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Sri Lanka A Fresh Look at Unemployment

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ABBREVIATIONS AND ACRONYMS

A/LEVEL	Advanced Level Examination
BOI	Board of Investment
CPC	Ceylon Petroleum Corporation
CSPS	Civil Servants' Pensions Scheme
DCS	Department of Census and Statistics
EPF	Employees' Provident Trust
EPZ	Export Processing Zone
ETF	Employees' Trust Fund
GCEC	Greater Colombo Economic Commission
ILO	International Labor Organization
LFS	Labor Force Survey
OECD	Organization for Economic Cooperation and Development
O/LEVEL	Ordinary Level Examination
OLS	Ordinary Least Squares
TEWA	Termination of Employment and Workmen Act
WTO	World Trade Organization

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EXECUTIVE SUMMARY

1. Unemployment has historically been a very sensitive issue in Sri Lanka. This is due to the fact that high levels of unemployment have predominantly been concentrated among educated youth—a group which has proven to be socially and politically volatile in the past. The Marxist youth insurrection of 1971, inspired by the Guevarista movement in Latin America, raised its head in an even more virulent manner to bring Sri Lanka to a virtual standstill during 1987-89. All forms of governance and law and order were crippled during this time, resulting in a near state of anarchy. Several thousands were reported to have lost their lives or disappeared during this period. The rebellion was led by mostly disadvantaged youth from rural areas of the country, especially the Southern province where unemployment has traditionally been highest.¹ Youth unrest was also a contributory factor in the Northern secessionist conflict which began in the early 1980s and continues to date. Memories of these two insurrections, as well as the traumas of the on-going conflict continue to haunt the people of Sri Lanka, thus making the issue of youth unemployment a serious concern for civil society and policymakers.

2. Sri Lanka's economy has grown healthily at an average of 5 percent over the last two decades, and unemployment has declined gradually to 9.5 percent in 1998. This decline, which took place despite a rapid increase in female labor force participation, is the result of sustained economic growth mostly in the private sector following a significant reform of the economy. The most effective of these reforms was the liberalization of the foreign exchange market and trade regime. In addition, Sri Lanka has seen a large increase in outward labor migration since the late 1980s, with the result that expatriate Sri Lankan workers (mostly in the Middle East) account for about 10 percent of the country's labor force. Notwithstanding these positive elements, the persistence of double digit unemployment rates over almost three decades implies that the overall labor market is not functioning at full efficiency.

Table A: A Snapshot of Sri Lanka's Labor Market in 1998

	Levels (in thousands)	Rates (in percent)
Population	18,774	growth: 1.2
Labor Force	6,693	participation rate: 51.5
Female		participation rate: 36.2
Unemployment	607	unemployment rate: 9.5
Female		unemployment rate: 14.7

Note: Labor force data excludes the Northeast province.

Source: Department of Census and Statistics.

3. **Previous research.** The persistence of double-digit unemployment in Sri Lanka has puzzled researchers, policymakers, and the international community for several years. As a result, there is no dearth of research and literature on the topic, and several explanations have been proposed for Sri Lanka's high unemployment. The most important hypotheses developed in the literature are: (i) the prevalence of a skills mismatch due in particular to the education system not being geared to labor market needs (Seers, 1971); (ii) the likelihood that government employment and pay policies promote "queuing" for attractive jobs (Glewwe, 1987; Dickens and Lang, 1996); and (iii) the existence of stringent labor market regulations which discourage job creation (Rama, 1994; Prywes, 1995; Kelegama and Gunatilaka, 1996). The demographic

¹ A Presidential Commission on Youth was established in 1990 to examine the causes of youth unrest and discontent. See Box 5.4 for a summary of findings of the Commission.

changes arising from a population bulge between 1950-70 is also cited as a reason for high youth unemployment in the last three decades (Alailima, 1992).

4. **Objective of study and methodology.** Although plausible, these explanations did not have the benefit of more recent microeconomic data available on household earnings. Hence, the primary objective of this study is to further explore the reasons for the high level of youth unemployment in Sri Lanka using individual records from the 1995 Labor Force Survey (LFS) conducted by the Department of Census and Statistics (DCS). In particular, the study will test the three main hypotheses already presented in the literature by conducting rigorous econometric analysis using the large volume of microeconomic data available from the quarterly Labor Force Survey. The data are analyzed through a comprehensive econometric exercise using multi-variate and probit regressions on unemployment status, earnings functions which control for individual and job characteristics, and by carrying out time series analysis of unemployment and wages between 1980-97.

5. Chapters 1 and 2 provide background information on Sri Lanka's economic reforms and performance over the last decade, and summarize the conclusions of existing literature on unemployment in Sri Lanka. Chapter 3 presents the new data and methodology used in this study, while Chapter 4 discusses the findings. Chapter 5 explains the results obtained from the data analysis from a broader public policy perspective, and Chapter 6 presents some reform options which could have positive impacts on the labor market in Sri Lanka.

6. **Four key findings** emerge from the data analysis:

- ***Strong job preferences partly explain the unemployment conundrum.*** When using a narrow definition of unemployment where only those reported as willing to take "any job" (full-time, part-time, self-employment, or other) are considered unemployed, the overall unemployment rate falls dramatically to 3.2 percent on an aggregate basis. In addition, unemployment appears closely related to household status and the availability of income support from family relatives, both critical factors in encouraging extended periods of job search.
- There is ***little evidence of a theoretical skills mismatch*** to explain Sri Lanka's unemployment rate. Two statistical techniques have been used to assess the role of education in determining both actual wages for the employed and lowest acceptable wages for those unemployed with similar characteristics. Both techniques show that (i) wages do rise with increasing educational accomplishment; and (ii) the ratio between the lowest acceptable wage of the unemployed and the actual labor earnings of employed individuals with similar characteristics declines with rising educational attainment. These two results cast doubt on the existence of a "theoretical" skills mismatch in Sri Lanka. This conclusion does not invalidate the fact that some of the unemployed do not have the skills most commonly required by currently available jobs. This form of "functional" mismatch in fact persists because of structural obstacles such as wage rigidities and government's employment and pay policies.
- There is substantial ***evidence of labor market segmentation*** in Sri Lanka which provides a rationale for the unemployed to wait for good jobs. The analysis shows that even on the basis of pure cash wages, public sector jobs are on average more lucrative than non-public sector jobs, at times demonstrating earnings gaps as large as 60-100 percent. These wage

gaps are especially evident for workers at lower-levels (primarily those with basic education). There are also substantial earnings gaps in favor of those who are covered by the country's job security regulation (Termination of Employment of Workmen Act— TEWA) and protective tariffs.

- Additional evidence of labor market segmentation comes from the data on wage trends in both the formal and informal sectors. A time series analysis has been conducted on average wages set by Wages Boards (formal wages) and the average wages of casual workers (informal sector wages) to evaluate the relationship between unemployment and wages in both the formal and informal sectors. The main conclusion is that *unemployment rates have no effect on informal sector wages*, but do however exert a downward pressure on formal sector wages. This suggests that the unemployed are in search of good formal sector jobs and are not interested in jobs in the informal sector.

7. **Labor market segmentation and the policy/social environment.** The large wage differentials existing in Sri Lanka (due mostly to labor market segmentation) are artificial, and *stem from a policy environment that provides protection to certain segments of the economy* in the form of stringent job security regulations, tariffs, and preferential employment and pay treatment in the public sector. Labor market regulations in Sri Lanka are very restrictive, best demonstrated by the costly and non-transparent processes of termination in the formal private sector. In addition to the termination costs, enterprises in the formal private sector also face substantial costs in the form of higher wages (relative to the informal sector), large contributions for retirement income, and the management of militant trade unions that take adversarial positions often based on political agendas. Combined with the fact that the informal labor market appears to operate efficiently, this gives informal sector enterprises little incentive to graduate to the formal sector. As a result, the supply of formal sector jobs is constrained, while the economy is unable to realize its maximum productivity.

8. The problems resulting from the supply-side shortage of formal protected jobs are compounded by the high demand for this type of job in the economy. School graduates engage in long periods of job search to meet their aspirations for a protected job. Extended job searches are easily sustained given the provision of free education at all levels and the availability of income support from family and relatives. Under these circumstances, there is an imbalance between the demand and supply of formal sector jobs in Sri Lanka.

9. **Policy response of government.** Some of the pressures from unemployment have been eased by the creation of Export Processing Zones (EPZs) and Board of Investment (BOI) companies as well as promotion of large scale outward migration. In the case of EPZ/BOI industries, employment generation is due not only to the tax concessions offered, but also the relief afforded them with regard to labor regulations. Unfortunately however, neither the creation of BOI industries nor the promotion of migration has succeeded in addressing the real bottleneck in the labor market, i.e., high unemployment among the educated youth. A large number of BOI jobs are considered “undesirable” by this group, leading to numerous vacancies in the sector. In this context, Sri Lankan governments have regularly resorted to the ad hoc creation of jobs in the public sector to satisfy educated youth. These have been particularly large in the teaching corps, public enterprises, and the operation of poverty programs.

10. The Government's behavior as an employer of last resort is not unique to Sri Lanka. What is unusual, however, is that in addition to artificially creating jobs within government, cash

wages paid to public sector employees with A/Level qualifications and below are significantly higher than wages paid to similar workers outside the public sector. In fact, of all protected workers, public sector employees benefit from the largest wage premium. This is somewhat of an anomaly given that public sector employment also entails job security and nonwage benefits such as pensions. The pay distortion is particularly large for non-professionals (support staff) within government administration. Moreover, the Government's existing pay policies have resulted in a highly compressed pay schedule, which has reduced its ability to attract and retain mid- and high-level employees. As a result, Sri Lanka's public sector now faces growing weaknesses in governance and public sector management.

11. **Challenges for the future.** The most important challenge for Sri Lanka in the area of labor markets is to improve the supply of formal private sector jobs by facilitating the transition of small enterprises operating in the informal sector into larger enterprises operating in the formal sector. The three areas in need of reform to help this transition are (i) trade and market liberalization; (ii) liberalization of labor regulations; and (iii) reform of public sector pay and employment policies. From a broader perspective however, easy labor mobility into the private sector will also require improvements in the education system with a view to better equip new generations of workers with skills more consistent with market realities.

