigidity and employment variability seen in Jamaica's formal sector is the dominant characteristic of U.S. labor markets as a whole.[1] The average percentage fluctuations in Jamaican rates of weekly earnings was almost fifty percent higher than in the United States during 1976-1979, a period for which comparable data for the two countries are available. However, fluctuations in employment and hours worked is far greater — varying roughly three times as much as in the United States. (See Table V-1).

The internal labor markets in large Jamaican establishments are designed to accommodate these relatively large fluctuations in labor requirements through staffing strategies which adjust both the size and the quality of the work force. During periods of contraction, some firms retain a substantial portion of their skilled and experienced labor force within the firm, laying off primarily unskilled workers. More often, however, these key workers are also laid off with the expectation that any or all redundant workers can be rehired when demand increases. Expansion of employment is accomplished in part by recalling those previously laid off.

Table V-1
Fluctuations in Employment, Earnings, and Hours of Production (%)
for Non-supervisory Workers in Manufacturing,*
Jamaica and the United States, 1976-1979

	1976			1977				1978				1979				Average Absolute Change**	Coefficient of variation (S/X)
	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec		
Employment																	
Jamaica	-6.3	-9.4	2.5	1.4	-4.9	-2.1	-2.4	0.02	1.8	-11.2	-1.8	-7.6	3.2	9.0	6.6	4.7	-4.1
U.S.	2.7	1.9	-2.2	0.2	3.6	1.0	-0.5	0.10	2.9	0.9	0.3	0.4	1.6	0.4	-1.9	1.4	2.1
Weekly Earnings																	
Jamaica	2.9	-0.02	4.5	2.9	3.7	1.3	5.4	-2.8	10.5	3.3	4.5	2.9	3.7	1.3	5.4	3.7	.89
U.S.	2.6	2.3	3.3	0.1	3.7	2.2	3.5	0.4	2.6	3.5	4.8	-0.7	1.2	1.9	4.0	2.5	.66
Hours																	
Jamaica	-0.8	0.47	-.6	2.0	-1.3	1.4	-1.3	-1.7	-.43	-8.8	6.6	-4.6	-0.6	7.4	-2.0	2.7	-13.8
U.S.	0.1	0.15	1.0	-1.0	1.5	-0.5	1.2	-1.7	0.70	0.0	1.7	-1.9	-0.5	-0.2	-1.5	0.9	-18.1

Sources: Employment, Earnings and Hours in Large Establishments, Department of Statistics, Jamaica (Data are for "wage earners").
U.S. Department of Labor, Employment and Earnings.

*Jamaican data for formal sector (large establishments) only.

**Absolute value of "average percentage change between quarterly observations."

Most return, since wages are significantly higher on average in these large firms. When this labor pool is exhausted, firms can often hire additional workers with ample prior experience from their casual labor pools. A variety of additional informal recruitment methods are called into play as labor demand expands beyond this core labor force of the firms. Recruitment of new workers is concentrated among friends and relatives of employees, and schools may be contacted for additional referrals.

Quality adjustments are also articulated through recruitment and selection practices. Formal sector firms are in a position to be highly selective in recruitment. Selectivity permits these firms to develop screening and hiring criteria which may be only loosely tied to job performance. This allows for various forms of credentialism to operate, and to be adjusted as supply and demand conditions change.

The second element of quality adjustment is training. As new workers are hired, they are trained by their employers, primarily on the job. In all the firms surveyed by us (and in most of the firms surveyed during the 1970's by Standing), training adjustments, rather than active wage competition, was the principal means of obtaining skilled labor. The only exception was for the most highly-skilled professional, managerial, and technical personnel, whose compensation depends to a great extent on international market forces. For formal sector firms, the internal training capacity at the workplace is the major device in Jamaica for avoiding skill bottlenecks. It is supplemented, when necessary, by a well-developed set of relationships with vocational schools. In cases where skill requirements pertain to specialized new equipment, equipment vendors may also provide advanced training in specific skills.

At the time of our interviews, this network of workplace and school-based training appeared adequate to meet the skill requirements of all firms in our diverse sample. In these firms, there was a far greater interest in strengthening basic education than in expanding publicly funded, school-based skill training. Our optimistic assessment of the skill development and adjustment capability of the formal sector, however, is based upon interviews during a period of relatively slack labor demand. It is possible that the capacity to train in the formal sector, including its ability to commandeer resources from schools, would be less adequate in a more prosperous economy. Nevertheless, at the level of the individual firm, we found a number of instances of dramatic employment growth without skill bottlenecks emerging, except for the most highly educated and specialized professionals and managers.

Indeed, what we found most striking about the formal sector firms was their ability to accommodate extraordinary shifts in employment with surprisingly small adverse affects on access to skilled labor. By the standards of developed countries, the ebb and flow of employment at the level of the individual establishment is astounding. On short notice, labor demand could be doubled, or a firm could close suddenly and then reopen weeks or months later with a full complement of labor. The extent to which the formal sector routinely adapts to such change suggests to us that formal sector labor bottlenecks are not likely to be a constraint to growth until the formal sector is a good deal larger than it now is.

While the adjustment behavior of formal sector firms suggests optimism with respect to skill development and growth, and for the earnings and employment of the labor force during periods of expansion, it clearly has

harsh consequences for workers during downturns. The ease with which the formal sector can recruit and train labor means that the economic incentives to stabilize employment are minimal. In the absence of legal or collective bargaining restrictions on layoffs, even small fluctuations in product demand can easily result in labor terminations. Our interviews suggest that this willingness to terminate employees may have grown in recent years.

Linkages Among the Labor Systems

We have little direct evidence on what happens to workers when they are terminated from formal sector employment. In fact, we found less awareness among employers of the alternative activities of laid off workers than we have encountered in similar firms in the United States.[2] However, from aggregate employment data, stratified by size of establishment, one sees a tendency for contractions in large establishments to be associated with expansion in employment in certain other areas of the economy.

During the 1974-75 recession, for example, public sector employment provided a major cushion to job losses elsewhere in the economy. Usually, however, services and the informal sector in general have provided the buffer. Thus, from the perspective of employment opportunities, the aggregate Jamaican economy consists of two complementary sets of economic activities: (1) demand-dominant industries — including large-scale manufacturing, mining, tourism, and large-scale agriculture — in which employment changes are largely driven by demand, and (2) "reactive" firms and industries (including small service establishments, self employment, "temporary" public employment, and small-scale agriculture), in which employment change is driven partly by changes in output and labor demand,

partly by intersectoral labor supply shifts to counterbalance employment changes in the demand-dominated sectors, and partly by demographic changes in labor supply.

High wages, and related employment practices, allow the demand-dominated industries to adopt "hire-fire" employment strategies — recruiting labor easily during periods of expansion and displacing it easily during periods of decline. Because of easy entry, based partly on kinship and family ties, the reactive sectors readily absorb labor displaced from demand-dominant industries during periods of decline. Since the relatively low average earnings are further eroded whenever the sector absorbs these laid off workers, this part of Jamaica's employment system also readily releases labor to higher-wage formal employment during periods of expansion. The blend of demand-dominated and reactive sectors in the Jamaican economy has helped to stabilize employment (if not aggregate earnings) in the face of wide swings in output.

More specifically, the period of the 1970's in Jamaica was marked by stagnation and decline in the economy coupled with a rapid growth in population and the labor force, particularly among youth. While unemployment (especially youth unemployment) rose, there were a number of sectors of the economy that helped to absorb the slack in the economy created by declines in mining, manufacturing, and tourism. These counter-balancing sectors included the public sector in the early 1970's, and miscellaneous services, small establishments, and self-employment throughout the decade. This counterbalancing process helps to explain why the link between output and employment is relatively weak for the economy as a whole.

While data which distinguishes "buffer" jobs from fully-productive jobs are not available, it is possible to observe some evidence of this process at work through the data on informal sector employment and on self-employment discussed in Chapter II. During 1976-79, a period for which the data permit some tentative assessments of differences between large and small establishments, it appears that the decline in the overall economy were matched by growth in small enterprise and informal employment in many parts of the private sector. Within manufacturing, the share of informal employment in the industry grew from 30% to 50% (Table II-16). It rose from 54% to 65% in transportation, and in commercial activities informal employment rose from about 65% to almost 80% of total employment. Self-employment, the easiest work of all to enter (and in many instances the employment of last resort), also increased dramatically during the 1970's, particularly for males, in sectors such as manufacturing, transportation, and commerce (Table II-15). Estimates presented in Chapter II suggest that employment in small, multi-person informal sector firms rose even more rapidly than self-employment during this period (Table II-17).

Although we have no direct evidence on this issue, it is reasonable to infer that, while some of the growth in employment (such as in small manufacturing firms) may have reflected growing private sector demand, much of it probably represented very low-wage, marginal employment in small establishments, self-employment, and family farms. Similarly, job growth in the public sector during the early 1970s was reportedly the result in part of a deliberate policy decision to expand government employment as a counter-cyclical device.

Differential Effects of Buffer Jobs

Together, these sectors act as a buffer for the economy as a whole. The data suggest, however, that these various sources of buffer employment operate differently for different groups in the labor force. For example, the data are consistent with the view that workers displaced from mining in rural areas during the late 1970's were more likely to drop back into agriculture than to move into the major cities to obtain informal sector jobs. If remaining near the mining areas increases an individual's chances of being recalled, one would expect this type of queueing behavior.

There are also marked differences by age and sex in the way workers are displaced and reabsorbed. For the economy as a whole, the brunt of employment instability is concentrated among younger workers, particularly teenagers (Tables A-29 to A-31). Each older age cohort has somewhat greater employment stability than the one before it until age 55 when instability begins to increase. In both formal and informal sector employment, the strength and security of employment tends to increase. When older workers are laid off from high wage jobs, they frequently have informal bumping rights to gain work in informal activities. These overall patterns of employment instability by age are further reflected in unemployment rates for young workers which have consistently remained more than double those of adult workers (Tables A-10 to A-12).

Male and female workers fared somewhat differently during the downturn in the economy in the mid 1970's. In general, females began to experience somewhat more instability in their employment than males. This was more apparent in the employment rates, than in the unemployment rates, of males

and females since females were somewhat more likely to leave the labor force.

More specifically, since females are concentrated in certain sectors such as services, commerce, and public administration which are often buffers to recessions (and since females are underrepresented in sectors such as agriculture, mining, manufacturing, and construction which are demand-sensitive), their employment would be expected to show a different cyclical pattern from that of males. Females, however, were displaced from manufacturing at a somewhat higher rate than males and slightly increased their representation in agriculture during the 1970's (Tables A-23 and V-2). It was the public sector, however, where female employment showed the greatest gain, particularly during the early part of the decade.

In contrast, males generally moved more rapidly into various kinds of self-employment than did females. In 1972, roughly equivalent proportions of males (38.3%) and females (33.3%) were self-employed. By 1982, almost half of all male workers were self-employed while the proportion of self-employed females remained constant. Growth in male self-employment was particularly rapid in the transportation and service sectors.

These shifts in the employment situation of various groups in the Jamaican labor force portray a partial but consistent picture of the pattern of gains and losses in the Jamaican economy. For example, shifts from demand-dominated jobs to supply-oriented sector jobs, and the large increases in informal sector jobs and self-employment, suggest an economy with a deteriorating mix between better and worse jobs. It is also

Table V-2

Employment Change % by Sex: Selected Industries, 1973-82

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Agriculture, Forestry, & Fisheries										
Male	-3	10	-3	6	-1	5	-6	12	3	-1
Female	7	15	16	21	2	6	-21	19	5	-10
Manufacturing										
Male	7	-2	-6	5	1	5	-6	2	11	7
Female	-5	10	-11	-5	2	0	-7	10	-4	3
Public Administration										
Male	1	2	32	5	9	-6	2	-4	-1	-1
Female	13	11	28	11	1	1	1	1	-5	1
Total										
Male	1	2	5	1	1	1	-4	10	5	-1
Female	-2	9	6	-3	6	0	-7	13	1	-1

Source: Calculated from Tables A-2 and A-3.

unambiguous that the employment situation of young workers deteriorated relative to older workers as the economy declined and youth labor force cohorts expanded rapidly during the 1970's without corresponding gains in employment. Less visible, but equally certain, was the deterioration of the employment situation of older workers. When coupled with rising unemployment and falling real income, these observations suggest that both poverty and inequality are increasing.

Less certain, however, are the consequences of changes in the economy that have affected males and females differently. Jamaica has traditionally

had unusually high labor force participation and employment rates for females, and it has been argued that females are less disadvantaged relative to males than in most industrializing countries.[3] This was particularly true when relatively easy emigration drew a large percentage of young males overseas, opening relatively better domestic employment opportunities to women. Females, however, have remained more concentrated than males in lower wage sectors such as commerce and services, despite their greater levels of education.

In the mid 1970's the employment situation for females relative to males deteriorated in some respects as they began to experience greater instability of employment than males, as barriers to emigration and rapid population continued to swell the ranks of the unemployed and underemployed. Females lost jobs in manufacturing at a higher rate than males. The only significant offset to these adverse trends was public employment, where females gained in their share of jobs. Unfortunately, available data on income by sex is too imprecise to determine whether these trends resulted in an overall increase, or from hiring patterns based on the government's stated determination to reduce gender inequality. In any case, judging from past evidence, so long as rapid population growth and limited emigration opportunities cause labor force growth to exceed the growth of good, productive jobs, women are unlikely to fare well relative to men in Jamaican labor markets.

Forecasting Employment and Training Needs

The labor market adjustment patterns described in the previous sections carry important implications fro employment forecasting and educational

planning. For example, recent attempts at employment forecasting in Jamaica have been based on projection techniques developed by the U.S. Bureau of Labor Statistics for the United States labor market, a market that is far more stable and industrialized than that of Jamaica.

Briefly, this approach begins by developing an industry-occupation matrix showing the skill mix of each industry. Output levels are then projected for each (two-digit) industry. Assuming constancy in the occupational mix in each industry over time, occupation-specific occupational forecasts are developed for each industry and then aggregated by occupation for the country as a whole. After adjusting for attrition from the labor market (through deaths, retirements, emigration, and other normal turnover), net occupational growth is then estimated.

These net additions in employment by occupation can then be compared to estimates of the supply of new graduates coming from the education and training system to determine impending shortages and surpluses of different skills. Where shortages are predicted, supplemental training programs can be designed and implemented.

While this approach has limitations, even for industrialized country projections, its shortcomings in the context of the Jamaican labor market are particularly severe. In this section, we review the labor market factors in Jamaica that tend to undermine the effectiveness of such projection methods.

Changes in the composition and level of future output. The first step in the projection of employment and training requirements is to anticipate industry-specific changes in output. These growth predictions can be made fairly accurately in economies that evolve along relatively stable growth

paths. In relatively closed and slowly changing economies, for example, relative growth rates among industries do not tend to change dramatically over short and medium-term forecasting periods. Where there are major shifts in growth patterns in such economies, they are usually associated with dramatic technological breakthroughs and the opening of new product markets, rather than or as a result of sudden shifts in international competition.

In a small open economy, such as Jamaica, however, individual domestic industries are relatively more susceptible to sharp swings in demand as competition in world markets shifts. These shifts can be further aggravated by rapidly changing trade and currency regulations and devaluations. Volatility in the composition and level of output by industry makes it difficult to establish baseline trends from which reliable estimates of industry growth can be made.

Changes in productivity and the output-employment link. A more important source of error in predicting employment changes in the Jamaican economy are the assumptions regarding productivity. The BLS projection method, assumes "fixed-coefficient" relationships between occupational employment and output in each industry which are then adjusted by long-term trends in output per man-hour.

Unfortunately, productivity trend changes by industry are generally difficult to assess in developing countries. Productivity growth may change in very different ways in traditional industry and the modern sectors of particular industries. In a country like Jamaica, contractions in the modern sector that are offset by labor absorption and underemployment in traditional sectors can dramatically alter measured productivity without any

change in underlying determinants of growth. Conversely, inefficiently staffed modern firms can suddenly rationalize production and shed labor and also substantially alter output per manhour. When coupled with the effects of cyclical and sectoral volatility in output by industry, which also disrupt scale economies of production and create both excess capacity and bottlenecks, productivity estimates can be very unreliable.

Problems in choosing a base period for projections. In any economy, a great deal of caution is needed in choosing the base period for a forecast. There must be some confidence that the period chosen is accurately represents conditions which are likely to prevail during the forecast period, or that these conditions differ in ways which are understood and which can therefore be modelled specifically.

In an economy which is undergoing sharp swings in output and employment, this problem is greatly aggravated. The data from the 1970's demonstrates that productivity declined and real wages increased prior to 1976 as a result of deliberate attempts through government policy to expand employment. Thereafter, real wages and employment growth dropped, as fiscal discipline and austerity measures were imposed on the national government by the IMF.

Such shifts make it difficult to determine a "normal" baseline period from which to extrapolate. For example, in drawing up employment forecasts in the early 1980's, the National Planning Agency used Labor Force Surveys from October 1979 and April 1980.[4] In retrospect, this period turned out to be the bottom of the economic downturn which followed the OPEC price increase and the resulting foreign exchange crisis of the mid-1970's. Consequently, actual employment changes coincided poorly with projections as

the economy has emerged from this recession and the forecasts had to be substantially revised to incorporate higher rates of productivity growth.

Entry ports vs. internally staffed positions. Finally, the institutional structure of employment in Jamaica can affect the interpretation of otherwise reliable projections. As our interviews in Jamaica illustrate, internal training and promotions are an important source of staff for higher-skilled positions in many firms. Forecasts of training needs which ignore these staffing practices within internal labor markets can result in projecting of job vacancies (and therefore training needs) at a range of skill levels that do not correspond with actual hiring practices. Without an understanding of staffing practices, projections may seriously over estimate the skill levels of jobs that are available to be filled from the external labor market and may encourage new formal training programs where on-the-job training systems are already in place.

These inherent limitations in the process of employment forecasting in an economy such as Jamaica, suggest that simpler approaches may provide more timely and accurate information on changing skill requirements. One possibility, which has proved reasonably reliable in the case of the small, open labor markets of local economies in the United States, is to rely upon short-term linear extrapolations of occupational data rather than occupation-industry matrixes driven by industrial projections.[5]

The reliability of these forecasts can be further improved with sample surveys of formal sector staffing practices to pinpoint entry occupations for which formal training is suitable. In addition, survey of technical, managerial and professional pay and monitoring of skilled labor recruitment

from abroad can provide further occupation-specific indicators of emerging skill shortages.

Summary

This chapter has examined the way in which different sectors of the labor market react to economic change. These responses to change affect the macro operation of the labor market in various ways. Formal sector firms tend to have relatively rigid wages, to ration scarce jobs, and to expand and contract employment with changes in output. In contrast, informal sector firms, and self-employment opportunities, absorb labor easily when it is displaced from the formal sector by sharing work and income. When demand expands in the formal sector, these easy entry jobs release their labor back to the formal sector.