12. **Trade liberalization** is the least controversial reform option and one that the Government has already been embracing. Considerable success has also been achieved in developing the domestic competitive environment-- the privatization of Sri Lanka Telecom and tea plantations being good examples. Numerous opportunities remain however with respect to the large statutory boards/public enterprise sector, and private sector participation in infrastructure development. As there has been considerable liberalization of product markets, the most urgently needed reforms are in **factor markets**. Liberalization of the financial sector is an obvious priority, but equally important is the labor market. Sri Lanka continues to have one of the most restrictive labor market regimes in the developing world, and labor regulations have not evolved in consonance with the broad economic reforms of the last two decades. Consequently, the promotion of BOI industries as well as labor migration have represented in Sri Lanka indirect ways of alleviating the negative fallouts of labor regulations and practices. A better approach would be to ensure that labor regulations provide job and income security to employees without penalizing employers and constraining the private sector's ability to create good jobs. This implies a **more flexible, expeditious and transparent separation regime** similar to that of middle income countries, the ranks of which Sri Lanka has just joined.

13. Another critical area for reform pertains to the **public sector's employment and pay policies**. Given the long record established regarding political interference in the management of the public sector, the most effective option is to implement a **program of public administration reform** that addresses the most egregious governance weaknesses of the sector in a comprehensive way. This would necessarily include institutional modernization, the introduction of mechanisms to minimize political interference, and the strengthening of financial control and accountability. But these would not suffice without reform of the public sector's salary structure. Clearly, current policies are very taxing on the performance of both government administration and the private sector, and wages need to be adjusted at both ends to ensure consistency with market realities. Non-wage benefits in the public sector are also in need of adjustment. Civil service pensions are generous, while the mandatory retirement income scheme covering the formal private sector is poorly enforced and suffers from negative returns. A higher return on these funds, through financial sector liberalization/development and reduced budgetary needs,

would undoubtedly facilitate the needed readjustment as well as increase the mobility between the government and private sectors.

14. **Reaching consensus for sustainable reforms.** Given Sri Lanka's circumstances, the most critical prerequisite for the success of these challenging public policy reforms is the development of domestic consensus. As in successful reforms in the past, the key ingredient is full participation of all stakeholders in the design of strategies at an early stage. The Government's continued pandering to the demands of protected workers comes at the high cost of marginalizing the large number of workers currently employed in Sri Lanka's informal sector. This was highlighted by the Presidential Commission on Youth, established in 1990 to examine the causes of youth unrest and discontent in the aftermath of the 1987-89 Marxist insurrection. The Commission noted that "a pervasive sense of injustice...arising principally from political patronage in employment" was a fundamental reason for the youth rebellion. Accordingly, "the denial of merit has had a traumatic effect on the youth of the country who...appear to have harbored covert expectations of the dismantling of what they perceived as an inequitable system." A "do nothing scenario" or continued politicized recruitment into the public sector could therefore be more damaging than a bold implementation of reforms, given that educated youth are likely to feel even more dissatisfied as the gap between the marginalized and the protected continues to widen—a burden Sri Lanka can little afford today.

CHAPTER 1: MACROECONOMIC BACKGROUND AND SECTORAL CHANGES IN THE ECONOMY

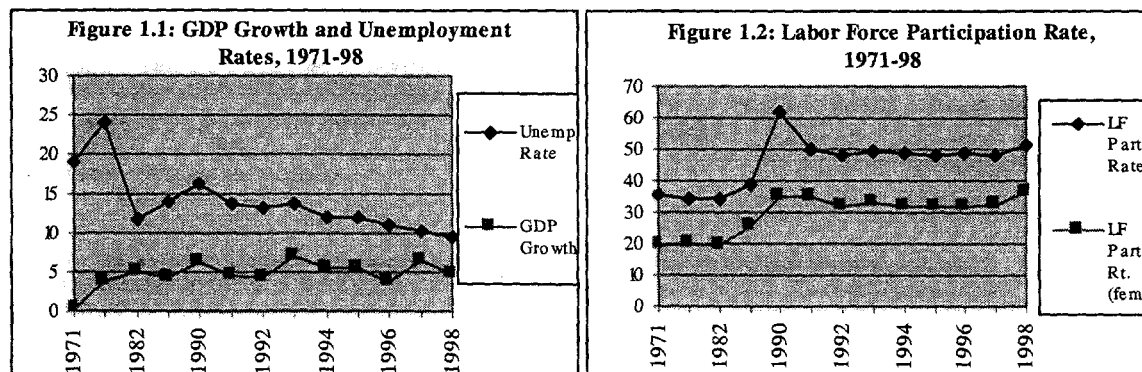
A. MACROECONOMIC CHANGES AND PERFORMANCE

1.1 Since its transition to an open, market economy in 1977, the Government of Sri Lanka has introduced several strong structural reforms which have helped the country realize higher rates of growth. These include (i) liberalization of external trade— Sri Lanka now has the most liberal trade regime in South Asia; (ii) development and liberalization of the financial sector—including opening of the banking sector to foreign investors, interest rate liberalization, and establishment of a stock market and inter-bank foreign exchange market, among others; (iii) privatization of many state-owned entities, the most important of which are plantations and telecommunications; and (iv) establishment of Export Processing Zones (EPZs). On the macroeconomic policy front, performance over the last decade has been mixed, marked by persistent and large budget deficits.

1.2 Sri Lanka's economic growth has averaged 5 percent annually over the last two decades, and per capita income in dollar terms doubled in one decade. Structural reforms have also transformed the economy in significant ways, namely: (i) value added in services and manufacturing has risen dramatically, and now accounts for over 70 percent of GDP; (ii) the country has become a leading exporter of garments, and has regained its place as the largest world exporter of tea; (iii) economic resilience has improved with the emergence of a dynamic private sector; and (iv) poverty levels have declined substantially, with people in the lower deciles of the income groups being relatively well protected.

B. IMPACT OF ECONOMIC TRANSITION ON UNEMPLOYMENT

1.3 These structural reforms have been at the source of considerable job creation, and Sri Lanka's overall unemployment rate has declined steadily over the years (Figure 1.1). This decline is impressive given the country's rapid increase in labor force participation in the 1980s due primarily to the influx of women into the labor market (Figure 1.2). It should be recognized however that the steady decline in unemployment is also partly due to the annual flow of labor migration which has increased tenfold over the last decade. War related recruitment (mostly from rural areas) as well as expansion of government administration have also contributed to the decline (see Chapter 5).

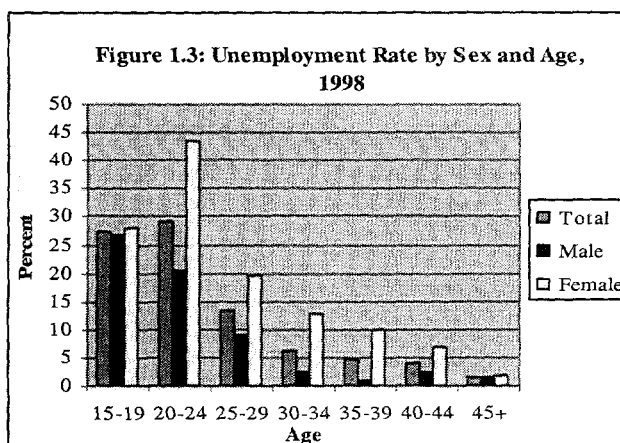


Source: Central Bank of Sri Lanka; Department of Census and Statistics.

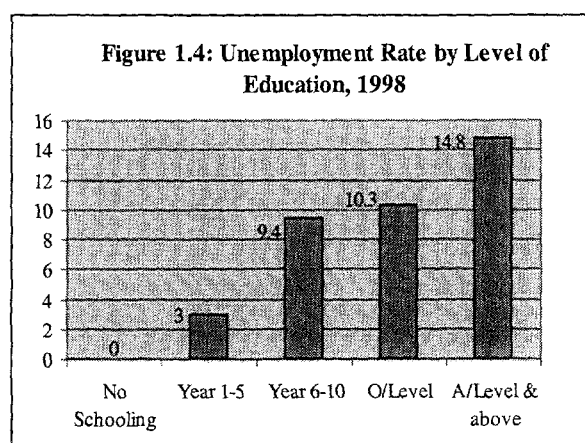
C. KEY FEATURES OF THE UNEMPLOYMENT SITUATION

1.4 Despite the external factors that have contributed to easing Sri Lanka's unemployment pressures, it is important to note that the sustained decline in unemployment over the last decade reflects a genuine improvement in labor market conditions. More precisely, this decline is not due to statistical or demographic changes. First, the measurement of unemployment in Sri Lanka is based on a definition that is internationally accepted and consistent over the years-- the Department of Census and Statistics (DCS) defines a person as unemployed based on if s/he has met the following criteria: (i) is available for work; (ii) is actively looking for work; and (iii) has worked less than one hour in the preceding week. Second, Sri Lanka's more recent demographic transition has not as yet had an impact on the labor market.² A quick statistical analysis, which assumes unchanged 1995 labor force participation and unemployment rates for all age groups over the last decade, shows that the perceived decline in overall unemployment during this time has not been due to the demographic transition. Notwithstanding these positive outcomes, Sri Lanka continues to face two important issues:

- Despite the decline in unemployment in recent years (from 16 percent in 1990 to 9.5 percent in 1998),³ double-digit unemployment rates have persisted in the country for almost three decades (Figure 1.1). This in itself implies that the overall labor market is not functioning at full efficiency.
- Youth unemployment has consistently been, and still remains, a big problem. It is also most pronounced among educated youth and women (Figures 1.3 and 1.4). An additional concern is that the country's demographic changes will not contribute significantly to solving the unemployment problem: staff analysis shows that the unemployment rate would decline by less than 2 percentage points in the next 10 years when assuming unchanged 1995 labor force participation and unemployment rates for all projected age cohorts over this period.



Source: Department of Census and Statistics.



² Sri Lanka is the first developing country to experience a demographic transition comparable to OECD countries, with recent projections estimating that 20 percent of the country's total population will be over age 60 by 2025. These demographic trends which are just beginning in Sri Lanka, could help reduce unemployment as young population cohorts become increasingly small.

³ The most recent unemployment rate is not strictly comparable with past rates as the coverage of employed persons was significantly increased in 1998 to include unpaid family workers, especially female agricultural workers. If this group were excluded, the rate for 1998 would be 10.3 percent (Central Bank of Sri Lanka).

CHAPTER 2:. THE UNEMPLOYMENT PUZZLE— PREVIOUS RESEARCH

A. A REVIEW OF PREVAILING HYPOTHESES

2.1. Previous researchers have offered three explanations for the high rate of unemployment among educated youth in Sri Lanka. A review of these three explanations and their major shortcomings is presented below.