As a result, earnings and productivitiy in the informal sector vary inversely with employment in the formal sector. These intersectoral linkages, when coupled with a highly volatile economy, make productivity, earnings, and occupational demand very difficult to forecast. In addition, differences in workplace employment and training practices create problems in translation of occupational projections into education and training programs.

Instead of elaborate educational planning models, relatively simple occupational extrapolations and alternative indicators of skill scarcities are recommended for labor market planning in Jamaica.

Notes for Chapter V

1 See Robert E. Hall, "Employment Fluctuations and Wage Rigidity," Brookings Papers on Economic Activity, No. 1, 1980, pp. 91-124; and "The Importance of Lifetime Jobs in the U.S. Economy, American Economic Review (72:4), 1982, pp. 717-724.

2 Interviews among formal sector firms in the United States indicate that employers frequently have relatively good information about the post-layoff activities of workers. See, for example, Peter Doeringer and Michael Piore, Internal Labor Markets and Manpower Analysis, 2nd ed. (Armonk, N.Y.: M.E. Sharpe, 1985); and Peter Doeringer, "Internal Labor Markets and Paternalism in Rural Areas," in Paul Osterman, ed., Internal Labor Markets (Cambridge, Ma.: The MIT Press, 1984). Jamaican employers in our formal sector interview sample, by contrast, were for the most part less aware of workers' activities following layoffs. Perhaps the most reasonable explanation of this difference is that in Jamaica, these employers offer exceptionally well-paying employment opportunities. Thus, they are quite successful at recalling workers even if they have temporarily taken up alternative jobs.

3 Guy Standing, Unemployment and Female Labour: A Study of Labour Supply in Kingston, Jamaica (London: MacMillan Press, Ltd., 1981), pp. 313-314. Standing notes that the early marginalization of women in rural areas, coupled with family structures which "encouraged female schooling rather more than male," actually pushed women to strive for white collar urban jobs, overseas opportunities, and other means of escaping poverty's snare. Thus, tendencies toward sexual dualism were lessened in comparison with those in many other developing countries.

4 Government of Jamaica, Department of Statistics, Labour Force Survey 1979 and Labour Force Survey 1980 have results of both the April and October surveys in these respective years. (Kingston: 1979 and 1980 respectively)

5 Susan Hudson-Wilson, "Labor Market Projections for Education and Training," in Peter Doeringer and Bruce Vermeulen, Jobs and Training in the 1980s: Vocational Policy and the Labor Market (Boston: Martinus Nijhoff Publishing, 1981), pp. 168-169

Chapter VI

CONCLUSIONS AND RECOMMENDATIONS

This chapter summarizes the major problems of the Jamaican labor market and discusses the implications of our research findings for labor market policy. The chapter concludes with a policy-research agenda.

Persistent Problems in Jamaica's Labor Markets

Chronic unemployment, low productivity, and widespread poverty and inequality have been persistent features of the Jamaican economy for decades. However, sharp reductions in opportunities for emigration, severely curtailed rural job options, rationalized production in manufacturing, and faltering economic growth in the late 1970s, have combined to aggravate joblessness and undermine income growth in recent years.

The foreclosure of large-scale emigration opportunities, which had historically been an escape valve for population pressures, has caused population growth rates within Jamaica to rise. Historically emigration has been concentrated among 25-35 year old adults so that limits on emigration have had a particularly strong impact on the growth of this labor force cohort. Because many of the would-be emigrants now remaining in Jamaica are women in their child-bearing prime, birth rates have also been affected disproportionately by restrictions on emigration. Employment growth slowed during the late 1970's and early 1980's and failed to keep pace with this rapid growth of the work force.

Unemployment declined and real wages rose during the early 1970's, spurred by Keynesian expansionary policies coupled with public employment programs aimed deliberately at alleviating unemployment. However,

productivity went into a sharp decline, which continued through the decade, as a result of OPEC price rises and subsequent foreign exchange crises. Once austerity measures were required to bring spending more in line with productivity, real wages fell as well. By the end of the 1970's unemployment was well above its level at the beginning of the decade and real wages had fallen as well.

In rural Jamaica, job opportunities have stagnated. The purchases by bauxite firms of large amounts of agricultural land have contributed to the abandonment of farming by many Jamaicans during the past three decades. Equally importantly, many jobs have disappeared in the coastal areas of sugar cultivation, both on the plantations themselves and in the neighboring communities. Technical changes in harvesting methods, organization of work, and glutted world markets have reduced the demand for plantation labor.

These changes have also eroded crucial job opportunities for small land holders who depended on part-time plantation work as an essential element of their overall income-generating strategies. The loss of thousands of jobs on the plantations, therefore, had strong multiplier effects throughout neighboring rural economies. The departure from the region of both plantation workers and small farmers further disrupted the fragile income-generating networks within which many rural Jamaicans in the sugar areas pieced together a livelihood. As the demand for a broad array of services declined, growing numbers of Jamaicans in non-agricultural work found themselves in untenable economic positions and were forced to join the exodus to the cities in hope of something better.

The massive flow of individuals and families from the countryside into the cities has made Jamaica an exceptionally urbanized country. The birth rate has been somewhat slower in the cities than in rural areas, so

urbanization has helped to some extent to slow population growth. However, the flood of rural-urban migrants has compounded problems of unemployment and crowding in the cities. The lack of job growth in rural Jamaica, coupled with sharply curtail emigration, has added to the press of unemployment, poverty, and soc l and political unrest in the cities.

The slow pace of job growth in the late 1960's, and the virtual stagnation of employment growth after the public employment projects of the early 1970's proved unsustainable, testify to the difficulties which Jamaica faces in attempting to employ its population productively. Employment, as well as the population, is increasingly urban and jobs are becoming concentrated in 'modern' rather than 'traditional' occupations. This transformation has been the result more of "push" forces due to changes in agricultural employment than of strong 'pull' forces created by a prosperous urban economy.

The negative effects on worker incomes of declining labor demand have been felt only partly through job losses. To a much greater extent than in more industrialized economies, unemployment effects are partially disguised in the increased marginalization of income-earning opportunities, as individuals are pressed into less and less productive jobs. Particularly in the informal sector, adjustments to faltering demand take the form of falling incomes rather than "open" unemployment. Thus, although official unemployment data have an upward bias due to the inclusion of youths some of whom may not genuinely be seeking employment, they also greatly understate the extent of unemployment among those whose skills and willingness to work are seriously underemployed.

For women, whose labor force participation rates are unusually high and have continued to increase, the consequences of declining wage-earning

opportunities have been especially severe. The data indicate that women have suffered disproportionately high rates of open unemployment in all occupational categories. Although there is a debate concerning the firmness of female labor force attachments in general among researchers and policy makers, the abundance of female-headed households (constituting more than a third of all Jamaican families), creates high levels of financial need among Jamaican women.

Among women who are employed, incomes tend to be relatively low even in a strong labor market. With female employment concentrated in services, teaching, clerical jobs, and petty trade ('higgling'), most income-earning opportunities, even for more educated Jamaican women, are in occupations at the lower end of the wage distribution. Unemployment is also disproportionately concentrated among females.

Since 1980, government policies to address conditions of high unemployment, low productivity, and poverty have had a limited impact on these problems. After an initial surge, the economy has shown far greater resistance to growth, and the hoped for infusion of international business initiatives has not yet come to fruition.

A major concern of Jamaica's recent efforts to stimulate domestic and foreign private investment, and to generate new jobs, has been the contentious nature of labor-management relations. Within the formal sector, industrial relations concerns are voiced prominently by both businessmen and labor leaders in discussions of employment problems. Yet, the link between the quality of industrial relations and successful employment growth is largely unexplored in recent policy discussions.

The persistence of labor market and industrial relations problems underscores the difficulty of generating sufficient productive employment in

Jamaica. While macroeconomic and international factors will continue to dominate the economic situation, growth prospects can be improved through better labor market policies. Devising such policies demands a better understanding of the functioning of labor markets within Jamaica's various types of employment subsystems.

Distinctions need to be made between markets in which easy entry and open wage competition are the principal determinants of income-earning opportunities, and those within which internal labor markets, job sharing networks, and other institutional structures constrain and modify the forces of market competition. Effective human resource policies will also require a more complete understanding of the ways in which employers fill jobs in different sectors and the manner in which individuals from various socio-economic and geographic backgrounds navigate through the complex employment system to build a livelihood.

Policy Considerations

Our reading of labor market problems and policy in Jamaica suggests that four closely related areas of particular importance and concern are: (1) skill bottlenecks and labor force training; (2) labor productivity; (3) youth employment; and (4) labor-management relations. Failure to improve performance in each of these areas may inhibit job creation, stifle economic growth, and worsen poverty and inequality.

Solutions which have already been proposed to correct problems in these areas focus on the formal sector — and on the stimulation of market competition by reducing union power. Skill bottlenecks are to be addressed by expanding the vocational training capability of the education system; inadequate labor productivity is seen as being rooted primarily in skill

deficiencies; and youth unemployment has been viewed as a structural problem also to be solved by a combination of school-based training programs and subsidies to employers who hire young workers.

Labor-management problems are viewed most frequently by business and government decision makers as a result of union militancy. In this view, union power is used to press for economically unjustifiable wage increases; to resist technical and administrative changes which could improve productivity; and to disrupt production through strikes in order to achieve union objectives. Unions are thereby thought to weaken the international competiveness of Jamaican industry. The principal recommendation has been to lessen union power and to invigorate labor market competition.

Our analysis of labor market processes in Jamaica lead to a significantly different analysis of Jamaica's labor market problems. While a number of important questions remain unanswered, our findings suggest that several modifications in current policy approaches may be appropriate. These are discussed below.

Skill bottlenecks. The formal sector has developed a variety of effective strategies for meeting major changes in the level and skill composition of its labor force. We encountered no insurmountable skill bottlenecks as the companies interviewed seemed well equipped to handle skill development in response to a variety of fairly substantial changes resulting from growth, new technology, and the introduction of new products.

The internal training capability of these large enterprises is strong. These companies have also developed partnerships with individual schools to provide specialized training which is tailored to the company's particular needs. Where training facilities are unavailable within Jamaica, such as when specialized machinery is brought on line requiring a small number of

newly-skilled workers, companies have found suitable programs in the United States and Canada to which they have sent key employees.

Jamaican employers do turn to the international labor market on those rare occasions when internal recruitment and training, or vendor training, cannot provide a particular set of highly specialized skills. Such foreign recruitment typically involves technical, professional and managerial occupations for which demand cannot yet be met quickly enough within the Jamaican labor market and its education and training system.

Moreover, the labor shortages which have occurred in Jamaica through emigration have resulted in workers who have responded to higher wages and greater employment opportunities in other countries. This has two important implications for Jamaican education and training programs. First, unless compensation for Jamaicans with these skills rises, or unless the Jamaican government restricts emigration of such workers, there is no reason to believe that expanded education and training can fill the domestic gap. Newly trained technicians and professionals are as likely to seek work abroad as those who have left in the past.

Second, past emigration has created a pool of educated and experienced Jamaican nationals living abroad. Some of these Jamaicans have already been repatriated. Our interviews did not permit us to explore the quantitative and qualitative dimensions of this skill repatriation, or of the counterpart concern with the "brain drain." Nevertheless, if income-earning opportunities at home improve, this pool of already-qualified individuals represents an important source of skilled labor which requires no additional educational investments. Thus, expanded investments in very expensive forms of higher education may be ineffective in the absence of relative wage increases within these occupational categories, and they may be superfluous if such wage changes occur.

This assessment is not an argument against major investments in higher education within Jamaica. Rather, our analysis makes clear the importance of taking a closer look at the distribution of all education and training investments together, at all levels, to understand more fully the nature of tradeoffs in the use of these resources, in order to assure a maximum return in terms of Jamaican development from these important national investments.

Apart from skill bottlenecks among highly educated occupations, the main problem in the education and training area seems to be connected to primary (and possibly secondary) education. As in more industrialized countries, employers generally expect to provide a considerable portion of any specific skill training needed by their work force. However, the learning ability of trainees, and therefore the costs of accomplishing any training, depends crucially on workers' ability to learn. This capacity to learn efficiently often depends on having effective skills in reading, writing, communication, and basic mathematics. Jamaican employers we interviewed are critical of the educational foundation which is being provided in these basic skills by the public schools. Although tese mployers are able to find sufficient workers to meet their minimum hiring needs in the present economy, they reported that many school leavers are only marginally prepared in basic mathematical and communication skills needed for effective learning on the job.

These findings, however, were obtained in an economy that continued to have substantial slack as a result of the reverses of the 1970's. The combination of a slack economy and relatively high rates of pay gave the formal sector the ability to pick a choose among the available labor force and to train workers with little fear of losing their training investments through turnover.

If economic growth accelerates, the situation may change. Experienced workers would certainly become increasingly scarce; voluntary turnover might increase as the range of employment alternatives expands; and companies would have to recruit somewhat less well-prepared students from schools. Given the the flexibility of workplace training which we witnessed, and assuming that the improvements in personnel management become widespread, only sudden and sharp increases in labor demand are likely to strain the training capacity of the formal sector.

Despite short-term complaints about labor quality, especially from lower-wage and more marginal firms, employers are not likely to face difficulties in meeting the bulk of the labor demands in the foreseeable future. Where specific skill shortages do emerge, they are likely to be in technical and managerial occupations. These vacancies will continue to be hard to fill within the Jamaican labor market and in the short term will require some on-going recruitment from abroad. In most instances, attracting foreign workers or retaining trained Jamaicans to fill these jobs will require higher rates of compensation, in addition to any increase in education and training efforts.

Rather than causing major bottlenecks in a broad range of specific skill categories for which expanded vocational training is appropriate, successful economic growth is likely to intensify concerns over the quality of basic primary and secondary education already expressed by the employers interviewed for this report. Thus, as growth progresses, the costs of job creation, the biases in choice of technology, and the decisions governing levels of investment within Jamaica as a whole, all depend to an important degree on the basic learning abilities of the work force. Developing a successful human resources strategy, therefore, requires evaluating the

costs and benefits of a wide range of training options — employer-based on-the-job training, vocational training, basic education and higher education.

Labor productivity. Labor productivity has improved substantially in recent years in Jamaica's formal sector. This improvement occurred without major changes in either skill levels or technology. Our interviews suggest that much of this improvement can be traced to changes in management practices with respect to the organization of production and the utilization of labor. In addition, there have been improvements in the quality of human resource management, in the interpersonal and organizational skills and attitudes of supervisors, and in the financial and nonmonetary incentives provided at the workplace. The extent to which productivity improvements also reflects workers' reactions to the prospect of layoffs could not be determined, but this was undoubtedly a reinforcing factor.

As a result, in the firms we visited, formal sector labor productivity seems to be far less of a barrier to growth now than a host of other obstacles associated with inadequate demand and physical bottlenecks in production. These obstacles include difficulties in establishing or gaining access to markets that are sufficiently large to permit companies to capture scale economies in production; obtaining sufficient primary and intermediate inputs, particularly in conjunction with foreign exchange limitations; and dealing with bureaucratic and regulatory inefficiencies which inhibit import and export trade.

Although productivity does not appear currently to be the most pressing issue within the formal sector, it is a very real problem elsewhere in the economy. The shake-out in formal sector employment that occurred during the recessions of the 1970's, coupled with a growth in the youth labor force, has forced an expansion of employment in the informal sector without a

corresponding increase in product and labor demand. Thus, output and earnings per worker has inevitably declined. While this sector has provided vital employment opportunities i a time of rising unemployment, the rapid erosion of earnings among workers in small enterprises and in self-employment after 1975 means that the official unemployment data account for less of Jamaican poverty than in the past. Aggregate statistics which report employment and output for the entire economy, therefore, conceal the divergent trends in productivity between the two sectors.

Yet, as in the formal sector, problems of low productivity cannot be solved through strategies which rely exclusively on education and training. Surveys of the informal sector suggest that the problems of demand, intermediate inputs, capital availability and the like are also serious threats to small enterprise performance. Many small businesses survive, in spite of these problems, on the basis of long hours of work, unpaid family labor, and flexibility and ingenuity in small enterprise management.

We were unable to explore the problems of small enterprises beyond those that were evident from surveys and labor force statistics. These surveys show that the small enterprise sector is heterogeneous with respect to industry, scale of operations, and production methods. Nevertheeless, many of these firms have accumulated significant items of capital equipment, many have fixed business locations, and some employ wage labor.

Given the large size of the informal sector, its diversity, and the predominance of self-employment and very small enterprises, it is a difficult sector for public policy to approach. Nevertheless, studies in a number of countries suggest that the entrepreneurial talents of that sector, and its ability to mobilize collectively substantial amounts of labor and capital, make it a likely target for imaginative policy-making.[1]

The challenge for policy makers is to find ways of exploiting these advantages by encouraging a expansion of demand for the goods and services produced within the informal sector. By investing in measures which aid in the expansion of this small business sector, which has demonstrated its effectiveness in absorbing workers and in producing goods and services in a labor-intensive manner, government policy can promote increased employment, productivity, and incomes. Moreover, such investments are likely to have far higher rates of return in terms of broad-based development and increased standards of living than a variety of more conventional alternatives.

Youth unemployment. Since 1976 there has been a particularly substantial increase in the youth unemployment rate, and labor market policy has tended to focus on this problem.[2] The aggregate employment data suggest that the principal cause of increased youth unemployment has been slow growth in the Jamaican economy during the late 1960's and 1970's, coupled with a sharp increase in the youth labor force. During the 1970's, the number of young workers entering the workforce simply outstripped the capacity of a slowly growing economy to absorb them.

Even when the demand for labor is robust, however, young workers in Jamaica consistently face employment problems. In the years immediately after leaving school, young workers traditionally have higher unemployment rates than adults as they begin to establish their work patterns. Due to inexperience, lack of connections, employer hiring preferences, and the like, youth cannot always obtain the kinds of jobs they expect. They often experiment with a variety of formal and informal sector jobs, and may move erratically from job to job and in and out of the labor force prior to settling down as adults.[3]

As a result, there may be a large component of both "frictional" and "waiting" unemployment among young workers as they sample different jobs and

as they hold out for jobs that will meet their employment expectations. Since all young workers are included in the unemployment statistics, whether they are actively seeking work or merely "waiting", it is difficult to assess the social cost of unemployment among this age group. Yet, it seems quite clear that in Jamaica, most young workers face severe obstacles to obtaining productive employment, even when they engage in active job search.

Unemployment rates for Jamaican youths have been relatively high as long as data has been available; and unemployment rates have been sharply lower for workers in their late twenties. Young workers experience more frictional unemployment and more restricted job opportunities than older workers almost regardless of market conditions, as they search for and test job alternatives.

Inexperience, and possibly age discrimination, rather than a lack of formal skill training, appear to be the major employment barriers to youth. Employers, particularly in formal sector firms, often prefer to hire somewhat older workers who have some experience with work and who are ready to settle down in the labor market. In an economy with large surpluses of available workers from which to choose, formal sector employers are particularly likely to select more mature and experienced workers in preference to recent school leavers. When there is a net decline in jobs, as was the case in Jamaica during 1979, this decline gets concentrated among the youngest workers.[4]

Efforts to make young workers more attractive by providing skill training are, therefore, not likely to affect this overall pattern of unemployment to any great degree. Moreover, we have seen no evidence of skill bottlenecks, or of substantial numbers of unfilled jobs at skill levels for which young workers could be trained within a reasonable period

of time. This conclusion must be tempered by our lack of any suitable data on job vacancies or any in-depth information on the occupational structure of the informal or agricultural sectors. However both aggregate data on employment by age and sex, and informal interview results among managers and union representatives, support this premise.

Wage subsidies may have a greater affect on the age composition of employment, but neither policy is likely to affect aggregate job opportunities or overall unemployment significantly. In a number of other countries where wage subsidies have been implemented to stimulate employment, this policy by itself has been an inadequate inducement for job creation. Employers haved tended instead to replace higher-cost (e.g. adult) workers, or to ignore these incentives altogether, rather than expanding total employment.[5]

Thus, the principal means of reducing youth unemployment is to achieve a rate of economic growth which is sufficient to lower the aggregate unemployment rate in the economy. Measures focusing specifically on young workers have a tendency to be self-defeating, either because they have no impact on demand, or because they tend to reallocate existing demand so as to cause job losses for some other group in the work force.

Other changes in employability. The concern with youth unemployment has masked several changes in the labor market situation of other groups. For example, there appears to be a general shift in employment practices which has favored prime-age adults. These workers not only experienced employment gains relative to young workers, they also showed improvement relative to older males aged 55-64 and to young adult females aged 20-24. The employment rates of adult female workers have also shown gains relative to those of adult males, along with sharp increases in the labor force

participation rate of this group. However, unemployment rates for adult women have grown even faster, and are more than three times as high as males in comparable age ranges.

While open unemployment of young workers during the 1970's may not be as serious a structural problem as has been argued, so long as adulthood brings a reasonable likelihood of stable employment, the benefits and costs of economic change are not being spread evenly through the labor market. Wage differentials continue to be substantial by sector, and workers in some sectors are far more vulnerable to layoffs and real earnings declines than in other sectors during periods of recession. Moreover, even where employment rates have been improving, much of the growth has occurred in sectors of the economy, such as services and self employment, where low earnings and underemployment are frequently a problem. Thus, there are a broad range of structural problems affecting the employability of various demographic groups.

Labor-management relations. The stridency of union-management relations is also cited as a cause for concern in the labor market. Historically, there has been a long tradition of animosity and distrust between employers and workers. The sociological literature is filled with discussions of worker perceptions that wages and working conditions are "unfair," and of employer perceptions that workers do not work hard enough to earn even the meager wages paid for their services. Unions are blamed for inflationary pressures in the economy, for disrupted production, and for inflexibility and opposition to productivity enhancements at the workplace. Management is termed old-fashioned, and insensitive to the working conditions and welfare of their employees. While these themes are scarcely exceptional in industrial relations, they have an unusual intensity and persistence in the Jamaican context.

In spite of these perceptions, aggregate measures of strike activity do not indicate that Jamaica is unusually strike prone, particularly for a country with a relatively large unionized sector. This apparent paradox may stem from the fact that strikes are only one manifestation of a troubled industrial relations climate. An adversarial relationship between workers and managers can have a devastating impact on productivity even without actual strikes. Thus, strike data may not be suitable evidence through which to gauge the relative intensity of industrial unrest in Jamaica.

It may also be that the degree of unpredictability in labor-management relations creates a sense that the conduct of business in Jamaica is unusually difficult. The nature of Jamaican unions, inter-union rivalries, and the weakness of the governmental industrial relations machinery, contribute to conditions of uncertainty. They create a volatile atmosphere in which work stoppages may occur for non-economic reasons, without warning and when they are completely unexpected by the employer. Where relations are poor to begin with, minor altercations can trigger major disuputes.

This uncertainty, and the added potential for unanticipated interruptions in production, may be especially significant in formal sector firms. Unlike the situation in the United States, where firms paying relatively high wages have generally benefited from improved workforce stability and more regularized industrial relations, relatively high-wage employers in Jamaica's formal sector may not be receiving the full benefits from their compensation strategies. It is precisely these high-wage, higher-skilled workers in Jamaica's better jobs who are the most militant.[6] Thus, employers may not be getting normal, cost-effective returns (in stability, worker discipline, and other efficiencies) for their investments in internal labor markets.

On the union side, the strongly political orientation of the largest unions, and particularly the intense partisan rivalry between the BITU and the NWU, detract from their ability to engage in stable industrial relations. The political competition for members may also lead to violent union take-overs and unrealistic political demands which further aggravate industrial relations difficulties.

Government machinery for resolving industrial disputes has not been successful at addressing these problems and promoting orderly collective bargaining. Regardless of which major party is in office, there may be conflicts of interest between narrow political objectives and the smoother functioning of industrial relations. Neither party has incentives or inclinations to disengage itself from its union supporters and the intense inter-union rivalry.

Therefore, despite the efforts of a number of key government mediators and arbitrators, the government's industrial disputes machinery remains exceptionally weak. The lack of well-defined regulations, poor facilities, the shortage of technical support, and the limited experience of some mediators and Tribunal members, all serve to undermine efforts to ensure a degree of rationality and foster peaceful bargaining between the parties. While it may be difficult to depoliticize industrial relations in Jamaica, improvements in the mediation and arbitration services can and need to be made.

There is also some evidence that lax industrial relations practices in the public sector have contributed to poor economic performance in Jamaica. These include a willingness to make liberal bargaining concessions to ensure labor peace, a reluctance to set productive work standards, and a tendency toward over-staffing. Through union bargaining spillovers, or through the

determinations of arbitration panels established to resolve private sector labor disputes, there have been pressures to extend some of these arrangements into the private sector. While not conclusive, our findings suggest that industrial relations policies and management practices in the public sector during the 1970's created a set of circumstances that disrupted bargaining relationships in the private sector. In particular, settlements based upon "ability to pay" in some firms and some sectors was carried over, through pattern bargaining, to other firms that were less economically sound. During the 1980's, however, more tough-minded management took the initiative in forging improved relationships with unions at the workplace to foster an improved industrial relations environment.

Our interviews further suggest that worker militancy and strike activity are related to the state of the economy. The pressures of declining demand and job cuts have reduced the frequency and intensity of industrial disputes during the most recent economic recession. The prospect that economic recovery may rekindle industrial strife, further emphasizes the need to improve Jamaican industrial relations.

For policy makers intent on encouraging private investment and accelerating the process of job creation, the industrial relations system in Jamaica has advantages as well as disadvantages. Although the highly political nature of the trade union movement in Jamaica encourages both businesses and politicians to settle disputes in a politically expeditious manner which too often is not conducive to economic growth, a well organized work force can also be a great asset for economic development. The close relationship between the government and the unions, combined with both high levels of union organization and the presence of a tightly-knit business community in the formal sector, provide an institutional vehicle which can

be utilized far more effectively than it is now for linking economic policy with industrial relations policy. This potential for harmonizing growth and industrial relations policies is an important key to improving rates of private investment and employment growth in the future.

An Integrated Labor Market Strategy

There is little disagreement concerning the problems which need to be addressed by policy-makers in Jamaica. Clearly, job creation is a critical need. Currently, additions to the labor force are outstripping employment growth. Increased productivity is needed, both to keep Jamaica's exports competitive on world markets, and to make possible widespread increases in incomes.

Our labor market findings differ from those upon which current policy is based, however, in the relatively greater importance that we place on understanding of formal and informal institutional relationships more. The historical character of the Jamaican economy, the contemporary social and political relationships which constrain economic decisions, and the role of trade unions and employer associations, must be taken into account along with more traditional economic variables. These institutional forces have shaped both the current structure of the economy, and many of the perceptions concerning policy options which are open to decision-makers. They often are key determinants of success and failure in the implementation of new policies.

Concerns over the accumulated effects of the loss of skilled labor through emigration and a desire to increase the productivity and employability of the Jamaican work force, have led to an emphasis on expanding programs for vocational education and on-the-job training as the

key tools of labor market policy. Our preliminary investigations have suggested, however, that the current strategy for training is unlikely to achieve its objectives because it does not sufficiently address either employers' concerns over the quality of basic education, or workers' needs for greater numbers of new jobs.

First, in an interview sample of larger firms operating in the 'formal sector,' none of the employers faced shortages of skilled workers. High levels of unemployment and good relationships with existing training institutions assure these employers of relatively reliable access to trained workers without necessary recourse to further governmental assistance. Spot skill shortages have been a problem, particularly in professional and managerial positions, but these problems require longer term solutions than are contemplated within the framework of vocational training policy. In addition, educational programs to meet professional and managerial skill needs must be coupled with incentives to retain such personnel in Jamaica.

Second, the most frequent criticism by employers of the education and training system concerns general knowledge, rather than specific vocational skills. As is true for a large majority of firms in the United States, these Jamaican firms are accustomed to providing specialized skill training, but need adequately educated trainees who can these skills learn efficiently. Thus, existing and planned educational efforts in basic education do not appear adequate to meet the needs of these employers, and the large-scale vocational training efforts now underway may not prove as fruitful as expected.

If the mix of education and training investments is to be re-balanced, steps must also be taken on the demand side of the labor market to ensure that earnings are commensurate with the level of individual and public

educational investments. Not only must there be a sufficient increase in job opportunities that can productively employ trained workers, there must also be a increase in employment stability and improvements in industrial relations.

Finally, in planning for an integrated labor market policy, account must be taken of the variations in workplace employment practices in different sectors of the economy. Hiring procedures, patterns of job access, skill requirements of employers, training strategies, job stability, wage structures, wage determination procedures, working conditions, and fringe benefits all differ fundamentally in various parts of the economy. Programs and incentives need to be tailored to fit these specific and distinct sets of employment practices. By taking advantage of these differences through customized programs, significantly greater returns can be achieved on public investments in employment and training programs.

In particular, the ability of the informal sector to absorb large amounts of employment even when aggregate demand is falling causes the relationship between education and productivity to differ from that which is usually assumed by economists and policy makers. As demand for output falls, while employment remains relatively stable, productivity can decline quite rapidly, regardless of educational attainments. In an economy like Jamaica, with such large surpluses of underemployed and unemployed labor, a great deal of productivity growth could be achieved simply by more fully utilizing existing worker skills and capacities. To exploit the existing potential of the Jamaican labor force, there is no substitute for policies which will stimulate growth and labor demand. Increased demand will raise productivity and incomes of those already employed, and will provide the greatest number of new jobs for young workers entering the labor force for the first time.

Research Agenda

While this study has been able to sketch the broad outlines of Jamaican labour market dynamics, critical gaps remain in our knowledge of particular labor market sectors. Effective labor market policies will be hampered until the following areas are more fully explored: (1) the effectiveness of linkages between the education-training system and the jobs-earnings system; (2) the impact of formal sector personnel practices on productivity, earnings, and employment; (3) the labor market and production strategies of small firms and self-employed individuals; (4) individual, kinship, and enterprise links among various employment sub-systems — agricultural, rural non-farm, urban informal, and urban formal; and (5) the skill, demographic and earnings composition, of emigrants and immigrants. Specific research in these areas are briefly described below.

Follow-up studies of educational and training programs. Preliminary interview results indicate that it is important to know more about how individuals track through the education and training system, and how employers select and upgrade their employees. Because the present program for expanding the nation's supply of skilled workers is not based on any explicit understanding about hiring and upgrading practices, it appears likely to produce a poor fit between trainee/graduates and employer needs. Implicitly, the program assumes that hiring is based solely on readily knowable productivity characteristics of each worker which are measured principally in terms of formal education and training.

How, and under what conditions, do individuals progress in the labor market, to develop marketable skills and experience earnings growth over their lifetimes? What happens to individuals who complete various levels of

schooling and training? Are there ways in which the training system can work with market and institutional considerations in the labor market to increase the earnings of graduates? Answers to these questions are essential inputs for sound labor market planning and policy and they can only be obtained by tracing the post-schooling experiences of Jamaican school leavers.

Youth labor market problems. Youth unemployment has been particularly high in Jamaica because of demographic change and formal sector employment practices that have favored adults in a period of economic stagnation. While the increase in average years of schooling has cut the percentage of youths counted in the work force, there are large numbers of youth who fail to obtain work for long periods after leaving school. Are these problems indicative of the extremely low probabilities of being hired, or of a tendency to prolong labor market entry and job search while being supported by family and kinship systems that foster long-duration dependency on parents and relatives? Or is a third explanation at work — one which has been identified in several studies Latin America — that education has created unrealistically high expectations for Jamaican youths? The promise of good jobs when schooling is completed may cause many to wait for jobs they will never obtain, rather than taking advantage of poorer earning opportunities which may be available.

A second important set of questions goes to the nature of employment preferences in the Jamaican economy. What are the characteristics of young workers that deter formal sector employment, and how can they be offset through public policy? Why are adult workers more readily absorbed into informal sector employment than young workers? What are the self-employment prospects of young workers? Addressing these questions requires looking

more deeply into the operation of kinship labor markets, and workplace staffing practices in both the formal and informal sectors.

Workplace studies of employment, productivity, and training. Much more needs to be known about how formal sector employer practices impact upon productivity, job creation, and pay. How, and under what conditions, employers decide who to hire, with what mix of skills, and how to train and upgrade their workforce over time? To what extent do they require additional publicly sponsored and/or provided education and training? What kinds of skill bottlenecks are most prevalent among Jamaican employers? What are their perceived current and future needs?

Our preliminary field interviews indicate that an expanded set of studies of the internal labor markets of medium and large scale firms would be fruitful to help in the design of education and training systems that are most compatible with meeting the skill needs of the formal sector. A set of carefully designed case studies of employer "best practice" in human resources development would be a useful management education tool, as well as a guide to the design of business-education partnerships. Such studies should include rural, non-farm establishments in addition to urban businesses. This type of establishment study would be an important complement to the following study of school leavers described above.

Industrial relations and economic performance. We were only able to scratch the surface of the industrial relations system in Jamaica and how it might be affecting performance, growth, and inequality. There is an emerging body of literature on the role of trade unions, collective bargaining, and management structure in determining the economic performance of industrialized economies. This literature seeks to explain the dynamic competitiveness of industries and nations in terms of their economic

institutions as well as their comparative economic advantages. There is persuasive evidence for countries as diverse and England and Japan that institutional structures and industrial relations arrangments can significantly help or hinder economic performance. We know of no such institutional analysis for Jamaica, nor for other developing countries with similar economic and cultural backgrounds. This, however, is an exploratory area which has the potential for uncovering new insights into development policy.

An important by-product of studies of both internal labor markets and industrial relations practices would be a better understanding of general business practices in Jamaica and of the constraints on business growth and performance. The result would be a comprehensive set of guidelines for employment, wage and industrial relations policies, policies to remove bottlenecks to production and to enhance productivity.

Self-employment and small-scale employment. Another major gap in our understanding of the Jamaican economy pertains to the informal sector. There are some good surveys of small enterprises in Jamaica, but these are now somewhat dated and do not address the analytical issues necessary for purposes of determining labor market policies. Field studies of small enterprises are needed in both urban and rural areas, to parallel the research we propose on formal sector enterprises. How do these enterprises make hiring and layoff decisions. What is the nature of training requirements for these firms? To what extent do employers and individual workers in small enterprises utilize the formal education and training system? In what ways would changes in the provision of publicly funded training assist these small scale enterprises in expanding productive employment. This information can identify constraints on the growth and

performance of small enterprises, and can help identify ways to build upon their inherent strengths, to increase the amount of productive economic activity conducted within this sector, and thereby raise incomes.

Rural enterprise studies. There have been a number of studies of rural Jamaican communities, and there are some survey materials pertaining to farm enterprises. These materials, provide a very useful introductory view of a number of individual farm circumstances, but not sufficiently complete to provide a picture of the economic problems and potential of the rural economy. Farm owners, non-farm employers, and rural workers need to be surveyed to determine the same kinds of information about skill development, self-employment, hiring practices, labor productivity, labor management, and structure of the industry that have been raised with respect to urban enterprises.

Individual, family, and enterprise links between employment subsystems. While we have focused on research studies aimed at analyzing the problems and practices within separate sectors of the Jamaican economy, workers do not necessarily limit their labor market activities to a single subsystem. As the sociological and anthropological literature on Jamaica so richly illustrates, a large majority of Jamaican workers assemble their livelihoods by engaging in a wide range of activities. This is true not only in rural areas, where many individuals have too little land to make farming a full-time means of support; it is also true in urban areas where lack of permanent, productive employment causes many workers to assemble their livelihoods from many different sources. To assess the impact of programs which will alter employment opportunities in any single subsystem, it is also important to understand the ways which labor is mobile across subsystems.

Various employment sub-systems are also tied together in a dynamic sense. In periods of recession, many workers displaced from formal sector employment seek work in informal sector enterprises and in self-employment. This ability of the informal sector to provide employment of last resort for many workers is not well understood in terms of its consequences for growth. What we do know, however, is that the informal sector often serves as a buffer to absorb labor in recessions and as a reserve labor pool to provide labor to the formal sector in times of growth. We need to know more about what types of supply-side and demand-side factors shape such mobility.

The implications of such inter-sectoral mobility for inequality, productivity, and underemployment, and for labor market policy, are important. What is needed are ways to harness the natural flow of labor between formal sectors and informal sectors to help promote growth in jobs and income. For example, are ther skills gained through experience in one sector that could be productively transferred to the other? Would it be possible for spin-off informal businesses to be encouraged by systematically tapping the formal sector work force that also had "connections" with informal sector firms?

International migration and the brain drain. Our employer interviews identified highly-skilled manpower as a potential are of labor market bottlenecks. The problem of a sufficient supply can be met in the long term through recruitment, education, and various substitutions of less-skilled for more-skilled workers. In the short term, however, there are likely to be severe problems of availability and wage inflation among highly-skilled workers which can be disruptive of production and may lead to educational programs which are inappropriate in the longer term. One way of getting a better sense of these problems, and of determining priorities for planning

for post-secondary vocational and university education systems in Jamaica, is to analyze trends and current developments in the immigration and emigration statistics.