- **“Skills mismatch” hypothesis** This hypothesis, first articulated by the International Labor Organization (Seers, 1971) and further researched by Glewwe (1987) and Dickens and Lang (1996), is the most widely accepted explanation for Sri Lanka’s high unemployment rates. According to this theory, the Sri Lankan education system produces skills that are not valued by employers, while raising the expectations of those who acquire them. As a result, the unemployed are not interested in the existing job vacancies, and employers are not willing to fill them with available candidates. Under this assumption, the mismatch is more dramatic for those who have just finished school— an explanation for the high unemployment rate among youth and first-time job seekers. Proponents of the hypothesis suggest a reform of the education system and an added emphasis on vocational training geared to the needs of the labor market.⁴
- **Queuing hypothesis linked to public sector employment and pay policies** This explanation was proposed by Glewwe (1987), and further developed by Bowen (1990) and Dickens and Lang (1996). In well functioning labor markets, public sector workers have lower pay than their private sector counterparts in order to compensate for the greater stability, attractive benefits, lower work effort and prestige of their jobs. In Sri Lanka however, public servants are deemed to have, on average, all of the above benefits as well as higher pay. As a result, labor market entrants have an incentive to wait for such attractive job openings in the public sector, with most of them choosing to remain inactive instead of taking available jobs outside the public sector. The Government’s recurring tendency of providing employment opportunities to the unemployed is seen as the main reason for job seekers to remain inactive. The proposed solution is reform of public sector recruitment and pay policies in order to discourage the “queuing” attitude.
- **Labor market regulations create a wedge** A third explanation has emphasized the wedge between private sector jobs created by Sri Lankan labor market regulations (Rama, 1994). After one year of service, workers in enterprises with 15 or more employees automatically get covered by stringent job security regulations (i.e., the Termination of Employment of Workmen Act-- TEWA⁵) which provide life-time tenure. By contrast, most other private sector occupations have no job security, e.g., firms with less than 15 workers or those that operate in special economic zones like EPZs. With this strong duality, many unemployed youth choose to wait for the protected jobs. Enforcing less stringent job security regulations more evenly across firms and sectors is seen as a mechanism to reduce the wedge between TEWA protected and unprotected jobs.

⁴ Policy makers were strongly influenced by this hypothesis in the 1980s which led to the creation of a large number (approximately 500 at present) of vocational training centers. However, these training centers, which are primarily government run, have not been successful in preparing students for the requirements of industry and private sector employers. New efforts in this area are currently being undertaken by government in collaboration with external donors.

⁵ Described in greater detail in para. 5.5 of Chapter 5.

B. SHORTCOMINGS IN EXISTING WORK

2.2 These three explanations are well accepted in Sri Lanka, with the skills mismatch hypothesis gathering the most support. However, because of the importance of the unemployment issue, there is constant debate on the statistical and analytical foundations of each of the hypotheses. In this spirit, this study has highlighted a few shortcomings in existing work:

- **Skills mismatch** Dickens and Lang explored the role of education in explaining unemployment by using secondary data from a labor force survey carried out in 1985-86. Their analysis, which concluded that unemployment was concentrated among those with relatively little education, was based on aggregate data which did not control for individual characteristics.⁶ On the other hand, Glewwe's results which showed that the likelihood of being unemployed increases steadily with education (consistent with the mismatch hypothesis) were based on individual data, but from a population census of 1970-71. More importantly however, neither of the analyses have empirically proven that education attainment raises income expectations even more than actual income—a critical foundation for the skills mismatch hypothesis.
- **Queuing hypothesis/wage gap** Similar problems arise with the alleged wage gap between certain jobs, a central factor supporting the argument that queuing and employment constraints due to labor regulations are the main causes of unemployment in Sri Lanka. For instance, there are two shortcomings in Glewwe's analysis that public sector jobs are much more remunerative than their private sector counterparts. First, although the analysis compared average earnings across sectors and skills, the comparison was for broad groups of workers, and not for individuals with similar characteristics. Second, the analysis was based on ILO data on earnings for 1969. Similarly, Bowen's analysis which compared earnings of workers with comparative positions in the public and the private sector lacks specificity and typically involves private sector jobs in full compliance with labor market regulations only. A systematic analysis of labor earnings in jobs covered and not covered by the TEWA is not available in existing research.

⁶ Dickens and Lang used data clusters based on age, education, sector (urban-rural) and gender instead of individual records, and therefore have very few data points. The coefficients on education could be picking the effect of some of the omitted variables—a possible reason for their conclusion.

CHAPTER 3: CURRENT STUDY—NEW DATA AND METHODOLOGY

A. DATA

3.1 This study addresses the shortcomings in existing literature and takes a fresh look at unemployment in Sri Lanka. Its objective is to explore in a rigorous manner the persistence of youth unemployment by analyzing the 34,000 individual records collected under the 1995 Labor Force Survey (LFS).⁷ It is important to note at the outset that the Labor Force Survey questionnaire and data are of good quality-- the questionnaire is relatively comprehensive, and the data are clean, consistent, and complete. However, some additional information which would have been useful for this study is missing. These include: (i) earnings of the self-employed; (ii) poverty and socio-economic indicators; (iii) union membership; and (iv) employer characteristics, most importantly firm size. Also, the 1995 questionnaire allowed only a maximum of four digits for the earnings variable, and hence censored monthly earnings above Rs. 9,999 (this censorship has been corrected in subsequent Labor Force Survey questionnaires). In addition to the Labor Force Survey data, time series data collected by the Central Bank on wages in sectors covered and not covered by the TEWA are used as well (i.e., informal sector wages and formal wages covered by Wages Board Agreements).⁸

B. METHODOLOGY

3.2 This study rests on extensive data analysis and a comprehensive econometric exercise which uses the following instruments: (i) multi-variate and probit regressions on unemployment status; (ii) earnings functions which control for individual and job characteristics; and (iii) time series analysis of unemployment and wages between 1980-97. It also tests the hypotheses presented in previous research, and presents further refinements to existing explanations of unemployment. The analysis proceeds in four steps:

- a) First, individual Labor Force Survey records are used to measure the unemployment rates of specific population groups and assess how sensitive these rates are to changes in the definition of unemployment. The "broad" definition of unemployment is the standard International Labor Organization (ILO) definition as used by the Labor Force Survey (para. 1.4); under the "narrow" definition only those who are willing to take "any job" available (full-time, part-time, self-employment or any other) are considered unemployed. Both the previous week and the previous year are used as a reference period to decide whether a person is unemployed under the broad definition. The Labor Force Survey contains a section with questions about work and job seeking in each of the 12 months preceding the survey—an "annual" unemployment rate can be calculated based on this information. A profile of unemployment is also generated through a probit regression analysis controlling for individual characteristics (i.e., age, gender, household status, etc.). These analyses provide a clear assessment of the extent and profile of unemployment in Sri Lanka.

⁷ Since 1990, the Department of Census and Statistics conducts quarterly Labor Force Surveys on a nationally representative sample of 10-16,000 housing units (excluding the Northeast Province) to collect information on the nature of unemployment and labor earnings. The 1995 LFS data is used because this was the most readily available data at the inception of this study.

⁸ The Central Bank collects data on daily wages of casual workers in a variety of occupations in tea, paddy, rubber, and construction. These data are collected on a monthly basis by 80 teachers in representative parts of the country.

- b) Second, a crude analysis which compares the lowest acceptable wages of the unemployed with the actual labor earnings of the employed with similar characteristics is done to assess the role of education in determining reservation wages of the unemployed. This analysis also helps determine the possibility of a skills mismatch explanation for unemployment in Sri Lanka. If the skills mismatch explanation of unemployment is correct, the gap between the lowest acceptable wage and the actual labor earnings of similar individuals should grow wider with rising educational attainment (i.e., the ratios of the average lowest acceptable wage reported by the unemployed and the average labor earnings of the employed would increase with rising educational attainment). A more sophisticated multi-variate regression analysis which takes into account individual characteristics other than education (e.g., age, household status, etc.) is also undertaken to assess the role of education in determining labor earnings.
- c) Third, earnings functions that control for job and individual characteristics are estimated to assess if there are earnings gaps between sectors (i.e., public⁹ versus non-public; sectors covered and not covered by TEWA; and sectors covered and not covered by tariffs). The earnings gaps are estimated for workers with different education levels. The prevalence of significant earnings gaps between sectors could be the basis for the unemployed to “queue” for suitable employment. Labor earnings functions are also used to assess the extent of labor market segmentation in the private sector due to protection in the labor market (through TEWA) and product market (through tariffs). Earnings gaps are estimated by using seniority in the job (tenure of one or more years) as a proxy for coverage by the TEWA¹⁰ and sectoral tariff rates¹¹ as a proxy for limited product market competition.
- d) Fourth, time series data on the average wage set by Wages Boards (formal sector wages) and the average wages of casual workers (informal sector wages) are used to compare the effects of unemployment on wage increases across the formal and informal sectors (Phillips curve relationship). This is to assess if some jobs are better than others, in particular to show whether changes in the unemployment rate across sectors (formal and informal) have a statistically significant effect on wage increases. If the unemployed are only after the better jobs, the impact of the unemployment rate on informal sector earnings should be negligible.

⁹ According to the Labor Force Survey definition, the “public sector” includes state-owned enterprises and government administration. In 1995, tea estates were still owned by government and were therefore counted by the Labor Force Survey as part of the public sector.

¹⁰ The Labor Force Survey asks the number of months the interviewee has spent in the same job, but does not report the size of the firm, nor indicate whether it is unionized. Therefore it is not possible to use firm size (>15 workers) as a proxy for TEWA coverage. Since workers in a job for less than one year are not covered by the TEWA, greater than one year of job tenure is used as a proxy for TEWA coverage (legally, even casual workers who have one or more years of tenure in the same job are covered by the TEWA). The number of years of work experience is controlled for in the regression, and hence this proxy does not wrongly capture the effect of seniority/experience on wages.

¹¹ Sectors of employment are matched with corresponding 1995 tariff rates calculated by the World Trade Organization (WTO).

CHAPTER 4: ECONOMETRIC ANALYSIS AND ITS FINDINGS

4.1 This section presents the analysis that has been carried out and its key findings. The detailed results obtained are presented in the Technical Annex (Tables A.T1-A.T11) and their summary tables are available in the text below. Four key findings have emerged from the analysis.

A. STRONG JOB PREFERENCES PARTLY EXPLAIN THE UNEMPLOYMENT CONUNDRUM

4.2 Two exercises were carried out to identify the main determinants of unemployment in Sri Lanka. In both exercises, the previous week and the previous year are used as the reference periods, and the unemployment rates are based on the broad and narrow definitions. The first exercise is a simple statistical analysis of the Labor Force Survey data, and Annex Tables A.T1-A.T3 present national unemployment rates by age, education level and household status, disaggregated by gender (Table 4.1 summarizes the results). However, since age, education, and family status are all highly correlated, it is necessary to conduct a more rigorous assessment taking into account all individual characteristics simultaneously. This is done by undertaking a second exercise which applies a *probit regression* analysis to the individual records. The results of this analysis are presented in Table A.T4, and summarized in Table 4.2 below. The main conclusions of both these analyses are as follows:

- The overall unemployment rate drops from 13.6 percent to 3.2 percent when the narrow definition is used— implying almost full employment in the economy (Table 4.1). However, although unemployment virtually disappears for labor force participants above age 30 when using the narrow definition, it remains somewhat high for those: (i) aged 15 to 24 (24 percent); (ii) with 9 years of education and above, excluding graduate and post-graduate degrees (12 percent); and (iii) who are sons and daughters of household heads (8 percent). Also, female unemployment rates across all these variables are approximately double those of males (Tables A.T1-A.T3).

Table 4.1: Unemployment Rates by Age, Education and Household Status (All Country)

Age	Weekly Basis		Education	Weekly Basis		Household Status	Weekly Basis	
	Narrow	Broad		Narrow	Broad		Narrow	Broad
15-19	14.3	38.6	No School	0.7	3.4	Head	0.6	2.4
20-24	9.5	34.9	1-5 Years	1.5	4.7	Wife/Husband	0.8	6.5
25-29	4.2	18.3	6-8 Years	3.1	8.6	Son/Daughter	7.6	28.3
30-34	2.2	9.9	9-10 Years	4.9	16.9	Others	3.5	12.7
35-39	1.7	6.3	O/Level	3.5	18.4			
40-44	0.6	3.6	A/Level	3.4	22.3			
45-49	0.4	2.3	Degree	(.)	2.6			
50+	0.2	6.8	Post-graduate	(.)	3.0			
All	3.2	13.6	All	3.2	13.6	All	3.2	13.6

Note: Rates for cells with less than 100 observations are reported as missing (.).

- These determinants of unemployment based on the statistical analysis described above are also confirmed by the probit regression analysis. Results in Table 4.2 show that age, household status, O/Level education, and gender are very relevant in explaining unemployment (i.e., the regression coefficients are statistically significant at the 1 or 5

percent level for all independent variables). The probability of being unemployed is much higher for youth, and declines significantly with age. It is also much higher for sons and daughters of household heads, especially in urban areas. In addition, the results show that rural youth with O/Level qualifications are far more likely to be unemployed than urban youth with similar qualifications.

Table 4.2: Determinants of Unemployment

(Probit regression coefficients based on broad definition of unemployment; using the previous week as the reference period; the default status is unemployed)

Independent Variables	Urban	Rural	Estate	All
Age (in years)	-0.2060 *** (-36.54)	-0.2225 *** (-25.09)	-0.3007 *** (-9.741)	0.2136 *** (-46.62)
Age squared	0.0020 *** (27.47)	0.0022 *** (18.62)	0.0032 *** (7.004)	0.0021 *** (35.03)
Female	0.4813 *** (11.72)	0.3928 *** (6.120)	0.1108 (0.498)	0.4492 *** (13.27)
1-5 years of school	0.1839 * (1.940)	0.0019 (0.013)	0.6809 ** (1.996)	0.1712 ** (2.304)
6-8 years of school	-0.0617 (-0.568)	-0.3541 ** (-2.269)	0.7753 * (1.919)	-0.0814 (-0.961)
9-10 years of school	0.0440 (0.433)	0.0023 (0.016)	0.9621 ** (2.389)	0.1070 (1.346)
O/Level	0.2078 ** (2.017)	0.4076 *** (2.708)	1.170 ** (2.317)	0.3381 *** (4.156)
A/Level	0.1644 (1.520)	0.5718 *** (3.494)	-0.0536 (-0.065)	0.3371 *** (3.895)
Son or daughter of household head	0.4094 *** (6.006)	0.2142 ** (2.007)	-0.0592 (-0.183)	0.3462 *** (6.168)

Note: Z-values are reported in parenthesis. Statistically significant coefficients at the 10, 5, and 1 percent level are indicated by one, two, and three asterisks respectively.

4.3 The sharp drop in both the aggregate unemployment rate and the disaggregated rates (i.e., by age, education, household status etc.) when the narrow definition of unemployment is used implies that the unemployment problem in Sri Lanka is largely due to strong job preferences. For instance, when the narrow definition is used, the rate falls dramatically even for those groups recording the highest unemployment (Table 4.1). In addition, unemployment seems closely related to household status and the availability of income support from family relatives. Labor Force Survey data show that over 90 percent of the unemployed declare “family support” as their main source of income during their extended job search, as opposed to only 2-4 percent who report government assistance.

4.4 Nonetheless, the results of the two analyses also indicate that unemployment among the 15-24 age group remains high even under the narrow definition. To understand better the bias against this age group, a comparison of the detailed profiles of the unemployed and employed was undertaken. The results show that almost all individual characteristics of the unemployed are very similar under both the narrow and broad definition of unemployment (Annex Table A.T11). The only significant difference is that those who are unemployed under the *narrow definition* have far less educational attainment-- approximately 26 percent of this group have eight years of education or less, while only 14 percent of those unemployed under the *broad definition* have eight years of education or less. The low educational attainment of those

categorized as unemployed under the narrow definition could possibly be the reason for a higher level of unemployment among this age group.

B. LITTLE EVIDENCE OF A SKILLS MISMATCH EXPLANATION FOR UNEMPLOYMENT

4.5 A “skills mismatch” is implied when educated workers expect better jobs than they can actually find in the labor market (as employers do not value their education). If the skills mismatch explanation of unemployment is applicable in Sri Lanka, it should be possible to demonstrate that: (i) the gap between the lowest acceptable wage and the actual labor earnings of similar individuals become wider with rising educational attainment; and (ii) actual wages do not rise much with increasing educational attainment. The Labor Force Survey data provide information on both wage expectations of the unemployed and actual wages of those employed with similar characteristics.

4.6 Two techniques are used to assess the role of education in determining both actual wages of the employed and lowest acceptable wages of those unemployed with similar characteristics. The first is a *statistical analysis* of Labor Force Survey data calculating the ratios between the average lowest acceptable wages for the unemployed and the average labor earnings of similar, employed workers. These results are presented in Table A.T5 and summarized in Table 4.3 below.¹² However, as both actual labor earnings and the lowest acceptable wages are likely to vary with individual characteristics such as age or household status, which may in turn be correlated to education, this statistical analysis could be biased. To eliminate this bias, a second technique which applies *multi-variate regressions on earnings* is used to take into account individual characteristics other than education. The coefficients of the regressions explain the actual labor earnings of the employed and the lowest acceptable wages of the unemployed as a function of a variety of individual characteristics.¹³ Table 4.4 summarizes the relevant coefficients presented in greater detail in Table A.T6.

4.7 Both these techniques produce results that cast doubt on the skills mismatch explanation for Sri Lanka’s high youth unemployment rates (Annex Tables A.T5 and A.T6). These results can be summarized as follows:

- There is a steady decline in the ratio of lowest acceptable wage to actual average labor earnings as education increases (Table 4.3 below). It is therefore not clear that education creates unrealistic wage expectations among the youth.
- The education coefficients in the regression on actual labor earnings increase substantially with the number of years of schooling (Table 4.4 below). For instance, an average worker with A/Level qualifications earns almost three times¹⁴ more than a similar worker with no education. This gap corresponds to an average cumulative gain of almost 10 percent per year of education. The significant increase in labor earnings as educational attainment rises implies that the labor market does in fact reward the basic training gained from education.

¹² Since the Labor Force Survey does not collect information on labor earnings of the self-employed, actual average labor earnings (which reflect wages of salaried workers only) are likely to be biased upwards. Although the absolute values of the ratios reported in A.T5 should therefore be interpreted with some caution, the variation of the ratio across education levels is nevertheless informative.

¹³ To make the two regressions comparable, individual characteristics that were not observable for both groups (e.g., work experience, occupation) were left out of the regression.

¹⁴ All large regression coefficients are interpreted by using the following calculation: $100 * (\exp(\text{coeff. } 1.1049) - 1) = 201.9$

- The highly significant and rising educational coefficients in the regression on actual labor earnings, and the education coefficients in the regression on lowest acceptable wages which are close to zero support the findings in Table 4.3 that the ratio between the lowest acceptable wage and the average wage for workers with similar characteristics decreases, rather than increases, with education. In other words, educational attainment increases actual labor earnings more than it raises expectations.

Table 4.3: Lowest Acceptable Wage over Average Wage by Education
(Based on weekly, broad definition of unemployment)

Education	Urban	Rural	All Country
No school	(.)	(.)	(.)
1-5 years	1.37	(.)	1.56
6-8 years	1.32	1.54	1.39
9-10 years	1.16	1.20	1.20
O/Level	0.90	0.93	0.90
A/Level	0.72	0.81	0.74
Degree	(.)	(.)	(.)
Post-graduate	(.)	(.)	(.)

Note: Ratios for cells with less than 100 observations are reported as missing (.)

Table 4.4: Determinants of Actual and Reservation Wages (All Country)
(OLS regression coefficients based on log of wage in first job and/or log of lowest acceptable wage; both in Rs. per month)

Independent Variables	Employed (actual wage)	Unemployed (lowest accept. wage)	All
1-5 years of school	0.1201** (2.098)	-0.1467 (-0.747)	0.1454*** (2.709)
6-8 years of school	0.3374*** (5.797)	-0.0767 (-0.405)	0.3888*** (7.196)
9-10 years of school	0.5393*** (9.377)	-0.0298 (-0.161)	0.6091*** (11.51)
O/Level	0.8560*** (14.94)	-0.0361 (-0.195)	0.8440*** (15.97)
A/Level	1.1049*** (18.123)	0.1147 (0.614)	1.0628*** (19.2)
University degree or post-graduate	1.3747*** (18.78)	0.4254 (1.643)	1.3713*** (20.00)

Note: T-values are reported in parentheses. Statistically significant coefficients at the 10, 5, and 1 percent level are indicated by one, two, and three asterisks respectively.