Such data can provide important information on "brain drain" issues, and can help define the nature of the labor pool of Jamaican's living abroad who might be recruited back to Jamaica. It will also provide detailed information on the types of skills that are truly unavailable in Jamaica, and on the costs of importing skills.

Conclusion

In this chapter, we have proposed a way of looking at labor markets in Jamaica which emphasizes differences among sectors in their employment, training, and pay arrangements. We believe such a differentiated approach to labor market analysis provides a useful guide to labor market policy. Our findings lead us to proposed certain redirections in employment and training policy, and a greater need to couple such policies with reforms in the industrial relations system and in human resources policies at the workplace. In addition, we have identified several key areas where further research is likely to be productive of fresh approaches to labor market policy.

Despite its problems of growth, high unemployment and instability in income, the Jamaican labor market reveals a flexibility and pragmatism that can be a great asset if properly harnessed. The challenge is to incorporate an understanding of the institutional practices and constraints present in the labor market into an integrated set of policy to upgrade the country's human resources and to improve its labor market performance. We expect that many of the lessons from Jamaica will also be transferable to other parts of the developing world facing similar problems.

Notes for Chapter VI

[1]See, for example, Ray Bromley, "Working in the Streets: Survival Strategy, Necessity, or Unavoidable Evil," in A. Gilbert, ed., Urbanization in Contemporary Latin America (London: John Wiley & Sons, Ltd., 1982); and S. Kannappan, Employment Problems and Urban Labor Markets in Developing Countries (Ann Arbor: University of Michigan Graduate School of Business, 1983).

[2]Between October 1975 and October 1976, the unemployment rate fopr 14-19 year olds rose from 31.1% to 38.0%, and for 20-24 year olds it rose from 19.2% to 24.2%. This coincided with the severe foreign exchange shortages in late 1975, and with the subsequent macroeconomic austerity measures imposed by the IMF load agreement in July 1976.

[3] Paul Osterman, "Aging in the Labor Market," in Getting Started: The Youth Labor Market (Cambridge, Massachusetts: The MIT Press, 1980), pp. 5-14

[4]Between October 1978 and October 1979, total employment fell from 702,100 to 663,400, according to the Labor Force Survey. The overall unemployment rose from 26% to 32%, while rates among 14-19 year olds and 20-24 year olds rose to 65.8% and 46.7% (increases of 8.2% and 5.8 percentage points) respectively. See Tables A-1 to A-3 and A-10 to A-12.

[5] The tendency for wage subsidies to have relatively little impact on employment, or to result in displacement of non-subsidized workers, has been well documented in the United States. See Dan Hamermesh, "Subsidies for Jobs in the Private Sector," in John Palmer, ed., Creating Jobs: Public Employment Programs and Wage Subsidies (Washington, D.C.: Brookings Institution, 1978). For a more general discussion of employer staffing strategies, and the implications for education and training policy, see Peter Doeringer and Bruce Vermeulen, Jobs and Training in the 1980s: Vocational Policy and the Labor Market (Boston: Martinus Nijhoff Publishing, 1981).

[6] Derek Gordon, "Working Class Radicalism in Jamaica: An Exploration of the Privileged Worker Thesis," Social and Economic Studies (27:3), September 1978, pp. 313-341. Gordon's interview results indicate "strong support for radical positions amongst the more technically trained, skilled, and semi-skilled workers" (p. 327).

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STATISTICAL APPENDIX

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Table A-1
Population and Labor Force Indicators (both sexes)

Date	Total Population	Population 14 years & older	Total Labor Force	Total Employed	Total Unemployed
Jun 1968	1834100	1027600	726700	572200	154500
Oct 1968	1839600	1022100	727000	592300	134600
Apr 1969	1847500	1026000	743900	610100	133800
Oct 1969	1858500	1033500	753900	624300	129500
Apr 1972	1935000	1094600	782700	598200	184500
Oct 1972	1948700	1120700	808900	624400	184500
Apr 1973	1963300	1129500	810700	637500	173200
Oct 1973	1981900	1141900	801200	621600	179600
Apr 1974	1993500	1161200	820000	642000	178000
Oct 1974	2003100	1159500	814500	648000	166500
Apr 1975	2032500	1204800	849600	680200	169500
Oct 1975	2047000	1216000	865600	684300	181300
Apr 1976	2063300	1239800	871700	692600	183400
Oct 1976	2082800	1259800	895500	679100	216400
Apr 1977	2088600	1269400	902000	680300	221700
Oct 1977	2100800	1285900	917900	699200	218700
Apr 1978	2113000	1301700	928700	714800	213900
Oct 1978	2119300	1312400	949200	702100	247100
Apr 1979	2140600	1331800	944700	714500	230200
Oct 1979	2153200	1348800	962500	663400	299100
Apr 1980	2164600	1363600	975400	703400	272000
Nov 1980	2176700	1378800	1006900	737300	269600
Apr 1981	2192100	1396500	1006900	743300	263600
Oct 1981	2204800	1412200	1022900	761400	261500
Apr 1982	2231500	1436500	1037700	757000	280700
Oct 1982	2241200	1450400	1048600	756300	292300

Source: The Labour Force, Table 1.1, annual issues.

Table A-2
Population and Labor Force Indicators (males only)

Date	Total Population	Population 14 years & older	Total Labor Force	Total Employed	Total Unemployed
Jul 1968	894200	492800	425400	367800	57600
Oct 1968	898100	487000	415800	366100	49600
Apr 1969	901900	488300	421900	378600	43300
Oct 1969	907200	492700	422200	375400	46700
Apr 1972	936800	517800	437400	374900	62500
Oct 1972	947100	532500	449400	384600	64800
Apr 1973	941000	530700	442800	388600	54200
Oct 1973	950600	540300	446800	386900	59900
Apr 1974	957400	549800	454100	399600	54500
Oct 1974	968500	544400	449200	393200	56000
Apr 1975	990100	573100	475300	422500	52800
Oct 1975	992100	576500	469500	413600	55900
Apr 1976	1003200	590900	480400	422400	58000
Oct 1976	1017200	606800	489200	417400	71800
Apr 1977	1019300	604800	493300	413800	79500
Oct 1977	1027900	613800	494300	422400	71900
Apr 1978	1038700	625200	500100	434400	65700
Oct 1978	1041900	629600	504200	425000	79200
Apr 1979	1056400	641900	508100	437700	70400
Oct 1979	1060300	647600	507700	406500	101200
Apr 1980	1068900	656200	520000	429600	90400
Oct 1980	1076000	663700	533500	448200	85300
Apr 1981	1085700	673500	531500	451300	80200
Oct 1981	1093600	681800	546700	469300	77400
Apr 1982	1109100	695000	553600	469000	84600
Oct 1982	1115700	702600	561200	465700	95500

Source: The Labour Force, Table 1.1, annual issues.

Table A-3
Population and Labor Force Indicators (females only)

Date	Total Population	Population 14 years & older	Total Labor Force	Total Employed	Total Unemployed
Jul 1968	939900	534800	301300	204400	96900
Oct 1968	941500	535100	311200	226200	85000
Apr 1969	945600	537700	322000	231500	90500
Oct 1969	951300	540800	331700	248900	82800
Apr 1972	998200	576800	345300	223300	122000
Oct 1972	1001600	588200	359500	239800	119700
Apr 1973	1022300	598800	367900	248900	119000
Oct 1973	1031300	601600	354400	234700	119700
Apr 1974	1036100	611400	365900	242400	123500
Oct 1974	1034600	615100	365300	254800	110500
Apr 1975	1042400	631700	374300	257700	116700
Oct 1975	1054900	639500	396100	270700	125400
Apr 1976	1060100	648900	391300	270200	125400
Oct 1976	1065600	653000	406300	261700	[illegible]600
Apr 1977	1069300	664600	408700	266500	142200
Oct 1977	1072900	672100	423600	276800	146800
Apr 1978	1074300	676500	428600	280400	148200
Oct 1978	1077400	682800	445000	277100	167900
Apr 1979	1084200	689900	436600	276800	159800
Oct 1979	1092900	701200	454800	256900	197900
Apr 1980	1095700	707400	455400	273800	181600
Oct 1980	1100700	715100	473400	289100	184300
Apr 1981	1106400	723000	475400	292000	183400
Oct 1981	1111200	730400	476200	292100	184100
Apr 1982	1122400	741500	484100	288000	196100
Oct 1982	1125500	747800	487400	290600	196800

Source: The Labour Force, Table 1.1, annual issues.

Table A-4
Distribution of Population (%), by Labor Force Status (both sexes)

Date	Percent Population 14 years & Over	Percent 14 years+ in Labor Force	Percent Labor Force Employed	Percent of Labor Force Unemployed
6/68	56.03	70.72	78.74	21.26
10/68	55.56	71.13	81.47	18.51
4/69	55.53	72.50	82.01	17.99
10/69	55.61	72.95	82.81	17.18
4/72	56.57	71.51	76.43	23.57
10/72	57.51	72.18	77.19	22.81
4/73	57.53	71.78	78.64	21.36
10/73	57.62	70.16	77.58	22.42
4/74	58.25	70.62	78.29	21.71
10/74	57.89	70.25	79.56	20.44
./75	59.28	70.52	80.06	19.95
10/75	59.40	71.18	79.05	20.95
4/76	60.09	70.31	79.45	21.04
10/76	60.49	71.08	75.83	24.17
4/77	60.78	71.06	75.42	24.58
10/77	61.21	71.38	76.17	23.83
4/78	61.60	71.35	76.97	23.03
10/78	61.93	72.33	73.97	26.03
4/79	62.22	70.93	75.63	24.37
10/79	62.64	71.36	68.92	31.08
4/80	63.00	71.53	72.11	27.89
10/80	63.34	73.03	73.22	26.78
4/81	63.71	72.10	73.82	26.18
10/81	64.05	72.43	74.44	25.56
4/82	64.37	72.24	72.95	27.05
10/82	64.72	72.30	72.12	27.88

Source: Calculated from Table A-1.

Table A-5
Distribution of Population (%) by, Labor Force Status (males only)

Date	Percent Population 14 years & Over	Percent 14 years+ in Labor Force	Percent Labor Force Employed	Percent of Labor Force Unemployed
6/68	55.111	86.323	86.460	13.540
10/68	54.226	85.380	88.047	11.929
4/69	54.141	86.402	89.737	10.263
10/69	54.310	85.691	88.915	11.061
4/72	55.273	84.473	85.711	14.289
10/72	56.224	84.394	85.581	14.419
4/73	56.397	83.437	87.760	12.240
10/73	56.838	82.695	86.594	13.406
4/74	57.426	82.594	87.998	12.002
10/74	56.211	82.513	87.533	12.467
4/75	57.883	82.935	88.891	11.109
10/75	58.109	81.440	88.094	11.906
4/76	58.902	81.300	87.927	12.073
10/76	59.654	80.620	85.323	14.677
4/77	59.335	81.564	83.884	16.116
10/77	59.714	80.531	85.454	14.546
4/78	60.191	79.990	86.863	13.137
10/78	60.428	80.083	84.292	15.708
4/79	60.763	79.156	86.144	13.856
10/79	61.077	78.397	80.067	19.933
4/80	61.390	79.244	82.615	17.385
10/80	61.682	80.383	84.011	15.989
4/81	62.034	78.916	84.911	15.089
10/81	62.345	80.185	85.842	14.158
4/82	62.663	79.655	84.718	15.282
10/82	62.974	79.875	82.983	17.017

Source: Calculated from Table A-2.

Table A-6
Distribution of Population (%), by Labor Force Status (females only)

Date	Percent Population 14 years & Over	Percent 14 years+ in Labor Force	Percent of Labor Force Employed	Percent of Labor Force Unemployed
6/68	56.90	56.34	67.84	32.16
10/68	56.83	58.16	72.69	27.31
4/69	56.86	59.88	71.89	28.11
10/69	56.85	61.34	75.04	24.96
4/72	57.78	59.86	64.67	35.33
10/72	58.73	61.12	66.70	33.30
4/73	58.57	61.44	67.65	32.35
10/73	58.33	58.91	66.22	33.78
4/74	59.01	59.85	66.25	33.75
10/74	59.45	59.39	69.75	30.25
4/75	60.60	59.25	68.85	31.18
10/75	60.62	61.94	68.34	31.66
4/76	61.21	60.30	69.05	32.05
10/76	61.28	62.22	64.41	35.59
4/77	62.15	61.50	65.21	34.79
10/77	62.64	63.03	65.34	34.66
4/78	62.97	63.36	65.42	34.58
10/78	63.37	65.17	62.27	37.73
4/79	63.63	63.28	63.40	36.60
10/79	64.16	64.86	56.49	43.51
4/80	64.56	64.38	60.12	39.88
10/80	64.97	66.20	61.07	38.93
4/81	65.35	65.75	61.42	38.58
10/81	65.73	65.20	61.34	38.66
4/82	66.06	65.29	59.49	40.51
10/82	66.44	65.18	59.62	40.38

Source: Calculated from Table A-3.

Table A-7
Growth Rates of Population, Labor Force, and Employment

Date	Total Population	Population 14 years & older	Total Labor Force	Total Employed	Total Unemployed
Both Sexes					
68-69	1.0274	1.1154	3.700	5.403	-3.789
69-72	1.6178	2.8124	2.431	.005	12.587
72-73	1.7037	1.8917	-0.952	-0.448	-2.656
73-74	1.0697	1.5413	1.660	4.247	-7.294
74-75	2.1916	4.8728	6.274	5.602	8.889
75-76	1.7489	3.6020	3.454	-0.760	19.360
76-77	0.8642	2.0718	2.501	2.960	1.063
77-78	0.8806	2.0608	3.410	0.415	12.986
78-79	1.5996	2.7735	1.401	-5.512	21.044
79-80	1.0914	2.2242	4.613	11.140	-9.863
80-81	1.2909	2.4224	1.589	3.269	-3.004
81-82	1.6509	2.7050	2.512	-0.670	11.778
Males					
68-69	1.0133	1.1704	1.539	2.540	-5.85
69-72	1.4660	2.6926	2.147	0.817	11.54
72-73	0.3695	1.4648	-0.579	0.598	-7.56
73-74	1.8830	0.7588	0.537	1.628	-6.51
74-75	2.4368	5.8964	4.519	5.188	-0.18
75-76	2.5300	5.2559	4.196	0.919	28.44
76-77	1.0519	1.1536	1.043	1.198	0.14
77-78	1.3620	2.5741	2.003	0.616	10.15
78-79	1.7660	2.8590	0.694	-4.353	27.78
79-80	1.4807	2.4861	5.082	10.258	-15.71
80-81	1.6357	2.7271	2.474	4.708	-9.26
81-82	2.0208	3.0507	2.652	-0.767	23.39
Females					
68-69	1.0409	1.0652	6.587	10.035	-2.588
69-72	1.7625	2.9216	2.793	-1.218	13.070
72-73	2.9653	2.2781	-1.419	-2.127	0.000
73-74	0.3200	2.2440	3.076	8.564	-7.686
74-75	1.9621	3.9668	8.431	6.240	13.484
75-76	1.0143	2.1110	2.575	-3.325	15.311
76-77	0.6851	2.9250	4.258	5.770	1.521
77-78	0.4194	1.5920	5.052	0.108	14.373
78-79	1.4386	2.6948	2.202	-7.290	17.868
79-80	0.7137	1.9823	4.090	12.534	-6.872
80-81	0.9539	2.1396	0.591	1.038	-0.109
81-82	1.2869	2.3823	2.352	-0.514	6.898

Source: Calculated from Tables A-1, A-2, and A-3.

Table A-8
Labor Force Participation Rates by Age Group, 1972-1982
(percentage of age-specific population)

Both Sexes

Year	Total	14-19	20-24	25-34	35-44	45-54	55-64	65+
1972	41.5		62.5	86.6	87.1	83.0	72.7	41.9
1973	40.5		59.2	86.1	88.1	81.4	73.8	40.3
1974	40.7		57.5	87.3	88.3	83.3	72.1	43.1
1975	42.3	42.1	86.4	89.3	87.7	86.8	74.6	44.8
1976	43.0	40.5	87.7	90.5	87.2	85.6	74.6	43.4
1977	43.7	38.2	88.7	91.1	87.8	90.3	75.1	46.4
1978	44.8	41.2	87.9	92.0	91.5	88.7	76.2	45.7
1979	44.7	41.0	88.6	92.2	91.3	87.6	73.3	42.0
1980	46.3	39.6	89.2	93.1	91.9	87.4	78.5	48.3
1981	46.4	40.6	88.3	92.7	92.3	88.0	76.0	46.4
1982	46.8	41.2	87.9	92.5	92.2	89.8	78.4	41.1

Males Only

Year	Total	14-19	20-24	25-34	35-44	45-54	55-64	65+
1972	47.5		71.3	97.3	98.1	96.3	87.6	62.8
1973	47.0		67.6	97.2	98.4	97.3	92.3	61.0
1974	46.4		65.2	98.0	98.8	97.7	92.2	64.5
1975	47.3	47.7	94.2	97.6	98.2	97.6	91.6	64.8
1976	48.1	45.7	96.2	97.3	97.2	96.0	90.9	63.3
1977	48.1	44.2	99.0	97.9	95.9	97.1	91.8	65.9
1978	48.4	46.7	93.9	96.5	97.6	97.0	89.9	64.0
1979	47.9	73.5	93.0	96.9	96.9	95.5	97.0	59.3
1980	49.6	44.5	94.3	97.5	97.2	97.4	91.0	67.0
1981	50.0	45.3	94.2	97.5	98.2	97.0	88.5	65.6
1982	50.3	57.2	94.3	97.2	97.5	96.7	90.1	58.9

Females Only

Year	Total	14-19	20-24	25-34	35-44	45-54	55-64	65+
1972	35.9		54.2	76.9	77.3	71.9	55.5	24.3
1973	34.4		51.3	75.6	79.6	67.8	55.9	24.0
1974	35.3		50.2	78.1	79.7	71.2	53.2	25.5
1975	37.6	36.7	79.3	81.3	78.8	77.4	90.1	28.3
1976	38.1	35.3	80.1	84.2	82.1	76.2	57.0	25.6
1977	39.5	32.5	82.6	84.5	80.8	84.3	60.4	27.7
1978	41.3	35.6	82.8	87.5	86.1	81.3	64.3	27.8
1979	41.6	35.5	84.6	87.4	86.4	80.7	59.9	26.8
1980	43.0	34.7	84.5	88.7	87.1	82.3	67.9	31.8
1981	42.9	36.0	83.0	87.7	87.0	80.0	65.6	29.7
1982	43.3	43.3	82.3	87.6	87.4	83.4	68.7	25.1

For 1972-74, 14-19 year olds are classified with the 20-24 year old age group.

Source: The Labour Force, Table 2.1, annual issues.