4.8 It is legitimate to question the validity of these results given the low R^2 indicating poor fit of the regression for the lowest acceptable wage, and the results of the Chow test indicating the lack of similarity between coefficients in the two regressions for all variables (Table A.T6). These tests imply that the data on lowest acceptable wages may have some weaknesses. A closer look at other results of the analysis however allays this concern, and confirms the validity of the overall analysis. First, the coefficients on age and gender show little variation in the two regressions; and second, all education coefficients in the regression on actual labor earnings are statistically significant.

4.9 Finally, while the econometric results cast doubt on the existence of a “theoretical” skills mismatch in Sri Lanka, they do not invalidate the fact that some of the unemployed do not have

the skills required by currently available jobs (see Box 5.2).¹⁵ This form of “functional” mismatch is not captured in the data analysis, and persists because of structural obstacles such as wage rigidities and government’s employment and pay policies.

C. LABOR MARKET SEGMENTATION PROVIDES AN INCENTIVE FOR UNEMPLOYED YOUTH TO WAIT FOR “GOOD” JOBS

4.10 A common explanation proposed for the high unemployment rates of Sri Lanka rests on the assumption that there is a strong segmentation between jobs that are in great demand (i.e., “good” jobs) and those that are not in demand (i.e., “bad” jobs). This results from the following factors: (i) the divide between the public sector and the rest of the economy; (ii) the much higher job security enjoyed by those workers who are covered by the TEWA; and (iii) rent sharing in sectors where competition in product markets is limited, especially due to tariff protection and monopolies/quasi-monopolies.

4.11 OLS regressions have been run to evaluate the impact of these three factors on labor earnings. In the econometric model, the log of monthly earnings of salaried workers has been regressed on both individual and job characteristics. The individual characteristics considered are the same as in the previous section (age, gender, household status, etc.), plus total work experience and occupation. Job characteristics include whether (i) the job is in the public sector; (ii) the interviewee has been with the same employer for one year or more (as an indication of TEWA coverage);¹⁶ and (iii) the sector is protected by tariffs (a zero tariff rate is imputed to non-tradable sectors, but a dummy variable is introduced for each of them).¹⁷ The main results of the above regressions, presented in Annex Table A.T7 and summarized in Table 4.5 below, are the following:

- The earnings gap between public sector jobs and other jobs is unusually large. For instance, public sector workers earn approximately 60 percent more in cash wages than workers with similar individual and job characteristics outside the public sector. *This reflects the earnings gap at the sample mean*, i.e., for a worker outside the public sector with the average individual characteristics of the Labor Force Survey sample, with the average job seniority of the sample, in a sector protected by the average tariff of the sample. The earnings gap remains large even when disaggregated across urban, rural and estate workers. It is important to note that this significant wage differential does not imply that public sector jobs pay more than “good” private sector jobs (i.e., jobs covered by TEWA and/or in a sector with maximum tariffs). However, such “good” private sector jobs are scarce in a country like Sri Lanka which has more than half of its labor force in the informal sector.
- The earnings gap is also substantial between those who are covered by the TEWA and those who are not. In addition to job security, workers covered by the TEWA get 34 percent more in cash wages than those not covered by the TEWA.

¹⁵ The prevailing education system is in need of reforms for better gearing students to meet the diverse demands of the private sector, as well as remaining internationally competitive (see World Bank, May 1998b for descriptions of problems in the system).

¹⁶ A dummy variable that takes the value of one for workers with a seniority of at least one year is used as a proxy for coverage.

¹⁷ Non-tradable sectors might be characterized by limited competition in product markets. If no dummy variable was introduced for them, the estimated effect of trade protection on pay would be biased (in many sectors, a zero tariff rate could be associated with relatively high pay).

- Finally, higher tariff rates translate into higher labor earnings in both urban and rural districts. In urban districts, for instance, workers in sectors protected by the maximum tariff rate of 35 percent earn 38 percent more than those in sectors protected by a 10 percent tariff rate, holding constant for other individual and job characteristics. Some examples of these highly protected sectors include agriculture and manufacturing of food, beverages, tobacco, dairy products, sugar, textiles and garments, footwear, among others.

Table 4.5: Determinants of Labor Earnings by Broad Categories
(OLS regression coefficients based on log of Rs. per month in first job)

Independent Variables	Urban	Rural	Estate	All
Public sector job	0.4462 *** (7.572)	0.4937 *** (4.151)	0.7507 *** (3.608)	0.4673 *** (9.039)
I or more years of seniority	0.2800 *** (5.497)	0.2333 *** (2.459)	0.7047 *** (4.156)	0.2944 *** (6.582)
Tariff	0.0131 *** (4.124)	0.0177 *** (3.708)	0.0047 (0.504)	0.0130 *** (5.196)

Note: T-values are reported in parentheses. Statistically significant coefficients at the 10, 5, and 1% level are indicated by one, two, and three asterisks respectively.

All large regression coefficients are interpreted by using the following calculation: $100 * (\exp(\text{coeff}) - 1)$

4.12 Two additional refinements. The above results could be criticized on two grounds. The first relates to the *1995 Labor Force Survey questionnaire only allowing a maximum of four digits for the earnings variable*— 108 workers (of the sample of 7,013) appear to earn more than Rs. 9,999 per month. If very high earnings were more common outside the public sector than in it, the coefficient on the public sector dummy would be over-estimated. To correct for this possible bias, further analysis is conducted by splitting the sample by education levels as almost all of the workers reporting monthly earnings of Rs. 9,999 have university degrees.

4.13 The results, presented in Table A.T8 and summarized in Table 4.6 below, indicate that when disaggregated by education levels, the earnings gaps remain large for workers with A/Level education and below. This implies that public sector jobs are very attractive for those with general education qualifications, especially primary education. For instance, a public sector worker with 5 years of schooling or less could earn almost double (based on the 0.6628 coefficient) that of a worker with similar characteristics and qualifications outside the public sector.¹⁸ The earnings gap is over 69 percent for workers with O/Level or A/Level qualifications. By contrast however, the regression coefficient for workers with university degrees is far less statistically significant, and the Labor Force Survey data show that almost one third of this group of university graduates are affected by the censorship of the earnings variable. Hence there are no grounds to claim that workers with university degrees or higher earn more in the public sector than out of it.

¹⁸ Annex Table A.T10, which presents the characteristics and structure of public sector workers based on the Labor Force Survey data, shows that about 27 percent of public sector workers have less than O/Level qualifications.

Table 4.6: Determinants of Labor Earnings by Education Level
(OLS regression coefficients based on log of Rs. per month in first job)

Independent variables	5 years or less	6 to 10 yrs or less	O/Level or A/Level
Public sector job	0.6628*** (4.471)	0.4250*** (5.134)	0.5218*** (6.756)
1 or more years of seniority	0.3898*** (3.481)	0.1894*** (2.879)	0.4266*** (6.047)
Tariff	0.0026 (0.546)	0.0187*** (4.743)	0.0164*** (3.204)

Note: T-values are reported in parentheses. Statistically significant coefficients at the 10, 5, and 1% level are indicated by one, two, and three asterisks respectively.

All large regression coefficients are interpreted by using the following calculation: $100 * (\exp(\text{coeff}) - 1)$

4.14 The second criticism relates to the fact that *the results presented in Table A.T7 are based on earnings of salaried workers*, thus ignoring the earnings or potential earnings of other labor force participants such as the self-employed and the unemployed. These other earnings or potential earnings can be expected to vary with individual characteristics such as age or education. By focusing on the most successful labor force participants only, the regressions in Table A.T7 could yield biased estimates. To eliminate this self selection bias, the Heckman selection model was used to re-estimate the above regressions. This model analyzes how individual characteristics such as age or education affect the probability of being part of a successful group. The coefficients of the resulting earnings functions are not very different from those in Table A.T7; the results also confirm the finding that on average public sector jobs are more lucrative than other jobs, although the wage premium in this case appears somewhat smaller.

4.15 These robustness analyses confirm that the labor market is significantly segmented due to the large wage differentials offered to public sector jobs and private sector jobs covered by TEWA and protected by tariffs. The wage differentials cause protected jobs such as these to be more attractive than other salaried jobs, especially temporary private sector jobs. Therefore, youth with basic educational qualifications have a strong rationale to wait until "good" jobs such as the above become available.

D. UNEMPLOYMENT HAS NO IMPACT ON INFORMAL SECTOR WAGES

4.16 It is generally accepted that high unemployment rates translate into lower wage increases, especially in the short-run (the Phillips curve relationship). A plausible interpretation of this relationship is that the employed are more concerned about losing their jobs in periods of high unemployment, and are therefore more willing to accept modest pay increases. In a segmented labor market in which the unemployed are seeking mostly scarce "good" jobs, it appears reasonable that a high unemployment rate would be a source of concern to those who have "good" jobs, but have little or no impact on those with "bad" jobs.

4.17 A time series analysis has been conducted on average wages set by Wages Boards¹⁹ and

¹⁹ There are 37 tri-partite Wage Boards that set minimum wages for each skill level by sector (delegates to the Wages Boards are chosen from major trade unions and private employers, and includes the Commissioner of Labor). Most jobs covered by the TEWA come under the Wages Boards and are subject to collective bargaining agreements.

on actual average wages of casual workers to evaluate the relationship between unemployment and wages in both the formal and informal sector. The analysis considers seven sectors, three of them “formal” and the rest “informal.” Formal sector wages are based on the average minimum wage set by Wage Boards for agriculture, manufacturing and construction, and services. Informal sector wages are based on the average daily rate compiled by the Central Bank for casual workers in tea, paddy, rubber and construction. While the analysis controls for inflation and unemployment rate in the same year, it differs in the treatment of the unemployment variable and the independent term (see technical notes in Table A.T9 for details).

4.18 The main conclusion of this analysis (results presented in Table A.T9) is that unemployment rates have no effect on informal sector wages, but do however exert slight a downward pressure on formal sector wages. This pressure is reflected by the statistically significant coefficient on the dummy variable interacting the unemployment rate with the formal sector dummy. The finding demonstrates that the unemployed are in search of “good” jobs (i.e., jobs covered by Wages Boards agreements) but have little interest in “bad” jobs (i.e., jobs available on a daily basis). It lends further support to the results shown in regression Tables A.T7 and A.T8 which indicate that the unemployed have a strong preference for good jobs due to labor market segmentation.

CHAPTER 5: FITTING THE PUZZLE— THE ROLE OF THE POLICY ENVIRONMENT

A. OVERVIEW

5.1 The econometric results in the previous section provide the empirical evidence to demonstrate that there is considerable segmentation in Sri Lanka's labor market. The segmentation is reflected primarily in the large wage premiums provided in "good" jobs compared to "bad" jobs. For the purposes of this study, "good" jobs are those associated with life-time tenure, tariff protection, and the public sector; the "bad" jobs are those in the informal sector, and void of all of the above characteristics. These wage differentials are artificial²⁰ and stem mainly from a policy environment that provides protection to certain segments of the labor market, such as: (i) the formal labor market which benefits from stringent job security regulations; (ii) certain product markets that are protected by tariffs; and (iii) the public sector that offers preferential employment and pay treatment. Sri Lankan workers in protected sectors earn between 34-100 percent more than those in unprotected sectors (paras. 4.11 - 4.13), with the premium being highest in the public sector. This is contrary to what can be expected in a well functioning labor market where protection through job security regulations, tariffs, and public sector benefit schemes usually entails lower wages to compensate for the non-wage benefits.

5.2 Market segmentation takes greater significance in Sri Lanka because of the existence of a large pool of highly literate and politically active youth with high aspirations for upward mobility and white-collar employment (a product of the country's long standing policy of free education). A strong family support system allows young job seekers to be financially assisted during their lengthy search for such jobs.

5.3 The sections below provide background information which further support the econometric findings regarding labor market segmentation in Sri Lanka. They also explain how Sri Lanka's social context as well as the Government's response to unemployment amplify the impact of the distortion.

B. LABOR MARKET REGULATION CONSTRAINS THE CREATION OF "GOOD" JOBS

5.4 The econometric analysis has demonstrated that the highly restrictive nature of Sri Lanka's labor regulations are one of the most important explanations for the prevailing labor market segmentation.²¹ In fact, labor market regulations have remained restrictive despite the country's sustained implementation of liberalization policies. As a result, Sri Lanka today has one of the most stringent job security regulations in the world.

5.5 **Outdated regulatory framework.** The key piece of Sri Lanka's labor market regulations is the Termination of Employment of Workmen Act (TEWA). Although on the agenda since the late 1960s, the Act was introduced in July, 1971 following the Marxist

²⁰ Workers with similar individual and job characteristics would be expected to earn approximately the same in a well functioning labor market.

²¹ Significant liberalization of the tariff structure has occurred since 1995 (the year for which tariff rates have been used in the analysis). Hence, it can be assumed that additional progress has been made in reducing the distortions arising from tariff protection. This section therefore focuses only on the problems arising from labor market protection and public sector pay and employment policies.

insurrection of April that year. The TEWA extended State control over the retrenchment of workers in the private sector. Its objective was to prevent a feared mass retrenchment in domestic enterprises as the economy was being affected by a sharp decline in its terms of trade. Subsequently the law was amended to prevent not only retrenchments for economic reasons, but also terminations other than those based on disciplinary grounds, including incompetence, inappropriate skills and closure of business.

5.6 As it stands today, the TEWA protects all workers (even casual workers) who have job tenure of at least one year in establishments with 15 or more staff. Under this law termination of employment is possible only with prior written consent of the employee or the Commissioner of Labor. But more damaging is the fact that the process leading to the consent of the Commissioner of Labor is non-transparent, with dispute resolution taking several months and sometimes even years, during which time the firm has to continue paying the salary of its redundant worker. Furthermore, the mandatory severance payment to the employee (often very large in Sri Lanka) is solely at the discretion of the Commissioner of Labor.

5.7 In addition to restrictive labor regulations, enterprises in the formal sector also face adversarial trade unions which have developed over the years due to a combination of weak trade union legislation and politicization of economic management throughout the country. The trade union legislation was introduced in 1935 and has not evolved in tandem with the changing economic environment. For instance, a union can be legally established with a membership of only seven persons; the positions of union officers and leaders are not restricted to persons employed in the industry or trade, thus leaving room for outsiders with political motivations to hijack the objectives of the union (Kelegama and Gunatilaka, 1996). These weaknesses, together with the fact that politicians have historically been allowed to intervene widely in labor dispute resolution, have had adverse impacts on industrial relations. In this context trade unions have over the years developed strong political affiliations and taken very militant agendas. Today Sri Lanka has a large number of small trade unions with considerable leverage. This is evidenced by the high frequency of strikes and work stoppages throughout the country, especially in the last five years. The number of man days lost due to strike action in the private sector has averaged around 100,000 per year between 1994-98 (Central Bank of Sri Lanka, 1998). Industrial action has also been especially widespread in early 1999 in the run-up to Provincial Council elections. Workers in sectors including banking, power, telecommunications, aviation, postal services, medical services and higher education have instigated strike action demanding higher pay and greater non-wage benefits.

5.8 **Impact of the regulatory framework.** This regulatory framework and the relatively poor quality of industrial relations represent serious constraints on Sri Lanka's development potential. They impose a high risk and high cost environment on investors. For instance, foreign investors described labor union opposition as "formidable" and ranked this factor very high on the list of barriers to private sector investment in infrastructure in Sri Lanka (Stanfield, Baily and Halcrow, 1996).

5.9 Insufficient job creation. An even more damaging impact is on *domestic enterprises which perceive the restrictions as a hindrance to exploiting potential economies of scale*. The reduced flexibility to terminate workers on the grounds of retrenchment for restructuring or worker incompetence/mismatch represents a clear incentive for enterprises to remain below 15 workers (in order to avoid being subject to the TEWA) and not graduate to larger sizes operating in the formal sector. A 1995 survey of industries conducted by Department of Census and

Statistics demonstrated that an overwhelming 97 percent of the 133,000 firms surveyed in the rural sector employed less than 15 workers. Table 5.1 below gives a snapshot of some key industries.

Table 5.1: Number of Firms in the Rural Area by Selected Industries and Size, 1995

Industry	No. of Firms		% of Firms w/ <15 Employees
	<15 Employees	15 & Above	
Food products, beverages, & tobacco products	41,572	1,270	97%
Textiles & wearing apparel	23,381	1,033	96%
Wood & wood products, except furniture	13,484	202	99%
Rubber & plastic products	6,537	214	97%

Source: Department of Census and Statistics.

5.10 The *high unit labor costs prevailing in the formal sector* is a clear disincentive for enterprises to graduate out of the informal private sector. First, contrary to expectations, workers covered by the TEWA in the formal sector earn 34 percent more in cash wages than workers not covered by the TEWA. In a well functioning labor market, workers protected by job security usually receive lower wages as a tradeoff. This *large wage premium* (which is in addition to a number of non-wage benefits) in Sri Lanka is due primarily to the strong leverage of workers having life-time tenure (Box 5.1). Second, formal sector enterprises have to bear additional high *costs of employing and firing* workers. In addition to the indirect costs of legal delays and efficiency losses, terminating workers in Sri Lanka usually involves direct costs of two to nine months of salary per year of service as severance pay. This is unusually high in comparison to other countries where the maximum is usually one to two months of salary. Similarly, the costs of employing workers in the formal sector are large, due to high contribution rates on wages for retirement income-- 23 percent for Employers' Provident Fund (EPF) and Employers' Trust Fund (ETF), plus 0.5 month of gratuity per year of service. However, due to weak supervision capacity in the Labor Department, enforcement of social security schemes is poor in the informal, small enterprise sector.

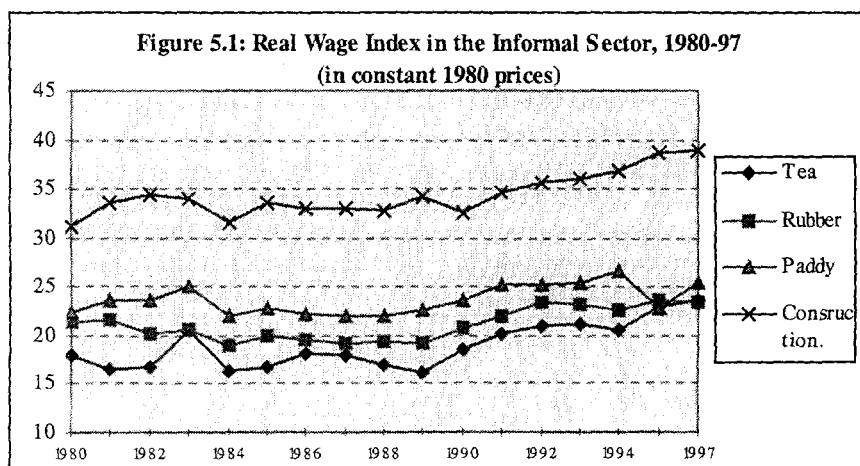
Box 5.1: Costs of Protection-- the Case of the Banking Sector

There are 27,000 bank employees in Sri Lanka, with 20,000 in the two large state commercial banks. These employees are among the most protected in Sri Lanka's labor market. In addition to higher wages, they receive generous non-wage benefits. These include, *inter alia*: (i) a combination of EPF, ETF and pension allowances; (ii) a wage indexation to the Consumer Price Index on an annual basis; (iii) life-time job security; and (iv) a greater number of holidays than the rest of the public sector.

Despite such benefits, bank employees have been agitating actively for greater privileges. For instance, an impasse in negotiations between the Ceylon Bank Employees Union (CBEU) and the Employers Federation of Ceylon (EFC) over demands for a salary increase undermined the country's financial sector while causing losses to the economy in April, 1999. Employees of the two state bank were demanding that the 8 percent salary increase granted to them in 1997 be given with arrears from 1994 (as in the case for executive staff), while private sector bank employees at lower levels were demanding a 35 percent increase as part of a re-negotiation of the Collective Agreement terminated by the CBEU in April, 1999. While the demands of the state bank employees were resolved, the EFC has been unwilling to grant more than a 20 percent increase in wages on the basis that when the cost of living allowance as well as EPF, ETF and pension benefits are added, this increase would in fact amount to as much as about 30 percent-- in itself a huge cost to the sector. The Labor Ministry has intervened, offering a 25 percent increase effective April, 1998. No decision has been taken as yet.

5.11 On the other hand, *domestic enterprises in the informal sector appear to operate in a relatively efficient environment for labor*. This is particularly evident in the case of the informal

rural labor market where wages and labor mobility have been responsive to market forces. Time series analysis of wages for various categories of unskilled informal sector workers shows that real wages have demonstrated an upward trend (especially in the 1990s) in response to shortages in certain sectors, e.g., rubber, tea, construction (Figure 5.1), and wage differentials across sectors have decreased over time. Labor mobility has also improved substantially within the rural informal sector with an increasing number of unskilled workers moving from rural farm to non-farm activities such as construction over the last few years.²²



Note: Wage data for 1995 are not available.
Source: Central Bank of Sri Lanka.