Table A-9

Distribution of Unemployed Seekers and Non-Seekers by Duration

	All Unemployed		Seekers		Non-Seekers	
Year	Never Worked Previosly	Unemployed at Least 12 months	Never Worked Previously	Unemployed at Least 12months	Never Worked Previously	Unemployed At Least 12 months
Both Sexes						
1973	31.7	28.8	30.5	20.6	32.7	36.0
1974	35.4	26.1	32.0	20.1	38.1	30.8
1975	30.4	26.7	27.6	21.7	32.9	31.0
1976	28.4	24.6	25.0	21.5	30.9	26.9
1977	29.2	29.9	27.6	25.6	30.2	32.8
1978	34.3	29.0	34.2	25.3	34.3	31.9
1979	37.4	27.0	35.6	22.6	38.6	29.9
1980	40.1	27.2	41.7	22.2	39.1	30.5
1981	43.3	28.0	41.5	24.6	44.4	30.0
1982	44.5	29.7	43.1	25.4	45.9	34.0
Male						
1973	29.1	15.7	26.1	15.1	38.3	17.4
1974	30.5	20.9	26.2	20.3	40.0	22.3
1975	25.4	19.4	22.3	19.4	34.0	19.6
1976	22.7	15.6	16.9	15.2	33.5	16.3
1977	27.5	21.1	23.4	22.9	34.3	18.2
1978	31.1	22.6	31.2	21.2	30.9	25.4
1979	32.7	19.9	27.8	21.2	39.8	18.0
1980	34.0	24.7	32.9	23.6	35.6	26.4
1981	38.2	21.6	35.0	20.4	42.4	23.1
1982	39.3	22.1	37.0	22.3	43.8	21.8
Female						
1973	33.0	35.4	35.7	26.9	31.7	39.5
1974	37.9	28.2	38.5	18.1	37.6	32.8
1975	32.7	29.9	32.6	23.8	32.7	33.0
1976	31.3	29.1	33.6	28.1	30.2	29.6
1977	29.9	34.2	31.9	28.4	29.1	36.6
1978	35.8	32.0	37.1	29.2	35.1	33.5
1979	39.8	30.6	43.5	24.0	38.2	33.4
1980	43.0	28.3	49.6	20.8	40.0	31.6
1981	45.5	30.6	46.7	27.9	44.9	31.8
1982	44.4	31.6	48.1	28.0	42.0	33.9

Source: Calculated from The Labour Force, Table 4.14, annual issues.

Table A-10
Unemployment Rate(%) by Age Group (both sexes)

Date	Total	14-19	20-24*	25-34	35-44	45-54	55-64	65+
Jul 1968	21.3		38.7	21.9	16.6	10.7	8.8	6.8
Oct 1968	18.5		34.9	21.1	14.3	7.0	5.9	1.9
Apr 1969	18.0		33.2	22.0	13.0	7.6	4.9	3.2
Oct 1969	17.2		31.9	19.6	11.9	8.9	6.6	2.0
Apr 1972	23.6		40.3	23.7	20.7	12.3	11.8	8.0
Oct 1972	22.8		40.5	20.6	18.3	14.0	11.0	7.1
Apr 1973	21.4		37.0	22.5	16.7	12.2	10.3	7.1
Oct 1973	22.4		40.2	21.6	18.6	11.8	9.7	6.2
Apr 1974	21.7		39.5	21.7	16.5	11.6	10.1	6.0
Oct 1974	20.5		37.4	19.0	17.1	11.8	9.4	6.3
Apr 1975	20.0	46.6	30.4	18.2	14.3	11.3	10.3	6.9
Oct 1975	21.0	45.9	32.2	19.3	15.0	13.5	10.3	6.7
Apr 1976	20.6	45.6	32.2	19.9	15.6	10.0	8.1	7.2
Oct 1976	24.2	54.3	37.5	22.8	17.1	13.2	7.7	11.1
Apr 1977	24.6	54.4	36.8	23.8	19.7	12.1	10.4	8.1
Oct 1977	23.8	58.4	36.3	21.3	16.7	12.0	9.5	8.0
Apr 1978	23.0	51.7	36.8	21.3	15.7	13.5	9.5	7.9
Oct 1978	26.0	57.6	40.9	23.7	17.4	13.4	12.2	7.9
Apr 1979	24.4	53.6	39.3	23.6	16.7	13.1	10.8	5.5
Oct 1979	31.1	65.8	46.7	28.8	20.9	17.2	14.4	10.4
Apr 1980	27.9	60.5	43.9	25.5	19.1	15.5	12.0	11.1
Oct 1980	26.8	59.9	43.0	23.8	17.8	14.6	9.2	9.4
Apr 1981	26.2	57.1	42.3	24.7	17.4	13.3	10.2	9.8
Oct 1981	25.6	58.7	42.7	21.5	14.2	12.7	11.7	5.4
Apr 1982	27.0	59.1	45.2	25.1	15.6	11.2	12.0	7.0
Oct 1982	27.9	58.4	45.0	24.6	17.9	11.9	13.0	9.0

*Prior to 1975, entries listed under '20-24' are for ages '14-24.'

Source: The Labour Force, Table 4.2, annual issues.

Table A-11
Unemployment Rate(%) by Age Group (males only)

Date	Total	14-19	20-24*	25-34	35-44	45-54	55-64	65+
Jul 1968	13.6		29.8	10.5	6.0	5.8	6.4	7.1
Oct 1968	12.0		25.3	11.9	8.2	3.8	4.0	2.2
Apr 1969	10.3		22.3	11.1	6.3	2.5	3.0	2.1
Oct 1969	11.1		22.2	10.2	6.8	5.1	7.3	2.4
Apr 1972	14.3		30.0	10.8	10.6	5.4	6.2	7.0
Oct 1972	14.4		29.8	11.7	8.6	7.4	6.2	5.6
Apr 1973	12.2		23.6	12.0	8.0	4.9	7.2	5.6
Oct 1973	13.4		28.2	10.6	9.1	5.4	5.4	4.8
Apr 1974	12.0		26.6	10.9	6.5	3.5	4.7	3.5
Oct 1974	12.5		27.3	9.2	8.4	5.6	5.1	5.2
Apr 1975	11.1	33.7	15.1	9.7	5.4	3.0	4.4	4.7
Oct 1975	11.9	31.1	19.2	10.2	6.8	5.9	4.6	3.9
Apr 1976	12.0	30.2	19.6	10.8	7.7	3.4	2.9	5.1
Oct 1976	14.7	38.0	24.2	12.5	9.2	7.1	3.2	8.4
Apr 1977	16.1	41.5	23.9	14.5	11.5	6.1	7.2	5.1
Oct 1977	14.6	43.0	22.8	10.8	8.5	5.4	4.6	6.7
Apr 1978	13.1	33.8	21.7	11.3	7.9	4.9	5.4	6.2
Oct 1978	15.7	41.6	24.4	13.5	8.9	5.9	7.2	3.3
Apr 1979	13.9	37.3	24.9	13.2	5.9	5.4	5.0	2.2
Oct 1979	19.9	50.6	33.0	16.4	12.2	7.3	7.2	8.0
Apr 1980	17.4	45.0	29.2	14.1	8.7	6.8	7.2	8.6
Oct 1980	16.0	42.9	26.5	12.6	7.6	7.3	5.8	5.3
Apr 1981	15.1	40.4	24.4	13.1	8.3	4.9	4.8	6.2
Oct 1981	14.1	40.2	25.2	9.6	5.5	6.4	6.1	1.3
Apr 1982	15.3	40.4	26.5	12.9	6.8	4.7	6.6	3.9
Oct 1982	17.0	41.8	28.8	12.6	8.5	5.3	8.5	6.0

*Prior to 1975, entries listed '20-24' are for ages '14-24.'

Source: The Labour Force, Table 4.2, annual issues.

Table A-12
Unemployment Rate(%) by Age Group (females only)

Date	Total	14-19	20-24*	25-34	35-44	45-54	55-64	65+
Jul 1968	32.2		51.6	34.0	29.9	17.4	13.0	6.0
Oct 1968	27.3		47.4	32.2	22.0	11.2	9.1	1.4
Apr 1969	28.1		46.7	35.7	20.7	14.2	7.7	5.6
Oct 1969	25.0		44.0	31.8	17.1	13.5	5.4	1.2
Apr 1972	35.3		53.4	38.1	31.9	20.7	20.8	10.2
Oct 1972	33.3		53.7	31.0	29.2	21.5	18.3	10.3
Apr 1973	32.4		53.0	34.4	25.8	20.7	14.7	9.9
Oct 1973	33.8		55.2	34.8	28.2	19.7	16.5	9.0
Apr 1974	33.8		54.8	34.4	25.9	21.1	18.6	10.2
Oct 1974	30.3		49.6	29.7	26.1	19.1	16.3	8.6
Apr 1975	31.2	65.8	41.3	28.2	24.2	20.7	19.5	11.6
Oct 1975	31.7	65.4	42.5	29.9	23.7	22.0	17.8	12.0
Apr 1976	31.0	64.7	44.8	30.3	24.1	17.7	15.8	11.2
Oct 1976	35.6	74.9	52.2	33.6	24.8	20.2	15.6	17.1
Apr 1977	34.8	72.5	51.7	34.1	28.0	18.4	15.4	13.9
Oct 1977	34.7	78.4	50.6	33.2	25.2	18.7	16.0	10.6
Apr 1978	34.6	75.3	52.1	32.7	23.4	23.4	14.6	11.0
Oct 1978	37.7	78.8	57.0	35.0	25.8	21.4	18.2	16.5
Apr 1979	36.6	74.9	53.7	35.3	27.0	21.4	19.2	12.1
Oct 1979	43.5	82.4	60.2	42.8	29.4	27.6	23.5	15.1
Apr 1980	39.9	80.5	58.8	38.6	29.4	24.7	17.7	15.6
Oct 1980	38.9	81.4	59.3	36.4	27.9	22.3	13.0	17.1
Apr 1981	38.6	78.8	60.3	37.8	26.0	22.1	16.0	16.5
Oct 1981	38.7	81.7	60.4	35.4	23.0	19.6	18.0	13.3
Apr 1982	40.5	81.5	63.8	39.3	24.7	18.1	18.0	13.9
Oct 1982	40.4	79.8	61.6	38.8	27.3	18.9	17.9	15.2

*Prior to 1975, entries listed under '20-24' are for ages '14-24.'

Source: The Labour Force, Table 4.2, annual issues.

Table A-13
Unemployment Rate by Occupation Group (both sexes)

Date	Professional/ Technical	Clerical/ Sales	Self-Employed	Service	Craftsmen	Unskilled /Manual & General	Unspec.	Total Spec.	Total Labor Force
6/68	5.9	15.0	6.0	32.0	17.9	19.3	31.7	16.1	21.3
10/68	2.1	15.6	3.0	29.1	15.5	18.8	0.0	13.5	18.5
4/69	2.9	13.1	2.8	32.6	16.5	12.2	0.0	12.7	18.0
10/69	3.4	9.9	2.9	30.2	14.6	16.9	0.0	12.1	17.2
4/72	2.6	15.8	2.9	32.7	18.8	15.6	62.6	14.6	23.6
10/72	4.7	14.3	4.2	30.2	18.0	20.1	41.5	14.9	22.8
4/73	4.3	14.9	4.3	35.3	18.3	19.4	21.2	15.5	21.4
10/73	6.3	17.5	5.5	32.1	19.1	22.8	62.1	16.5	22.4
4/74	5.5	17.7	4.6	34.0	19.5	18.6	36.4	15.7	21.7
10/74	2.8	15.3	3.6	31.6	19.1	20.4	44.4	14.3	20.5
4/75	4.7	13.7	4.8	30.8	17.3	20.6	18.9	14.4	20.0
10/75	5.8	17.9	4.8	33.6	19.4	17.7	23.8	15.6	21.0
4/76	4.9	16.5	5.4	34.0	21.6	17.3	27.3	15.6	20.6
10/76	8.3	20.5	6.7	38.8	23.1	23.4	7.4	18.6	24.2
4/77	8.5	22.5	6.1	37.0	26.7	26.5	21.1	19.5	24.6
10/77	11.7	20.9	5.5	34.3	24.7	23.4	5.0	18.2	23.8
4/78	8.9	19.8	5.8	33.6	24.2	23.2	7.7	17.2	23.0
10/78	9.7	21.6	6.6	38.3	24.9	23.5	17.9	18.8	26.0
4/79	8.6	20.8	5.4	34.9	24.6	22.1	22.7	17.5	24.4
10/79	12.5	24.8	8.4	40.9	30.1	28.3	35.5	22.2	31.1
4/80	8.5	24.0	6.2	37.5	28.4	23.6	42.5	19.4	27.9
10/80	9.9	22.5	6.8	35.6	25.1	22.2	27.3	18.1	26.8
4/81	7.2	24.8	5.7	35.9	23.9	24.8	13.0	18.1	26.2
10/81	8.6	20.8	5.8	32.0	21.2	23.2	31.8	16.5	25.6
4/82	8.2	24.2	6.8	37.3	22.6	22.1	6.4	18.0	27.0
10/82	8.9	23.0	6.3	36.2	24.5	24.9	29.4	18.3	27.9

Source: The Labour Force, Table 4.5, annual issues.

Table A-14
Unemployment Rate by Occupation Group (males only)

Date	Profes-sional/ Technical	Clerical/ Sales	Self-Employed	Service	Crafts-men	Unskilled /Manual & General	Unspec.	Total Spec.	Total Labor Force
6/68	2.9	9.4	3.7	12.5	15.4	17.3	32.4	11.0	13.5
10/68	1.2	7.9	2.2	10.1	11.6	18.7	0.0	9.3	11.9
4/69	2.7	8.6	2.6	8.1	13.5	11.7	0.0	7.9	10.3
10/69	1.9	8.0	2.8	12.3	11.7	16.0	0.0	8.6	11.1
4/72	0.3	7.8	1.5	11.5	16.7	14.5	51.5	9.6	14.3
10/72	1.7	8.5	2.0	10.1	16.3	17.3	10.4	9.9	14.4
4/73	2.2	5.5	2.0	13.3	15.2	15.9	16.5	9.2	12.2
10/73	1.3	9.0	2.4	8.8	15.8	17.9	58.3	9.9	13 4
4/74	1.3	9.2	1.8	5.9	16.7	13.9	0.0	8.7	12.0
10/74	2.0	5.9	2.0	8.9	16.8	17.0	47.0	9.0	12.5
4/75	1.4	7.1	2.5	9.3	14.4	14.6	8.3	8.3	11.1
10/75	5.0	10.0	2.4	11.5	16.7	12.9	8.3	9.2	11.9
4/76	4.0	7.9	2.8	10.2	18.4	13.4	26.7	9.4	12.1
10/76	6.1	7.9	4.2	12.1	21.0	19.5	5.3	11.7	14.7
4/77	5.5	13.2	4.0	15.1	23.9	22.3	15.4	13.3	16.1
10/77	6.9	10.7	3.3	9.8	20.5	18.1	0.0	11.0	14.6
4/78	6.7	9.6	3.3	7.4	21.5	17.0	4.5	10.3	13.1
10/78	5.0	12.4	3.4	10.6	22.0	18.3	16.7	11.4	15.7
4/79	5.1	9.1	3.2	9.0	21.4	15.0	0.0	9.9	13.9
10/79	5.0	14.4	5.6	12.3	27.1	24.3	14.9	14.5	19.9
4/80	3.4	14.7	4.0	12.7	24.5	19.4	11.1	12.0	17.4
10/80	5.4	13.7	3.7	12.9	22.1	18.0	29.4	11.2	16.0
4/81	3.3	12.4	3.4	11.1	20.8	19.0	6.7	10.6	15.1
10/81	4.4	10.7	3.3	10.4	17.6	16.9	14.3	9.4	14.2
4/82	4.8	12.2	3.9	12.2	19.9	16.3	2.9	10.3	15.3
10/82	3.2	13.4	3.8	13.2	21.3	19.4	23.1	11.2	17.0

Source: The Labour Force, Table 4.5, annual issues.

Table A-15
Unemployment Rate by Occupation Group (females only)

Date	Professional/ Technical	Clerical/ Sales	Self-Employed	Service	Craftsmen	Unskilled /Manual & General	Unspec.	Total Spec.	Total Labor Force
6/68	8.7	20.0	10.7	35.2	31.6	26.2	30.8	24.0	32.1
10/68	3.1	21.5	4.1	32.9	33.7	19.3	0.0	19.6	27.3
4/69	3.2	16.7	3.0	37.2	30.1	13.8	0.0	19.5	28.1
10/69	4.7	11.4	3.2	33.6	16.0	31.1	0.0	16.8	24.9
4/72	4.5	21.3	5.5	37.3	31.5	19.3	79.2	21.9	35.3
10/72	7.0	18.4	8.2	34.1	27.6	31.3	80.0	21.8	33.3
4/73	5.7	20.6	8.1	40.6	34.0	29.8	29.3	23.9	32.3
10/73	10.1	23.0	10.9	37.3	41.1	39.0	67.1	25.5	33.8
4/74	8.9	22.5	10.0	40.6	36.2	29.7	80.0	25.2	33.8
10/74	3.3	20.3	6.8	37.0	31.5	28.7	42.1	21.2	30.3
4/75	7.4	18.3	9.3	36.7	36.3	35.6	38.5	22.9	31.2
10/75	6.4	22.7	9.5	39.5	36.4	26.9	44.4	23.8	31.7
4/76	5.6	21.5	9.4	40.3	41.1	24.5	33.3	23.8	31.0
10/76	10.1	27.7	11.6	45.6	36.8	30.2	12.5	27.5	35.6
4/77	11.0	28.3	10.2	43.6	42.6	33.2	33.3	27.5	34.8
10/77	15.3	27.3	9.9	40.8	48.4	31.2	33.3	27.1	34.7
4/78	10.6	26.1	10.9	41.6	40.6	32.3	25.0	26.0	34.6
10/78	13.2	27.0	12.5	45.9	41.8	31.4	20.0	28.0	37.7
4/79	11.3	27.2	10.0	43.1	41.2	32.7	55.6	27.2	36.6
10/79	17.8	30.8	14.1	49.7	44.6	35.1	55.6	32.0	43.5
4/80	12.0	29.4	11.1	45.4	50.0	30.5	68.2	28.9	39.9
10/80	12.9	27.8	13.4	42.3	39.8	29.2	20.0	26.9	38.9
4/81	10.2	31.8	10.2	43.5	41.7	34.1	25.0	27.5	38.6
10/81	12.3	26.3	10.9	38.9	41.6	34.7	62.5	25.9	38.7
4/82	11.0	31.4	12.1	44.9	38.0	35.3	15.4	28.1	40.5
10/82	12.8	28.6	11.5	43.3	45.0	35.3	50.0	27.6	40.4

Source: The Labour Force, Table 4.5, annual issues.

Table A-16
Distribution of Unemployment by Occupational Group (both sexes)

Date	Professional/ Technical	Clerical/ Sales	Self-Employed	Service	Craftsmen	Unskilled /Manual & General	Unspec.	No Prior Employment
6/68	1.09	6.2	8.33	23.2	12.7	18.2	1.23	28.7
10/68	0.52	7.8	5.09	23.1	12.0	20.4	0.00	31.3
4/69	0.66	6.1	5.15	28.9	14.2	11.4	0.00	33.4
10/69	0.91	5.5	5.70	23.7	12.5	17.6	0.00	33.8
4/72	0.63	6.4	3.42	20.2	12.7	10.0	2.00	44.5
10/72	1.13	6.4	5.36	20.4	12.4	12.7	0.76	42.0
4/73	1.13	7.3	6.10	25.8	13.5	13.3	0.35	32.2
10/73	1.60	9.1	7.36	22.2	13.7	14.1	0.45	31.7
4/74	1.58	8.6	6.44	23.7	14.3	12.5	0.22	32.7
10/74	0.85	7.8	5.82	21.8	14.3	12.8	0.96	35.2
4/75	1.78	7.9	7.23	22.7	12.7	14.8	0.41	33.0
10/75	2.03	10.3	6.66	23.7	13.3	13.1	0.27	30.7
4/76	1.68	9.7	7.99	23.7	15.0	13.1	0.33	28.3
10/76	2.69	9.4	8.35	22.5	13.0	15.5	0.09	28.4
4/77	2.61	10.7	7.55	21.0	15.0	17.2	0.18	25.5
10/77	3.73	10.4	6.97	20.7	13.7	15.5	0.05	29.2
4/78	2.96	10.6	8.02	19.9	12.9	15.3	0.09	30.5
10/78	2.60	9.1	8.03	20.3	12.5	13.0	0.28	34.3
4/79	2.65	9.2	6.97	21.0	13.0	12.7	0.22	34.0
10/79	2.92	9.1	7.97	19.1	11.6	12.4	0.37	36.8
4/80	2.18	9.9	6.92	20.1	12.0	10.6	0.59	37.7
10/80	2.58	9.6	8.17	17.9	10.7	11.3	0.22	39.4
4/81	1.89	10.6	7.17	19.2	10.3	12.7	0.11	37.8
10/81	2.41	9.0	7.36	17.4	9.3	11.6	0.53	42.3
4/82	2.17	9.6	8.25	19.8	9.4	10.2	0.11	40.8
10/82	2.35	9.1	7.23	18.0	9.5	11.5	0.34	42.0

Source: Calculated from The Labour Force, Table 4.4, annual issues.

Table A-17
Distribution of Unemployment by Occupational Group (males only)

Date	Profes-sional/ Technical	Clerical/ Sales	Self-Employed	Service	Crafts-men	Unskilled /Manual & General	Unspec.	No Prior Employment
6/68	0.69	5.03	9.3	3.49	24.8	34.0	1.92	21.3
10/68	0.41	4.65	6.5	3.63	20.1	41.2	0.00	24.5
4/69	0.92	5.54	9.6	3.44	29.4	25.4	0.00	25.1
10/69	0.64	5.34	9.6	4.25	22.1	33.5	0.00	24.3
4/72	0.10	3.77	3.4	3.78	28.5	21.1	2.88	4.3
10/72	0.51	4.41	4.6	3.16	27.0	25.1	0.31	35.1
4/73	0.77	3.27	5.7	6.11	30.0	26.3	0.56	27.8
10/73	0.42	5.52	6.1	3.30	29.6	25.4	0.67	29.1
4/74	0.54	5.32	5.4	2.57	34.2	21.6	0.00	30.5
10/74	0.73	3.19	6.3	3.53	31.8	22.3	1.42	30.4
4/75	0.78	5.35	7.9	4.74	29.8	24.2	0.38	27.5
10/75	2.50	7.14	7.0	5.54	32.1	20.5	0.36	25.8
4/76	1.91	5.19	8.5	4.65	33.9	20.4	0.69	24.6
10/76	2.76	4.03	10.5	4.31	31.0	24.6	0.14	22.7
4/77	2.13	6.70	9.2	5.56	31.8	24.6	0.25	19.9
10/77	2.89	5.23	8.4	3.75	29.2	21.7	0.00	27.4
4/78	3.22	6.41	9.9	3.36	32.0	21.7	0.15	23.8
10/78	1.79	5.94	8.4	3.77	29.4	19.0	0.51	31.1
4/79	2.24	4.65	9.2	4.25	30.9	16.8	0.00	31.6
10/79	1.45	5.73	10.6	3.99	26.0	20.0	0.40	32.6
4/80	1.09	6.63	9.2	4.97	26.4	16.3	0.11	35.4
10/80	1.75	7.03	9.5	4.70	24.8	18.1	0.59	33.5
4/81	1.24	6.33	9.2	4.59	8.8	19.7	0.12	33.5
10/81	1.94	5.55	9.5	4.65	22.2	18.5	0.52	37.0
4/82	1.89	6.00	10.2	4.95	23.3	17.3	0.12	36.0
10/82	1.05	5.97	9.0	4.74	22.0	18.0	0.63	38.8

Source: Calculated from The Labour Force, Table 4.4, annual issues.

Table A-18
Distribution of Unemployment by Occupational Group (females only)

Date	Professional/ Technical	Clerical/ Sales	Self-Employed	Service	Craftsmen	Unskilled /Manual & General	Unspec.	No Prior Employment
6/68	1.34	6.9	7.83	35.1	5.69	9.1	0.83	33.4
10/68	0.60	9.5	3.95	34.4	7.42	8.5	0.00	35.3
4/69	0.56	6.4	2.85	41.3	6.95	4.7	0.00	37.4
10/69	1.09	5.6	3.65	34.9	3.90	16.3	0.00	39.4
4/72	0.89	7.7	3.43	28.7	4.60	4.4	1.56	48.8
10/72	1.45	7.5	5.83	29.7	4.49	6.0	1.00	44.1
4/73	1.29	9.3	6.28	34.9	6.07	7.5	0.25	34.4
10/73	2.21	10.9	7.92	31.7	5.71	8.4	0.33	32.9
4/74	2.03	10.0	6.98	32.8	5.50	8.5	0.32	33.5
10/74	0.91	10.1	5.73	31.1	5.23	8.1	0.72	37.7
4/75	2.23	9.2	7.19	30.9	4.93	10.5	0.43	35.7
10/75	1.82	11.7	6.72	31.9	5.01	9.9	0.24	33.0
4/76	1.56	11.9	6.85	32.7	5.92	9.6	0.16	30.1
10/76	2.02	12.1	7.26	31.5	4.11	11.0	0.07	31.2
4/77	2.89	13.0	6.60	29.7	5.63	13.2	0.14	28.8
10/77	4.08	12.3	6.28	28.9	5.99	12.4	0.07	29.8
4/78	2.82	12.4	7.25	27.1	4.52	12.4	0.07	33.4
10/78	2.98	10.6	7.85	28.1	4.58	10.0	0.18	35.8
4/79	2.82	11.2	5.94	28.5	5.04	10.9	0.31	35.2
10/79	3.65	10.9	6.56	27.0	4.19	8.5	0.35	39.0
4/80	2.69	11.5	5.88	27.5	4.84	7.8	0.83	38.8
10/80	3.00	10.7	7.68	24.0	4.24	8.2	0.05	42.2
4/81	2.17	12.4	6.31	25.6	3.82	9.7	0.11	39.7
10/81	2.61	10.4	6.46	22.7	3.90	8.7	0.54	44.5
4/82	2.29	11.0	7.30	26.2	3.31	7.1	0.10	42.7
10/82	3.00	10.7	6.37	24.5	3.45	8.3	0.20	43.6

Source: Calculated from The Labour Force, Table 4.4, annual issues.

Table A-19
Females as Percent of Total Unemployment by Occupational Group

Date	Total	Professional/ Technical	Clerical /Sales	Self-Employed	Service	Craftsmen	Unskilled /Manual & General	Unspec.	No Prior Employment
6/68	62.4	76.8	69.5	58.7	94.3	28.0	31.2	42.1	72 6
10/68	63.2	73.2	77.8	49.1	94.2	39.0	26.2	0.0	71.3
4/69	67.5	57.0	70.5	37.3	96.5	32.9	27.6	0.0	75.6
10/69	63.6	75.7	65.0	40.8	93.6	19.8	58.9	0.0	74.0
4/72	65.9	93.8	79.9	65.9	93.5	24.0	28.9	51.4	72.4
10/72	64.9	83.3	76.3	70.6	94.5	23.6	30.5	85.7	68.1
4/73	68.4	77.9	86.5	70.4	92.5	30.8	38.7	50.0	73.2
10/73	66.8	92.4	80.0	71.9	95.3	27.8	39.8	50.0	69.4
4/74	69.6	89.5	80.8	75.4	96.5	26.8	47.0	100.0	71.4
10/74	66.3	70.4	85.3	65.2	94.4	24.3	42.1	50.0	71.0
4/75	68.7	86.0	79.7	68.3	93.6	26.6	48.8	71.4	74.2
10/75	69.1	61.9	78.5	69.7	93.0	26.1	52.2	60.0	74.2
4/76	67.6	62.8	83.1	57.9	93.3	26.7	49.6	33.3	71.9
10/76	66.7	65.1	85.3	58.0	93.5	21.0	47.5	50.0	73.5
4/77	64.1	71.0	77.8	56.0	90.6	24.2	49.3	50.0	72.1
10/77	67.4	73.7	79.9	60.7	94.0	29.5	53.7	100.0	68.9
4/78	69.5	66.2	81.2	62.8	94.7	24.3	56.6	50.0	76.0
10/78	68.0	77.9	79.3	66.5	94.1	24.9	52.6	42.9	71.0
4/79	69.3	73.9	84.6	59.0	93.8	26.9	59.8	100.0	71.6
10/79	66.1	82.5	79.0	54.4	93.3	23.8	45.3	63.6	70.1
4/80	66.8	82.5	77.9	56.7	91.6	27.0	49.2	93.7	68.8
10/80	68.2	79.2	76.4	64.1	91.4	26.9	49.5	16.7	73.1
4/81	69.6	80.0	81.6	61.3	92.7	25.7	53.0	66.7	73.0
10/81	70.4	76.3	81.3	61.8	91.8	29.4	52.8	71.4	74.1
4/82	70.0	74.0	80.8	62.0	92.6	24.7	48.8	66.7	73.3
10/82	67.3	85.8	79.5	59.3	91.5	24.4	48.6	40.0	69.9

Source: Calculated from The Labour Force, Table 4.4, annual issues.

Table A-20
Employment Distribution (%) by Industry Group (both sexes)

Date	Total Employed	Agri-culture /Mining	Manu-facture	Constr-uction	Trans-port/ Commun.	Com-merce	Public Admin.	Other Service	Unspec.
6/68	100.0	37.7	11.6	6.50	4.65	11.2	9.7	18.2	0.47
10/68	100.0	38.0	10.7	7.02	4.19	11.9	9.6	18.5	0.00
4/69	100.0	39.0	11.2	6.91	3.59	11.2	9.0	19.1	0.00
10/69	100.0	37.8	11.2	7.27	2.55	13.5	10.0	17.6	0.00
4/72	100.0	34.3	13.1	6.47	4.26	13.0	11.3	16.8	0.00
10/72	100.0	32.6	12.1	6.68	4.29	14.3	10.8	18.9	0.29
4/73	100.0	33.9	12.4	6.23	4.31	14.3	10.9	16.8	1.08
10/73	100.0	32.4	12.9	7.00	4.09	13.8	11.8	17.6	0.42
4/74	100.0	36.2	12.7	6.21	4.41	12.3	10.9	16.6	0.69
10/74	100.0	36.0	12.2	6.19	3.81	11.7	12.7	17.1	0.35
4/75	100.0	33.4	11.1	6.67	4.69	12.1	14.8	16.7	0.56
10/75	100.0	35.3	10.6	6.40	4.56	11.9	14.0	16.9	0.38
4/76	100.0	37.1	11.0	5.72	4.42	11.1	15.3	14.9	0.45
10/76	100.0	36.3	11.0	5.35	4.77	12.4	15.7	13.8	0.59
4/77	100.0	36.3	11.4	4.95	4.07	12.7	16.3	13.7	0.53
10/77	100.0	36.6	10.7	4.61	4.49	12.9	16.0	14.1	0.64
4/78	100.0	37.5	11.1	4.31	3.89	13.3	16.0	13.5	0.39
10/78	100.0	36.7	11.1	4.99	4.39	13.0	14.7	14.2	0.84
4/79	100.0	36.0	10.6	5.22	4.06	12.5	15.5	15.7	0.49
10/79	100.0	33.4	10.8	3.99	4.48	13.7	16.5	15.8	1.25
4/80	100.0	37.3	10.4	3.47	4.82	12.7	15.2	15.1	0.92
10/80	100.0	38.0	10.9	3.58	4.72	12.6	15.0	14.9	0.37
4/81	100.0	38.2	10.7	3.50	4.28	13.5	14.1	15.3	0.40
10/81	100.0	36.5	11.1	4.22	4.52	13.6	14.0	15.5	0.55
4/82	100.0	36.4	11.6	4.25	4.36	13.1	13.8	15.5	0.89
10/82	100.0	35.4	11.3	4.54	4.44	14.1	13.8	15.7	0.67

Source: Calculated from The Labour Force, Table 3.5, annual issues.

Table A-21
Employment Distribution (%) by Industry Group (males only)

Date	Total Employed	Agri-culture /Mining	Manu-facture	Constr-uction	Trans-port/ Commun.	Com-merce	Public Admin.	Other Service	Unspec.
6/68	100.0	46.3	13.3	10.0	6.53	7.45	9.4	6.61	0.00
10/68	100.0	46.9	12.5	11.0	5.65	7.54	9.4	6.99	0.00
4/69	100.0	48.5	12.6	10.9	4.99	7.39	8.3	7.37	0.00
10/69	100.0	46.9	12.9	11.8	2.96	9.21	8.7	7.48	0.00
4/72	100.0	44.4	15.1	10.1	5.33	7.07	9.7	7.36	0.93
10/72	100.0	43.2	14.0	10.7	5.46	8.27	9.5	8.53	0.29
4/73	100.0	43.8	14.7	9.9	5.69	7.77	9.2	7.75	1.13
10/73	100.0	42.5	15.7	10.9	4.94	7.78	9.8	7.99	0.47
4/74	100.0	46.5	14.9	9.8	5.58	6.61	9.0	6.88	0.75
10/74	100.0	46.9	14.1	10.0	4.78	6.18	9.9	7.83	0.31
4/75	100.0	42.0	13.1	10.4	5.9[illegible]	7.01	12.3	8.62	0.66
10/75	100.0	43.6	12.6	10.3	5.66	7.28	11.3	8.75	0.44
4/76	100.0	45.1	13.4	9.1	5.59	6.79	12.0	7.43	0.62
10/76	100.0	44.7	13.4	8.5	5.82	6.59	12.6	7.62	0.74
4/77	100.0	44.7	13.9	7.8	5.15	7.08	13.4	7.47	0.53
10/77	100.0	44.6	13.3	7.5	6.18	7.22	13.4	7.22	0.59
4/78	100.0	45.7	13.8	6.8	4.81	8.06	13.1	7.11	0.51
10/78	100.0	45.0	13.8	8.0	5.39	7.62	11.4	7.95	0.87
4/79	100.0	45.1	13.0	8.3	4.98	6.58	12.4	8.91	0.62
10/79	100.0	42.8	13.3	6.2	5.44	7.87	12.9	9.94	1.45
4/80	100.0	46.9	13.0	5.5	5.87	7.17	12.0	8.59	0.98
10/80	100.0	47.4	12.9	5.8	6.16	7.36	11.4	8.70	0.36
4/81	100.0	46.7	13.6	5.6	5.76	7.60	11.5	8.80	0.47
10/81	100.0	46.2	13.8	6.7	5.63	7.46	10.6	8.93	0.68
4/82	100.0	45.1	14.4	6.7	5.59	7.29	10.7	9.28	0.92
10/82	100.0	44.9	14.1	7.2	5.52	7.90	10.4	9.19	0.67

Source: Calculated from The Labour Force, Table 3.5, annual issues.

Table A-22
Employment Distribution (%) by Industry Group (females only)

Date	Total Employed	Agri-culture /Mining	Manu-facture	Constr-uction	Trans-port/ Commun.	Com-merce	Public Admin.	Other Service	Unspec.
6/68	100.0	22.3	8.46	0.29	1.27	18.0	10.1	38.9	1.3
10/68	100.0	23.6	7.73	0.62	1.81	19.1	9.9	37.3	0.0
4/69	100.0	23.5	8.94	0.48	1.30	17.5	10.0	38.4	0.0
10/69	100.0	24.0	8.68	0.44	1.93	20.1	12.0	32.9	0.0
4/72	100.0	17.4	9.76	0.36	2.46	23.0	13.8	32.6	-1.6
10/72	100.0	15.5	8.97	0.21	2.42	24.1	12.9	35.6	0.3
4/73	100.0	18.5	8.72	0.44	2.17	24.5	13.7	31.0	1.0
10/73	100.0	15.7	8.39	0.55	2.68	23.8	15.1	33.4	0.3
4/74	100.0	19.1	9.08	0.37	2.48	21.7	14.0	32.6	0.6
10/74	100.0	19.3	9.26	0.24	2.32	20.1	17.0	31.4	0.4
4/75	100.0	19.3	7.72	0.54	2.64	20.5	19.0	30.0	0.4
10/75	100.0	22.5	7.54	0.41	2.88	18.8	18.3	29.3	0.3
4/76	100.0	24.8	7.18	0.41	2.59	17.8	20.5	26.5	0.2
10/76	100.0	22.8	7.22	0.31	3.10	21.8	20.7	23.7	0.3
4/77	100.0	23.2	7.54	0.53	2.40	21.5	20.8	23.5	0.5
10/77	100.0	24.3	6.79	0.18	1.91	21.5	20.0	24.6	0.7
4/78	100.0	24.7	6.99	0.39	2.46	21.4	20.4	23.4	0.2
10/78	100.0	24.1	7.00	0.36	2.85	21.3	19.8	23.7	0.8
4/79	100.0	21.6	6.68	0.36	2.60	21.8	20.3	26.3	0.3
10/79	100.0	18.6	6.89	0.47	2.96	22.9	22.1	25.1	0.9
4/80	100.0	22.4	6.39	0.26	3.18	21.5	20.2	25.3	0.8
10/80	100.0	23.4	7.71	0.21	2.49	20.7	20.6	24.6	0.4
4/81	100.0	25.1	6.27	0.24	1.99	22.6	18.2	25.3	0.3
10/81	100.0	21.0	6.88	0.17	2.74	23.5	19.3	26.1	0.3
4/82	100.0	22.2	7.08	0.28	2.36	22.6	19.0	25.7	0.8
10/82	100.0	20.4	6.99	0.24	2.72	24.0	19.3	26.2	0.7

Source: Calculated from The Labour Force, Table 3.5, annual issues.