5.12 Negative impact on productivity. The net result of this very restrictive regulatory framework for labor is not only insufficient job creation in the formal sector, but also *lower productivity* in the workplace. First, due to the permanent job tenure it provides, workers have little fear of dismissal on grounds of incompetence, sub-standard performance, or inadequate skills. Second, the incentive to organize trade union action and agitate for higher wages is greater under circumstances of high job security. This is evident with respect to the banking and energy sectors, as well as the medical and teaching corps, among others. The ultimate result is a loss of man days. Third, large firms now resort to hiring greater numbers of casual and sub-contracted workers as a way of circumventing the TEWA. The resulting rapid turnover and lack of institution building have negative effects on productivity as well as workers' welfare (Kelegama and Gunatilaka, 1996). Finally, creating establishments with less than 15 workers has become the most common method used by employers to circumvent the TEWA (Table 5.1). Hence, even small enterprises undoubtedly suffer from lower productivity as a result of being unable to achieve economies of scale. This is demonstrated in the low per worker value-added in Sri Lanka's small enterprises (DCS, 1996). The broader macroeconomic impact of the above factors is that Sri Lanka today remains on a low-level equilibrium growth path, unable to realize its full growth potential.

C. SKEWED DEMAND FOR PROTECTED FORMAL SECTOR JOBS

5.13 The problems arising from a limited supply of formal private sector jobs are aggravated by the skewed demand for protected jobs in the Sri Lankan labor market. Aside from the wage

²² This section draws on the rural labor market analysis of Geeta Sethi (SASRD) and Don Mitchell (DECPG).

premium discussed above, this skew in demand for employment in the protected formal sector results from a strong job preference on the part of school graduates in Sri Lanka. The country's long-standing policy of providing universal (free) access to both primary and secondary education has led to a highly literate and relatively well educated labor force. Over the years, educational attainment has developed as a means of upward mobility, with young job seekers showing an unusually high preference for white collar employment, especially in government.

5.14 The prestige and status attached to white collar employment remains high even today. A survey on job preferences of A/Level qualified high-school graduates shows that the top three preferences are school teaching, government administration, and government clerical jobs (Aturupane, 1996). The graduates explained that the main factors behind their preference are job satisfaction, job security, income prospects and status. On the other hand, the most common reasons for their reluctance to enter the private sector were lack of job security, work load, and lack of appropriate training in entry level skills required by the private sector (Box 5.2).

Box 5.2: Accessing the Formal Private Sector: Inadequacies of the Education System

The Government maintains a strong monopoly in the provision of education services. Numerous distortions such as highly restricted access to university education and restrictions on language of instruction and non-public financing have consistently constrained Sri Lanka's ability to keep abreast with international innovations in pedagogical methods. As a result, educational outcomes have eroded. Sri Lankan students have very little exposure to English. All universities continue to conduct classes in the Humanities/Arts in local languages. Computer training and access to information technology are other areas of neglect even at the level of higher education. In the Economics faculty of the University of Colombo, only one optional class in computer training is available to students in their final year.

Implementation of the *Tharuna Aruna Scheme* confirms these problems. Launched by Government in 1997, the scheme assists unemployed university graduates in finding employment in the private sector. It is funded by the Government and managed by the four Chambers of Commerce in the country. Unemployed graduates are invited to apply to this scheme, and those selected are offered temporary employment (18 months, with a minimum wage of Rs. 3,000) in private firms. Depending on their performance they are absorbed into the firms upon completion of the training program. This scheme, which has 450 participating companies, has attracted around 2,000 graduates. While it is premature to evaluate the effectiveness of the program, some inadequacies have already appeared. Firstly, there is a big discrepancy between the pool of applicants and the type of trainees demanded by the private sector. Employers prefer Science/Commerce graduates who tend to be better equipped with analytical and computer skills. English proficiency is also in great demand. However, nearly 80 percent of applicants are Humanities/Arts graduates who do not have the same level of competency. Secondly, employers indicate that the biggest obstacle to integrating trainees in host enterprises relate to their attitudes/behaviors such as resistance to conform to the private sector culture and work ethic, insistence on hierarchy, and resentment of managers who do not have graduate degrees.

5.15 The selective job preference expressed by school graduates result in long periods of job search,²³ which is fully justified economically in Sri Lanka's socio-economic environment. While high returns to education can be easily assured even in "bad" jobs (as education is free), they are even greater for those who wait for good jobs (especially public sector jobs) as the wage premium is the highest, benefits are favorable, and the Government regularly succumbs to political leverage by acting as the "employer of last resort." Moreover, the job search is largely financed by family income—Labor Force Survey data show that over 90 percent of job seekers depend on family income as their main source of revenues, and that unemployment is closely related to household status, with sons and daughters having the highest unemployment rates

²³ Labor Force Survey data show that about 75 percent of the unemployed have a job search of more than 12 months.

while household heads enjoy almost full employment (Table 4.1). The role of family income support is also confirmed by studies on poverty. A 1992 report on employment and education linkages in Sri Lanka showed that the distribution of unemployment rates by household income is bi-modal, with a first peak at low levels of income, a decline at intermediate levels, and a second higher peak at middle-income levels (Alailima, 1992). Due to this strong family income support, the disutility of work in a "bad" job is greater than the utility gained from additional consumption possible due to the salary received from a "bad" job. Hence, there is little incentive for unemployed youth to be engaged in a "bad" job while searching for a "good" job.

D. GOVERNMENT'S RESPONSE TO THE LABOR MARKET SITUATION

5.16 The above sections have shown that there is a large imbalance between the demand and supply of formal sector jobs. The supply of this type of job is severely constrained by the regulatory and policy environment, while the social context of Sri Lanka tends to create high demand for these jobs. In these circumstances, the unemployed educated youth in Sri Lanka, as in most countries, have been able to wield strong political leverage. This leverage became most evident in 1971 and 1987-89 when they played a pivotal role in the country's two Marxist insurrections. Since that time, successive Sri Lankan governments have been actively searching for policies to promote economic development and employment. One important policy in this regard has been economic liberalization, and the results have been good. Job creation in the private sector has increased by almost 40 percent over the last decade. Economic liberalization has also been accompanied by the promotion of special economic zones (especially for the establishment of garment industries) and encouragement of labor migration. Despite these policies and their successes, political pressures from unemployed youth have remained strong, and the Government has resorted to regular recruitment in the public sector.

(i) Creation of Export Processing Zones (EPZs) and BOI companies:

5.17 The EPZs, first established in the late 1970s under regulations of the Greater Colombo Economic Commission (GCEC) and now expanded under the Board of Investments (BOI), have over time become an important element of Sri Lanka's economic infrastructure. The EPZs and BOI companies represent supra-national enclaves in which national laws are superseded by parallel laws and regulations designed to attract foreign direct investment. BOI enterprises are offered a great number of incentives, especially preferential tax treatment. An equally important benefit has been the relief given from the country's labor laws and practices. The success of BOI enterprises in terms of employment generation is not questioned (Table 5.2).

5.18 The most important lesson from this experience however is that BOI enterprises have not been successful in increasing the supply of formal sector "good" jobs. The regulatory relief has allowed them to bypass trade union agitation and stringent labor regulations that discourage domestic companies. For instance, many BOI companies only allow "workers' councils" to operate on their premises in lieu of trade unions. These councils are forums through which workers are able to express their legitimate concerns to higher levels of management, but are typically free of political influences. Similarly, job security regulations, which officially apply even to BOI companies, are often circumvented. Ultimately, the ambiguity in labor regulations prevailing in this enclave has created a great variation between the quality of jobs.

Table 5.2: Employment by Sector, 1988-1998 (in thousands)

	Public Sector			Private Sector			Total Empt. Pub. + Priv.
	Govt. ^a	Semi Govt. ^b	Total	BOI enterprises ^c	Others	Total	
1988	536	753	1,288	55	N/A	N/A	N/A
1989	589	750	1,338	61	3,571	3,632	4,971
1990	649	703	1,352	71	3,562	3,633	4,985
1991	653	654	1,307	85	3,691	3,776	5,083
1992	654	637	1,291	104	3,764	3,868	5,159
1993	676	619	1,295	122	3,751	3,873	5,168
1994	700	625	1,325	135	3,784	3,919	5,244
1995	738	569	1,307	233	3,893	4,126	5,433
1996	752	408	1,160	242	4,132	4,374	5,534
1997	762	310	1,072	258	4,241	4,499	5,571
1998	790	301	1,091	294	4,700	4,994	6,085

Notes: a. Includes central government, provincial councils and local authorities; b. includes public corporations, universities, boards and banks; c. approximately 60-70 percent of employees in BOI enterprises work in the garment and apparel industry.

Sources: Central Bank of Sri Lanka; Department of Census and Statistics; Board of Investments.

5.19 As a result, many EPZ jobs (especially those in garment factories) are now considered “bad” jobs where work conditions are poor and average minimum monthly wages (inclusive of special allowances) are low in the range of only Rs. 2,000-2,500 (US\$35). Young women comprise the majority of workers in garment factories, and problems related to housing, transportation, and long work hours result in a rapid turnover. Garment factories have become the main source of employment for women with relatively high levels of secondary education—Box 5.3 provides some explanations for this phenomenon. Due to a combination of such factors, garment factories face labor shortages and have an estimated 30-40,000 vacancies at any given time.

Box 5.3: Gender Equality and Employment in Sri Lanka

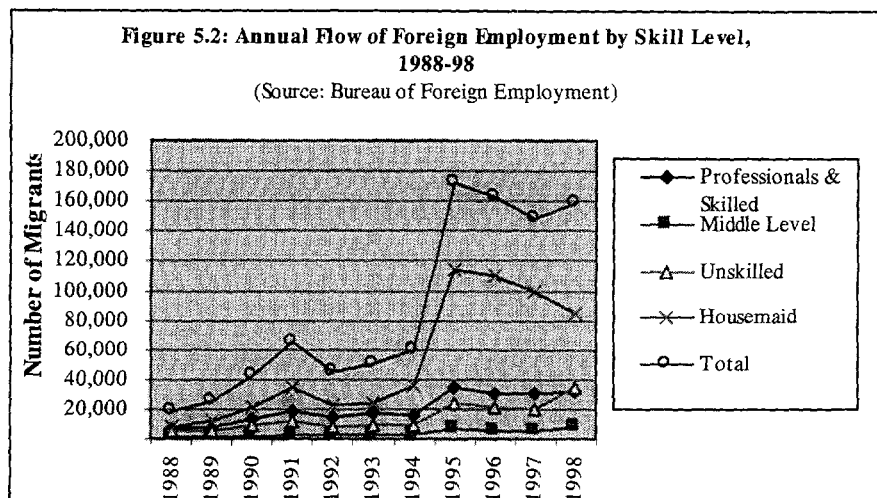
Sri Lanka is well known for its success in achieving gender equality in access to education. Women account for approximately 50 percent of enrolments, even in universities. Unfortunately however, this policy of equal access to education has not translated into equal employment opportunities for women, especially in the private sector. Female unemployment rates are often more than double the rates among men, and disconcertingly high among educated women—Labor Force Survey data used in this study show that the unemployment rate of women with A/Level education and above is as high as 44 percent in comparison to 15 percent for men. Female employment is also clustered in traditionally female occupations such as teaching, nursing, typing, stenography, and sewing. Women are also highly concentrated in the garment and textile industries, and they comprise the majority of labor migrants to Middle Eastern countries.