Table A-23
Females as Percent of Total Employment by Industry

Date	Total Employed	Agri-culture /Mining	Manu-facture	Constr-uction	Trans-port/ Commun.	Com-merce	Public Admin.	Other Service	Unspec.
6/68	35.74	21.16	26.13	1.613	9.77	57.39	37.43	76.61	100.00
10/68	38.19	23.69	27.65	3.365	16.53	61.02	39.40	76.71	0.00
4/69	37.93	22.82	30.26	2.607	13.70	59.12	42.23	76.09	0.00
10/69	39.86	25.31	30.77	2.423	30.19	59.10	47.76	74.45	0.00
4/72	37.33	18.96	27.81	2.067	21.57	65.94	45.77	72.48	0.00
10/72	38.40	18.28	28.51	1.199	21.64	64.51	45.93	72.23	38.89
4/73	39.04	21.26	27.50	2.771	19.64	66.89	48.85	71.95	36.23
10/73	37.76	18.29	24.53	2.989	24.80	65.00	48.43	71.73	30.77
4/74	37.76	19.97	26.99	2.256	21.20	66.62	48.57	74.20	31.82
10/74	39.32	21.04	29.87	1.496	23.89	67.81	52.68	72.20	47.83
4/75	37.89	21.88	2[illegible]6	3.084	21.32	64.03	48.61	67.96	26.32
10/75	39.56	25.27	28.06	2.511	25.00	62.89	51.51	68.63	30.77
4/76	39.01	26.01	25.49	2.778	22.88	62.63	52.31	69.54	16.13
10/76	38.54	24.20	25.20	2.204	25.00	67.46	50.89	66.13	22.50
4/77	39.17	25.04	25.90	4.154	23.10	66.17	50.09	66.95	38.89
10/77	39.59	26.31	25.10	1.553	16.88	66.15	49.46	69.04	44.44
4/78	39.23	25.84	24.59	3.571	24.82	63.16	50.13	68.01	21.43
10/78	39.47	25.93	24.81	2.857	25.65	64.59	53.20	66.03	37.29
4/79	38.74	23.23	24.47	2.681	24.83	67.68	50.86	65.15	22.86
10/79	38.72	21.60	24.62	4.528	25.59	64.76	51.92	61.52	28.92
4/80	38.93	23.34	23.84	2.869	25.66	65.62	51.73	65.22	35.38
10/80	39.21	24.13	27.87	2.273	20.69	64.40	53.85	64.58	40.74
4/81	39.28	25.77	23.02	2.692	18.24	65.84	50.57	65.08	30.00
10/81	38.36	22.05	23.70	1.558	23.26	66.22	53.15	64.49	23.81
4/82	38.04	23.17	23.18	2.484	20.61	65.56	52.10	63.01	35.82
10/82	38.42	22.08	23.66	2.041	23.51	65.41	53.74	63.97	39.22

Source: Calculated from The Labour Force, Table 3.5, annual issues.

Table A-24
Percent Distribution of Employment by Occupation Group (both sexes)

Date	Total	Professional/ Technical	Clerical /Sales	Self-Employed	Service	Craftsmen/Operative	Unskilled /Manual& General	Unspec.
6/68	100.0	4.70	9.5	35.3	13.4	15.7	20.6	0.72
10/68	100.0	5.47	9.5	37.3	12.8	14.9	20.0	0.00
4/69	100.0	4.87	8.9	39.3	13.1	15.8	18.0	0.00
10/69	100.0	5.40	10.4	39.7	11.4	15.2	18.0	0.00
4/72	100.0	7.24	10.5	35.4	12.9	16.9	16.8	0.37
10/72	100.0	6.77	11.3	36.1	13.9	16.6	14.9	0.32
4/73	100.0	6.85	11.4	37.0	12.9	16.4	15.1	0.39
10/73	100.0	6.87	12.4	36.5	13.6	16.8	13.8	0.08
4/74	100.0	7.51	11.1	37.0	12.7	16.3	15.2	0.11
10/74	100.0	7.64	11.2	40.2	12.2	15.6	12.9	0.31
4/75	100.0	9.03	12.5	35.9	12.7	15.2	14.2	0.44
10/75	100.0	8.75	12.6	35.1	12.5	14.7	16.2	0.23
4/76	100.0	8.45	12.7	36.3	11.9	14.1	16.3	0.23
10/76	100.0	9.48	11.7	37.1	11.3	13.8	16.2	0.37
4/77	100.0	9.17	12.0	37.9	11.7	13.4	15.6	0.22
10/77	100.0	8.78	12.2	37.4	12.4	13.0	15.9	0.27
4/78	100.0	9.05	12.8	38.9	11.8	12.1	15.1	0.32
10/78	100.0	8.52	11.6	39.9	11.5	13.3	14.8	0.43
4/79	100.0	9.08	11.3	39.4	12.7	12.8	14.4	0.24
10/79	100.0	9.23	12.5	39.2	12.5	12.2	14.1	0.26
4/80	100.0	9.08	12.1	40.5	13.0	11.7	13.3	0.34
10/80	100.0	8.61	12.1	41.0	11.8	11.7	14.5	0.22
4/81	100.0	8.64	11.4	42.1	12.2	11.7	13.7	0.27
10/81	100.0	8.80	11.8	41.1	12.7	11.9	13.3	0.39
4/82	100.0	9.00	11.1	41.8	12.3	11.9	13.3	0.58
10/82	100.0	9.31	11.8	41.6	12.3	11.3	13.4	0.32

Source: Calculated from The Labour Force, Table 3.4, annual issues.

Table A-25
Percent Distribution of Employment by Occupation Group (males only)

Date	Total	Profes-sional/ Technical	Clerical /Sales	Self-Employed	Service	Crafts-men/Oper-ative	Unskilled /Manual& General	Unspec.
6/68	100.0	3.62	7.56	37.7	3.81	21.3	25.4	0.63
10/68	100.0	4.51	7.32	38.9	4.37	20.7	24.2	0.00
4/69	100.0	3.80	6.76	41.3	4.49	21.6	22.0	0.00
10/69	100.0	4.13	7.67	41.7	3.78	20.8	21.9	0.00
4/72	100.0	5.41	7.44	37.4	4.85	23.7	20.8	0.45
10/72	100.0	4.99	7.98	38.3	4.73	23.3	20.2	0.44
4/73	100.0	4.73	7.80	38.9	5.53	23.3	19.3	0.44
10/73	100.0	4.94	8.63	38.6	5.30	24.4	18.0	0.08
4/74	100.0	5.63	7.16	40.0	5.58	23.2	18.2	0.15
10/74	100.0	5.11	7.27	44.2	5.16	22.5	15.5	0.25
4/75	100.0	6.82	8.73	38.3	5.78	22.1	17.7	0.52
10/75	100.0	6.41	8.68	38.6	5.75	21.6	18.7	0.27
4/76	100.0	6.30	8.33	40.6	5.63	20.7	18.1	0.28
10/76	100.0	.33	8.10	41.2	5.39	20.1	17.5	0.43
4/77	100.0	7.03	8.46	42.4	5.99	19.4	16.5	0.27
10/77	100.0	6.68	7.46	42.0	5.89	19.4	16.8	0.38
4/78	100.0	6.77	9.09	43.8	6.33	17.6	16.0	0.46
10/78	100.0	6.33	7.81	44.3	5.93	19.4	15.8	0.42
4/79	100.0	6.74	7.49	44.8	6.95	18.3	15.3	0.32
10/79	100.0	6.86	8.46	44.6	7.06	17.3	15.4	0.27
4/80	100.0	6.52	8.10	46.4	7.19	17.1	14.2	0.40
10/80	100.0	5.85	8.43	47.0	6.05	16.6	15.7	0.27
4/81	100.0	6.45	7.95	46.7	6.54	6.0	15.0	0.31
10/81	100.0	6.97	7.67	45.9	6.63	17.2	15.1	0.51
4/82	100.0	6.76	7.80	45.3	6.44	16.9	16.1	0.70
10/82	100.0	6.48	7.90	46.8	6.38	16.6	15.4	0.43

Source: Calculated from The Labour Force, Table 3.4, annual issues.

Table A-26
Percent Distribution of Employment by Occupation Group (females only)

Date	Total	Professional/ Technical	Clerical /Sales	Self-Employed	Service	Craftsmen/Operative	Unskilled /Manual & General	Unspec.
6/68	100.0	6.65	13.11	30.90	30.51	5.819	12.13	0.880
10/68	100.0	7.03	13.08	34.73	26.38	5.479	13.30	0.000
4/69	100.0	6.61	12.48	35.98	27.26	6.307	11.36	0.000
10/69	100.0	7.31	14.42	36.64	22.86	6.790	11.97	0.000
4/72	100.0	10.30	15.54	32.11	26.33	5.464	10.03	0.224
10/72	100.0	9.63	16.60	32.61	28.61	5.880	6.55	0.125
4/73	100.0	10.16	17.08	33.99	24.35	5.625	8.48	0.321
10/73	100.0	10.06	18.70	33.06	27.23	4.176	6.69	0.085
4/74	100.0	10.60	17.57	32.10	24.50	4.950	10.23	0.041
10/74	100.0	11.54	17.19	34.14	23.00	4.945	8.79	0.392
4/75	100.0	12.65	18.59	31.78	24.14	3.919	8.61	0.310
10/75	100.0	12.34	18.51	29.70	22.68	4.064	12.52	0.185
4/76	100.0	11.81	19.50	29.64	21.76	3.812	13.32	0.148
10/76	100.0	12.92	17.42	30.57	20.79	3.898	14.0	0.267
4/77	100.0	12.50	17.56	30.99	20.53	4.053	14.22	0.150
10/77	100.0	11.99	17.38	30.38	22.25	3.396	14.49	0.108
4/78	100.0	12.59	18.51	31.35	20.15	3.495	13.80	0.107
10/78	100.0	11.87	17.29	33.27	20.06	3.861	13.24	0.433
4/79	100.0	12.79	17.38	30.85	21.71	4.155	13.01	0.108
10/79	100.0	12.96	18.88	30.79	21.06	4.009	12.07	0.234
4/80	100.0	13.11	18.33	31.26	21.99	3.214	11.83	0.256
10/80	100.0	12.90	17.74	31.62	20.82	4.082	12.69	0.138
4/81	100.0	12.02	16.78	34.93	20.92	3.356	11.78	0.205
10/81	100.0	11.74	18.38	33.34	22.49	3.458	10.37	0.205
4/82	100.0	12.64	16.39	36.11	21.91	3.681	8.89	0.382
10/82	100.0	13.83	18.13	33.21	21.71	2.856	10.32	0.138

Source: Calculated from The Labour Force, Table 3.4, annual issues.

Table A-27
Females as Percent of Total Employment by Occupational Group

Date	Professional/ Technical	Clerical /Sales	Self-Employed	Service	Craftsmen/Operative	Unskilled /Manual & General
6/68	50.557621	49.084249	31.287129	81.675393	13.207547	20.999153
10/68	49.074074	52.482270	35.533454	78.863937	14.058957	25.379427
4/69	51.515152	53.027523	34.766277	78.776529	15.113872	23.952641
10/69	54.005935	55.486862	36.818732	80.028129	17.789474	26.559715
4/72	53.117783	55.431310	33.836715	76.363636	12.079208	22.355289
10/72	54.609929	56.453901	34.663121	79.032258	13.570741	16.827438
4/73	57.894737	58.379121	35.877863	73.812424	13.409962	21.933472
10/73	55.269321	56.791721	34.185022	75.710900	9.404990	18.362573
4/74	53.319502	59.831461	32.730332	72.705018	11.439466	25.409836
10/74	59.393939	60.497238	33.384497	74.271229	12.462908	26.826347
4/75	53.094463	56.485849	33.579336	71.824480	9.758454	22.910217
10/75	55.759599	58.255814	33.472107	72.065728	10.956175	30.513051
4/76	54.529915	59.954494	31.836248	71.186441	10.531697	31.971581
10/76	52.484472	57.430730	31.746032	70.741222	10.851064	33.515483
4/77	53.365385	57.212714	32.015504	68.805131	11.855104	35.754717
10/77	54.071661	56.191589	32.136034	71.213873	10.307018	36.158702
4/78	54.559505	56.783370	31.607335	67.261905	11.355736	35.833333
10/78	55.016722	59.062885	32.893329	68.811881	11.493018	35.288462
4/79	54.545455	59.456119	30.315939	66.408840	12.540894	34.917556
10/79	54.411765	58.504222	30.399693	65.338164	12.747525	33.049041
4/80	56.181534	59.058824	30.024553	66.081229	10.692588	34.615385
10/80	58.740157	57.575758	30.244871	68.957617	13.657407	34.235075
4/81	54.672897	57.714959	32.598274	67.439294	11.290323	33.758587
10/81	51.194030	59.866221	31.118211	67.871901	11.111111	30.000000
4/82	53.450808	56.324582	32.849021	67.631297	11.790879	25.371655
10/82	57.102273	59.280090	30.683625	67.995690	9.673660	29.556650

Source: Calculated from The Labour Force, Table 3.4, annual issues.

Table A-28
Self-Employment as a Percent of Total Employment by Industry

Indus.	Sex	1943	1960	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Agr/	M	46.4	53.4	74.0	77.8	71.9	73.1	75.6	77.0	80.6	79.2	75.9	79.5
min	F	29.7	41.1	73.9	72.9	58.7	51.7	50.1	61.1	59.1	57.0	61.5	59.6
Mfg	M	43.3	29.7	13.0	14.1	13.0	13.7	11.2	16.8	16.4	15.8	20.7	21.2
	F	74.3	57.1	19.3	19.5	21.1	13.2	12.2	16.0	13.0	16.1	12.9	14.6
Cons	M	18.5	11.4	5.2	11.4	12.7	13.8	7.5	9.4	19.4	16.3	19.0	13.4
truc	F		9.9	7.7							33.3		14.3
Tran/	M		12.7	11.0	16.5	15.0	25.2	26.4	25.8	23.1	29.7	26.5	24.9
Com	F		1.0				1.2			1.3		1.3	1.3
Comm	M	56.3	42.8	30.6	33.7	28.9	31.9	35.4	39.1	37.8	35.5	42.0	43.2
	F	81.1	60.0	62.3	65.0	58.0	63.7	62.4	60.4	64.3	64.8	62.8	64.6
Pub	M				0.5	1.1		0.5	0.6	0.4	0.2	0.4	0.8
Adm	F							0.2			0.2		0.2
Other	M		7.6	20.1	20.5	19.6	25.0	27.2	26.0	23.5	23.8	27.0	24.8
Serv	F		4.5	15.2	17.6	15.3	16.7	15.9	19.0	16.6	14.3	18.3	17.5
Total	M	36.8	36.9	38.6	44.2	38.6	41.2	42.[illegible]	44.3	44.6	47.0	46.3	46.8
	F	30.4	29.6	33.1	34.1	29.7	30.6	30.4	33.3	30.8	31.6	33.3	33.3

Table A-29
Percent Distribution of Employed by Age Group (both sexes)

Date	Total Employed	14-19	20-24*	25-34	35-44	45-54	55-64	65+
6/68	100.0		21.4	20.9	20.5	17.9	13.0	6.24
10/68	100.0		22.0	19.9	20.0	19.2	12.1	6.94
4/69	100.0		22.3	19.4	20.4	18.3	12.8	6.91
10/69	100.0		21.8	20.1	18.6	19.1	13.1	7.25
4/72	100.0		21.1	21.8	18.9	19.0	12.0	7.09
10/72	100.0		21.5	21.7	19.1	17.6	12.7	7.35
4/73	100.0		21.9	20.3	18.5	18.6	12.9	7.84
10/73	100.0		21.8	20.2	19.2	17.5	13.2	8.01
4/74	100.0		21.9	19.7	19.0	17.6	13.2	8.50
10/74	100.0		21.2	20.7	18.8	17.7	13.3	8.33
4/75	100.0	8.66	13.8	22.2	18.3	17.1	11.8	8.17
10/75	100.0	9.10	12.7	22.3	18.4	16.8	12.1	8.55
4/76	100.0	8.55	13.0	22.3	18.3	17.0	12.4	8.56
10/76	100.0	7.72	12.3	22.7	18.3	17.1	13.5	8.13
4/77	100.0	7.39	13.0	23.0	17.7	17.2	12.5	9.19
10/77	100.0	6.66	13.4	23.0	17.8	17.2	12.9	9.02
4/78	100.0	7.79	12.5	22.7	18.3	16.5	12.8	9.32
10/78	100.0	7.52	12.7	23.0	18.4	16.5	12.7	9.10
4/79	100.0	7.38	13.0	23.0	18.5	16.1	12.4	9.70
10/79	100.0	6.65	12.9	23.5	18.6	16.4	12.9	8.95
4/80	100.0	6.48	13.5	23.6	18.2	15.9	13.4	9.03
10/80	100.0	6.77	13.7	23.3	17.8	15.4	13.3	9.68
4/81	100.0	6.70	14.0	23.3	18.2	15.5	13.1	9.28
10/81	100.0	7.13	13.8	23.9	18.2	14.9	12.3	9.76
4/82	100.0	6.90	14.0	23.4	18.2	15.4	12.7	9.50
10/82	100.0	7.58	14.2	23.7	17.8	15.3	12.9	8.61

*For 1968-1974, data for ages 14-19 are pooled with ages 20-24.

Source: Calculated from The Labour Force, Table 3.1, annual issues.

Table A-30
Percent Distribution of Employed by Age Group (males only)

Date	Total Employed	14-19	20-24*	25-34	35-44	45-54	55-64	65+
6/68	100.0		22.5	20.4	20.0	17.1	13.2	6.7
10/68	100.0		23.1	19.7	19.3	18.1	12.4	7.5
4/69	100.0		23.2	19.8	19.1	17.6	12.7	7.6
10/69	100.0		23.1	21.1	16.4	17.9	13.8	7.7
4/72	100.0		22.2	21.4	18.0	18.1	12.6	7.8
10/72	100.0		22.8	21.1	18.5	16.3	13.1	8.3
4/73	100.0		23.7	20.1	17.1	17.6	12.9	8.7
10/73	100.0		23.4	20.2	17.3	16.7	13.6	8.7
4/74	100.0		23.2	19.5	17.4	16.5	13.9	9.5
10/74	100.0		22.2	19.9	17.5	16.9	14.2	9.3
4/75	100.0	10.3	13.8	21.3	17.1	16.0	12.3	9.2
10/75	100.0	10.7	12.6	22.0	17.2	15.9	12.0	9.5
4/76	100.0	10.4	12.7	21.6	17.0	16.1	12.9	9.4
10/76	100.0	9.5	12.9	21.5	16.1	16.0	14.6	9.4
4/77	100.0	9.1	13.8	22.2	16.[illegible]	15.5	12.8	10.3
10/77	100.0	8.5	13.8	23.0	16.4	15.5	12.9	9.9
4/78	100.0	10.0	12.8	22.4	16.3	16.0	12.4	10.1
10/78	100.0	9.7	13.3	22.6	16.8	15.2	12.2	10.3
4/79	100.0	9.2	13.1	22.6	16.7	14.8	12.5	11.0
10/79	100.0	8.2	13.1	23.9	16.7	15.4	12.8	9.9
4/80	100.0	8.3	14.0	23.8	16.7	14.8	12.5	9.9
10/80	100.0	8.9	14.5	23.3	16.3	14.1	12.0	10.8
4/81	100.0	8.7	15.1	23.4	16.2	14.3	11.9	10.3
10/81	100.0	9.3	14.7	24.0	16.3	13.5	11.2	11.0
4/82	100.0	8.8	15.1	23.6	16.5	13.8	11.4	10.8
10/82	100.0	9.7	15.1	24.1	16.1	13.7	11.5	9.8

*For 1968-1974, data for ages 14-19 are pooled with ages 20-24.

Source: Calculated from The Labour Force, Table 3.1, annual issues.

Table A-31

Percent Distribution of Employed by Age Group (females only)

Date	Total Employed	14-19	20-24*	25-34	35-44	45-54	55-64	65+
6/68	100.0		19.4	21.9	21.4	19.3	12.8	5.33
10/68	100.0		20.2	20.2	21.0	21.0	11.5	6.10
4/69	100.0		20.8	18.6	22.5	19.4	13.0	5.83
10/69	100.0		20.0	18.6	21.9	20.9	12.1	6.59
4/72	100.0		19.4	22.4	20.6	20.6	11.1	5.91
10/72	100.0		19.5	22.7	20.2	19.6	12.1	5.84
4/73	100.0		19.2	20.7	20.6	20.0	13.0	6.55
10/73	100.0		19.1	20.2	22.3	18.9	12.5	6.86
4/74	100.0		19.7	20.1	21.7	19.5	12.1	6.85
10/74	100.0		19.6	21.9	20.8	19.1	11.8	6.79
4/75	100.0	5.90	13.9	23.7	20.2	18.9	10.9	6.56
10/75	100.0	6.69	12.8	22.8	20.2	18.2	12.2	7.09
4/76	100.0	5.63	13.5	23.4	20.3	18.3	11.6	7.33
10/76	100.0	4.85	11.5	24.6	21.8	19.0	11.8	6.11
4/77	100.0	4.73	11.8	24.3	20.1	19.7	11.9	7.43
10/77	100.0	3.83	12.7	23.0	20.0	20.0	12.9	7.62
4/78	100.0	4.42	12.0	23.1	21.5	17.4	13.6	8.10
10/78	100.0	4.15	11.9	23.5	21.0	18.4	13.6	7.29
4/79	100.0	4.44	12.8	23.6	21.2	18.2	12.2	7.59
10/79	100.0	4.24	12.5	22.9	21.7	18.1	13.2	7.40
4/80	100.0	3.58	12.7	23.1	20.5	17.6	14.8	7.71
10/80	100.0	3.53	12.6	23.3	20.1	17.4	15.2	7.89
4/81	100.0	3.66	12.1	23.1	21.3	17.3	14.9	7.64
10/81	100.0	3.66	12.4	23.7	21.2	17.2	14.0	7.84
4/82	100.0	3.75	12.1	23.1	21.0	18.0	14.8	7.33
10/82	100.0	4.16	12.7	23.0	20.4	17.9	15.2	6 71

*For 1968-1974, data for ages 14-19 are pooled with ages 20-24.

Source: Calculated form The Labour Force, Table 3.1, annual issues.

Table A-32
Percentage Distribution of Employed by Average Weekly Income (both sexes)

Date	<$10	10-20	20-30	30-40	40-50	50-100	$100+	No Income
Jul 1968	64.9	16.6	5.0	2.4	1.5	0.9	0.2	8.4
Oct 1968	67.3	13.9	5.1	2.3	1.3	0.7	0.1	9.3
Apr 1969								
Oct 1969								
Apr 1972	40.5	28.5	12.1	5.2	2.9	3.9	0.8	6.1
Oct 1972	40.0	29.4	12.7	6.1	3.1	3.9	0.9	3.9
Apr 1973	38.1	30.6	10.5	6.4	2.3	3.0	1.3	7.8
Oct 1973	36.6	28.9	11.8	6.8	3.6	4.7	1.6	6.0
Apr 1974	28.7	27.1	13.0	8.8	5.5	8.1	2.4	6.4
Oct 1974	24.8	24.4	17.1	9.3	5.8	9.4	3.0	6.2
Apr 1975	21.2	23.0	16.1	11.8	7.2	12.1	3.9	4.7
Oct 1975	21.4	22.6	15.0	11.1	7.2	13.5	3.6	5.6
Apr 1976	17.4	21.0	18.2	11.7	7.0	13.2	4.5	7.0
Oct 1976	14.3	17.8	21.6	11.0	6.6	15.6	6.3	6.8
Apr 1977	14.4	18.9	21.3	10.7	7.1	14.2	6.0	7.4
Oct 1977	14.8	19.5	19.6	10.3	7.0	14.6	6.5	7.7
Apr 1978	13.3	18.0	18.1	10.7	7.4	17.0	7.0	8.5
Oct 1978	11.3	16.5	18.6	12.1	8.6	17.3	7.5	8.1
Apr 1979	9.5	16.0	17.9	11.5	9.2	19.3	9.2	7.4
Oct 1979	9.1	12.1	16.3	13.7	11.0	21.4	11.2	5.3
Apr 1980	8.5	13.0	14.7	12.3	9.6	22.0	13.3	6.6
Oct 1980	5.0	9.0	12.9	14.4	10.8	24.7	15.6	7.6
Apr 1981	6.2	9.8	11.2	13.3	9.8	24.4	16.5	8.8
Oct 1981	5.4	10.8	11.6	12.7	10.5	24.8	18.1	6.1
Apr 1982	4.6	9.5	10.3	12.0	9.5	24.7	21.9	7.5
Oct 1982	6.1	10.1	11.2	12.4	8.7	21.8	21.8	7.9

Source: Calculated from The Labour Force, Table 3.11, annual issues.

Table A-33
Percent Distribution of Employed by Average Weekly Income (males only)

Date	<$10	10-20	20-30	30-40	40-50	50-100	$100+	No Income
Jul 1968	62.3	20.1	5.6	2.9	1.9	1.3	0.4	5.6
Oct 1968	64.5	17.2	6.3	2.7	1.4	1.0	0.0	6.9
Apr 1969								
Oct 1969								
Apr 1972	36.6	30.1	14.1	5.6	3.3	4.1	1.1	5 1
Oct 1972	35.9	29.5	15.5	6.9	3.2	4.2	1.2	3.5
Apr 1973	34.2	31.3	12.9	6.7	2.3	3.5	1.5	7.6
Oct 1973	32.8	28.5	13.7	7.8	4.2	5.0	2.2	5.8
Apr 1974	26.9	24.7	14.9	10.6	6.7	7.8	3.3	5.1
Oct 1974	26.1	20.9	17.0	10.6	7.1	9.6	3.8	4.9
Apr 1975	20.6	19.8	15.8	13.4	8.9	13.0	4.7	3.8
Oct 1975	21.8	19.0	13.7	12.9	9.0	15.1	4.2	4.3
Apr 1976	18.2	21.0	14.8	12.2	8.7	15.6	5.4	4.1
Oct 1976	14.8	18.6	18.5	11.9	7.9	17.1	7.6	3.6
Apr 1977	15.1	20.3	17.3	11.9	8.3	16.3	6.8	4.0
Oct 1977	15.6	20.7	15.3	11.5	8.6	16.9	7.4	4.0
Apr 1978	13.0	19.0	14.5	11.3	8.9	19.5	8.2	5.6
Oct 1978	11.1	16.7	15.3	12.2	10.3	20.1	8.7	5.6
Apr 1979	9.4	16.8	15.0	11.4	10.2	22.6	10.3	4.3
Oct 1979	9.6	12.4	13.2	13.0	11.2	24.5	12.6	3.5
Apr 1980	8.7	14.5	12.2	9.8	10.2	25.5	14.9	4.2
Oct 1980	5.3	8.5	11.4	12.0	11.7	28.8	17.4	4.8
Apr 1981	6.2	9.1	10.7	11.3	10.1	29.1	18.0	5.5
Oct 1981	5.9	10.1	10.9	11.2	10.3	27.3	20.1	4.2
Apr 1982	5.4	9.8	9.6	9.6	9.8	27.1	23.9	4.8
Oct 1982	7.2	10.9	11.1	10.3	8.6	23.3	22.9	5.7

Source: Calculated from The Labour Force, Table 3.1, annual issues.

Table A-34
Percentage Distribution of Employed by Average Weekly Income (females only)

Date	<$10	10-20	20-30	30-40	40-50	50-100	$100+	No Income
Jul 1968	69.4	10.4	4.0	1.6	0.9	0.3	0.0	0.00
Oct 1968	71.8	8.7	3.3	1.6	1.0	0.2	0.1	0.01
Apr 1969								
Oct 1969								
Apr 1972	47.0	25.9	8.9	4.4	2.2	3.6	0.4	0.04
Oct 1972	46.2	29.4	8.7	4.8	2.8	3.3	0.4	0.04
Apr 1973	43.8	29.5	6.9	6.1	2.4	2.2	1.0	0.10
Oct 1973	42.7	29.4	8.9	5.2	2.7	4.1	0.6	0.06
Apr 1974	31.6	31.1	9.8	5.9	3.5	8.5	1.1	0.11
Oct 1974	22.9	29.7	17.3	7.4	3.8	9.0	1.9	0.19
Apr 1975	21.9	27.9	16.4	9.2	4.6	10.9	2.9	0.29
Oct 1975	20.7	28.0	16.9	8.5	4.5	11.1	2.7	0.27
Apr 1976	16.	20.9	23.1	11.0	4.6	9.8	3.2	0.32
Oct 1976	13.5	16.7	26.2	9.6	4.7	13.5	4.3	0.43
Apr 1977	13.5	16.9	27.0	9.0	5.3	11.3	4.9	0.49
Oct 1977	13.6	17.7	26.0	8.5	4.5	11.3	5.2	0.52
Apr 1978	13.5	16.6	23.3	9.8	5.4	13.3	5.4	0.54
Oct 1978	11.6	16.4	23.3	11.9	6.1	13.3	5.7	0.57
Apr 1979	9.8	14.6	22.2	11.6	7.8	14.4	7.5	0.75
Oct 1979	8.4	11.6	21.0	14.7	10.7	16.5	8.9	0.89
Apr 1980	8.1	10.7	18.5	16.0	8.9	16.8	10.7	1.07
Oct 1980	4.5	9.7	15.1	17.9	9.4	18.7	13.0	1.30
Apr 1981	6.2	10.8	12.0	16.3	9.3	17.5	14.2	1.42
Oct 1981	4.6	11.9	12.8	15.0	10.8	20.8	15.0	1.50
Apr 1982	3.5	9.0	11.2	15.8	9.1	20.9	18.9	1.89
Oct 1982	4.5	8.7	11.2	15.6	8.9	19.5	20.4	2.04

Source: Calculated from The Labour Force, Table 3.11, annual issues.

Table A-35
Industrial Disputes by Industry Group, 1960-1979

Year	Total	Agri-culture	Min-ing	Manu-facture	Constr-uction	Utility	Com-merce	Trans-port	Service
1960	69	20		26	3		2	2	16
1961	53	10		10	7		4	2	20
1962	83	17		13	25		10	2	16
1963	45	14		13	3		5	5	5
1964	41	14		8	5		4	4	16
1965	37	12		5	6		2	4	8
1966	69	17		12	14	7	2	8	9
1967	95	25	1	26	17	7	4	6	9
1968	84	13	1	22	17	13	3	8	7
1969	46	5		13	2	1	1	1	23
1970	70	8	2	14	14	6	1	5	20
1971	77	4		9	16	11	5	11	21
1972	55	11	2	8	11	3	3	7	10
1973	90	6	12	19	8		4	9	32
1974	137	6	2	77	8		7	2	35
1975	205	13	4	53	32		19	13	71
1976	142	3	9	67	3		7	13	40
1977	163	11	2	64	2		14	11	59
1979	182	2	7	39		6	14	20	94

For later years, disputes involving fewer than 10 workers and/or fewer than 100 worker-days lost are not enumerated.

Source: International Labour Orginization, Yearbook of Labour Statistics (Geneva: International Labour Office, annual issues)

Table A-36
Number of Workers Involved in Industrial Disputes, 1960-1979

Year	Total	Agri-culture	Min-ing	Manu-facture	Constr-uction	Utility	Com-merce	Trans-port	Service
1960	11921	6145		2579	661		64	827	1645
1961	13298	5293		1216	1047		869	1033	3840
1962	16081	5241		1570	5751		963	49	2507
1963	10728	5928		1893	152		107	1681	967
1964	8560	2679		597	364		478	2505	1937
1965	25316	20465		459	1429		264	1785	914
1966	29563	9957		2391	2035	2633	87	2194	10266
1967	17849	5028	117	3908	2562	3411	339	1881	603
1968	37642	20271	500	2161	4006	5304	463	4150	887
1969	8622	1400		1614	113	102	11	2360	3022
1970	23181	1380	2402	2911	8834	935	164	5642	913
1971	18623	61		1344	1180	5941	298	4685	5114
1972	30286	11894	1446	1359	2938	3977	442	1256	6974
1973	18726	1347	1320	3503	1806		227	2868	7655
1974	21194	2287	1820	2086	185		1057	4084	9675
1975	10993	2917	1105	2911			691	1286	2083
1976	12169	214	3588	6354	250		908	256	599
1977	12557	2476		4948			1553	432	3148
1979	19824		1000	3718		275	1790	3505	9536

For later years, disputes involving fewer than 10 workers and/or fewer than 100 worker-days lost are not enumerated.

Source: International Labour Orginization, Yearbook of Labour Statistics (Geneva: International Labour Office, annual issues)

Table A-37
Days Lost Due to Industrial Disputes, 1960-1979

Year	Total	Agri-culture	Min-ing	Manu-facture	Constr-uction	Utility	Com-merce	Trans-port	Service
1960	64522	31944		28759	1126		203	827	1663
1961	98951	38251		8489	18021		13545	9627	11018
1962	123829	56323		8873	28916		10961	271	18485
1963	204056	130336		8743	506		2515	61596	360
1964	67846	20831		1800	4664		16949	9579	14023
1965	290162	238232		4312	16470		3652	11966	15530
1966	180628	50321		28145	15211	5323	72	9088	72468
1967	173587	34873	507	49204	63886	11804	2035	4173	7105
1968	224781	61055	750	19502	99895	13842	1364	23847	4526
1969	91489	61188		18715	1011	102	99	3080	7294
1970	335432	677	2402	13642	289586	1271	4428	18478	4948
1971	76069	969		7433	19049	33942	1502	5169	8005
1972	266369	145088		26038	702	33211	9067	12317	39946
1973	236805	14371	39960	54963	30670		4212	25883	66746
1974	769139	25670	13209	72533	2590		17332	6630	631175
1975	112584	28474	9345	31379			12523	3952	26911
1976	139619		68585	61991	803		5029	129	3082
1977	81688	12007		30894			3063	1424	34300
1979	82093		2140	23768		5005	3660	13662	33858

For later years, disputes involving fewer than 10 workers and/or fewer than 100 worker-days lost are not enumerated.

Source: Calculated from A-35 and A-36.

Table A-38
Average Number of Workers Per Dispute, 1960-1979

Year	Total	Agri-culture	Min-ing	Manu-facture	Constr-uction	Utility	Com-merce	Trans-port	Service
1960	173	307		99	220			414	103
1961	251	529		122	150			517	192
1962	194	308		121	230			25	157
1963	238	423		146	51			336	193
1964	209	191		75	73			626	121
1965	684	1705		92	238			446	114
1966	428	586		199	145	376	1317	274	1141
1967	188	201	117	150	151	487	853	314	67
1968	448	1559	500	98	236	408	1768	519	127
1969	187	280		124	57	102	102	2360	131
1970	331	173	1201	208	631	156	935	1128	46
1971	242	15		149	74	540	1188	426	244
1972	551	1081	723	170	267	1326	1326	179	697
1973	208	225	110	184	226			319	239
1974	155	381	910	27	23			2042	276
1975	54	224	276	55				99	29
1976	86	71	399	95	83			20	15
1977	77	225		77				39	53
1979	109		143	95		46	20	175	101

For later years, disputes involving fewer than 10 workers and/or fewer than 100 worker-days lost are not enumerated.

Source: Calculated from A-35 and A-36.

Table A-39
Average Number of Worker-Days Lost Per Dispute, 1960-1979

Year	Total	Agri-culture	Min-ing	Manu-facture	Constr-uction	Utility	Com-merce	Trans-port	Service
1960	935	1597		1106	375		102	414	104
1961	1867	3825		849	2574		3386	4813	551
1962	1492	3313		683	1157		1096	136	1155
1963	4535	9310		673	169		503	12319	72
1964	1655	1488		225	933		4237	2395	876
1965	7842	19853		862	2745		1826	2991	1941
1966	2618	2960		2345	1086	760	36	1136	8052
1967	1827	1395	507	1892	3758	1686	509	695	789
1968	2676	4697	750	886	5876	1065	455	2981	647
1969	1989	12238		1440	506	102	99	3080	317
1970	4792	85	1201	974	20685	212	4428	3696	247
1971	988	242		826	1191	3086	300	470	381
1972	4843	13190		3255	64	11070	3022	1760	3995
1973	2631	2395	3330	2893	3834		1053	2876	2086
1974	5614	[illegible]8	6604	942	324		2476	3315	18034
1975	549	2190	2336	592			659	304	379
1976	983		7621	925	268		718	10	77
1977	501	1092		483			219	129	581
1979	451		306	609		834	261	683	360

For later years, disputes involving fewer than 10 workers and/or fewer than 100 worker-days lost are not enumerated.

Source: Calculated from A-35 and A-37.