There is no straightforward explanation for this phenomenon. The unusually high rate of female unemployment and the clustering of women in certain sectors could be attributable to either or both the narrow employment preferences of women and some element of gender discrimination in employment practices. A survey conducted in 1996 of A/Level and university graduates revealed that an overwhelming majority of educated women (over 70 percent) chose teaching as their first occupational choice and government administration as a second choice. Interestingly however, this study also revealed that almost half of the managers from the surveyed private sector firms have a stronger preference for men, when confronted with male and female applicants with similar educational qualifications (Aturupane, 1996).

(ii) Promotion of outward migration:

5.20 The Government has also sought to address the problem of unemployment by actively promoting outward migration. The annual flow of labor migration has increased almost tenfold

within the last decade, reaching 160,000 in 1998 (Figure 5.2). More than three-quarters of the migrant workers are unskilled workers or housemaids seeking employment mostly in the Middle East. This policy has however had mixed success from the social perspective. While it has succeeded in providing job opportunities in particular to unskilled middle-aged women (majority in the 31-35 age group), it has failed for the most part in providing an employment outlet for educated youth. The social costs of migration have been high, as mothers are separated from their families for extended periods of time. This partly explains the increasing rates of divorce, alcoholism, child abuse, and difficult reintegration into the community. The impact on children is of particular concern—it is estimated that as many as 400,000 children under five years had mothers working in the Middle East in the 1990s (Resources Development Consultants Ltd., 1996).



(iii) Creation of public sector employment:

5.21 With this backdrop of insufficient job creation, successive Sri Lankan governments have regularly responded to the problem of youth unemployment through the ad hoc creation of jobs in the public sector. The number of government employees increased by almost 50 percent between 1988-98 (a 5 percent annual average growth rate),²⁴ and the share of government employment in the total labor force increased from 8 to 12 percent during the same period. As of 1998, another 4 percent of the labor force is employed in the semi-government sector.

5.22 The on-going 16 year-long conflict in the Northeast of the country has undoubtedly contributed significantly to this expansion in government employment. Army recruitment has now become one of the largest sources of employment opportunities in the country in recent years, especially for rural youth with basic education. There are an estimated 240,000 military personnel in Sri Lanka (Kelegama, 1998). Nevertheless, even when excluding service employees who largely constitute military personnel (Table 5.3), the increase in government employment remains high (29 percent); this is driven primarily by extensive recruitment in the teaching and clerical corps. As a result, Sri Lanka has by far the greatest number of public sector workers per thousand population in most of Asia (Table 5.4 below).²⁵

²⁴ Total employment in the public sector declined somewhat however due to the transfer of tea estates to the private sector.

²⁵ Table A.T10 presents Labor Force Survey data on the structure of the public sector in terms of qualifications and age etc.

Table 5.3: Total Government Employment, 1988-1998 (in thousands)

	Teachers	Doctors & Other Health Personnel	Other Professional & Management	Clerical and Sales Workers	Services (includes army)	Drivers, Manual Wkrs & Others	Total Government
1988	140	30	47	101	130	88	536
1989	166	37	47	103	150	86	589
1990	178	35	46	102	204	84	649
1991	171	30	43	96	238	76	653
1992	176	32	45	95	228	79	654
1993	187	34	47	100	230	79	676
1994	188	37	48	105	238	84	700
1995	189	40	50	129	246	84	738
1996	189	41	56	130	249	88	752
1997	180	46	56	136	256	88	762
1998	188	48	56	143	269	86	790

Note: Employment Statistics include all Central Government, Provincial Councils and Local Authorities

Source: Central Bank of Sri Lanka.

5.23 Recruitment into the teaching service was particularly extensive during the 1988-94 period with the Government taking in large numbers of untrained teachers irrespective of the needs of the education system. This phenomenon of absorbing under-qualified personnel into the teaching corps recurred in 1995 (35,000 hired) and 1998 when another 12,000 were hired. Similarly, about half of the 30,000 poverty workers (Samurdhi Development Officers) initially hired on a contract basis were absorbed into the permanent cadre of the public service during 1998-99. Under a Presidential directive, 8,000 university graduates were recruited into government in May, 1999 outside the established official cadre of government services. Several public corporations (e.g., Ports Authority, Ceylon Petroleum Corporation) have also engaged in widespread recruitment in recent years. Frequent occurrences of such ad hoc recruitment practices by government have severely undermined the credibility of hiring freezes in Sri Lanka.

Table 5.4: Size of the Public Sector^a in Asia

Country	Public Sector Workers ^b (per thousand population)
Bangladesh	10
India	19
Indonesia	21
Malaysia	45
Pakistan	19
Philippines	23
Singapore	37
Sri Lanka	57
Thailand	31

Notes: a. Includes public corporations and semi-govt. institutions.

b. The size of the entire public sector in each of these countries is based on most recent available data for the 1990s.

Sources: Schiavo-Campo (1997); World Bank staff estimates.

5.24 The Government's response of acting as "employer of last resort" is not unique to Sri Lanka. What is unusual however is that in addition to "artificially" creating an unusually large number of jobs within government (i.e., recruitment which is not needs based), cash wages paid to public sector employees with A/Level qualifications and below in Sri Lanka are significantly

higher than wages paid to similar workers outside the public sector. In fact, of all protected workers, public sector employees benefit from the largest wage premium (Table 4.5). This is somewhat of an anomaly given that public sector workers in Sri Lanka, like elsewhere in the world, also have job security, and better non-wage benefits than workers elsewhere (e.g., pensions, greater number of holidays,²⁶ shorter work hours, and lower effort levels). Much of this inconsistency originates from the Government's pay policies, another important source of labor market segmentation in Sri Lanka.

5.25 As a result of its traditional policy of being the employer of last resort, the Sri Lankan public service has an unusually large proportion of workers at lower levels of administration (non-professional clerical/minor staff) who benefit from higher salaries than elsewhere in the economy. Random checks on the salaries of workers in the private sector show that lower levels of public sector staff in particular (e.g., drivers, clerks, shroffs) earn around the same as their equivalents in the best blue-chip private sector companies (Table 5.5), which is far more than their equivalents in smaller private sector companies. In addition, they enjoy the same non-wage benefits as other government employees, the most attractive of which is lifetime income security—the pension scheme of government employees is generous, providing pensions as well as widows and orphans benefits equivalent to 85-90 percent of the last salary drawn.

Table 5.5: Salary Structure of Public and Provincial Public Service in Comparison with the Private Sector (entry level grade)*

Grade	Entry Level Monthly Salary (Rupees)	
	Public Sector	Private Sector ^a
Labor Grade	3,400	2,000 - 4,000
Drivers (light vehicles)	3,740	3,000 - 4,000
Shroff's, Typists' & Clerical Service	3,825	3,500 - 4,900
Stenographers' Service/Secretaries in pvt. sector ^b	4,375	4,500 - 8,000
Nursing Service ^c	5,370	N/A
Teaching Service	3,825	3,825
Administrative Service/Entry level executives ^d	7,225	10,000 - 16,500
Medical Officers	9,945	13,500 - 15,000
Secretary to Cabinet	20,825	N/A

Notes: * With the exception of teachers, this revised salary structure came into effect only in 1998.

a. Private sector salaries in this table were collected from companies that pay among the highest wages in Sri Lanka.

b. Secretaries in the private sector usually provide stenography, typing, and clerical support, and hence their salaries could be compared to the sum of the salaries paid to employees in the typist, clerical and stenographers' services of the public sector.

c. The public sector nursing service does not compare with the private sector in terms of qualification and training.

d. The Administrative Service is purely a government category. Therefore, entry level executives in the private sector have been taken as a comparator.

Sources: Public Service Commission, printed in *Daily News*, Dec. 18, 1996; World Bank staff estimates.

5.26 Workers in semi-government institutions also represent a privileged group of workers. Salary scales of many public corporations are higher than government pay scales. For instance, a 50 percent salary increase has recently been granted to all executives above a certain grade employed in the Sri Lanka Ports Authority (SLPA), one of the most overstaffed public corporations today. Non-academic support staff in all universities brought the entire higher education system to a halt in April, 1999 by demanding life-time pension benefits (in addition to the EPF/ETF and gratuity allowances currently received) along with salary and benefit increases

²⁶ Public sector workers have a total of 175 non-working days per annum (130 weekly rest and holidays, 24 days annual leave, 21 days casual/sick leave), in comparison to between 80-115 days for workers in the private sector (Kelegama and Gunatilaka, 1996).

commensurate with those of higher-level administrative staff. A new social security scheme is currently under review, and it is likely that university employees will have a proportion of their provident fund contributions converted to a pension scheme.

5.27 The Government's employment and pay policies have had adverse impacts on the efficiency of government administration and the economy as a whole. First, given the budget constraints arising from recruiting extensively at lower levels of public service, wage remuneration of professionals in the service has been kept abnormally low. This is reflected in Sri Lanka having the lowest salary compression ratio of 1:6 (Table 5.5) in comparison to around 1:10 in the rest of South Asia. This low ratio in Sri Lanka has implied inadequate remuneration of professional staff and has severely reduced the ability of government to attract and retain mid- and top-level personnel in the public service. Second, the private sector has been unable to create jobs to its fullest potential due to Government interventions in setting high wages and benefits in the public service as well as the sectors covered by the Wages Boards. Less obvious but as damaging, the Government's overall employment and pay policies have entrenched a strong bias/job preference for public sector jobs which has given rise to a waiting attitude among young job seekers. Lastly, as indicated in the report of the Presidential Commission on Youth (1990), the Government's interference in job creation has often been perceived as inequitable by a large segment of the unemployed (Box 5.4 below).

Box 5.4: Youth Discontent and Unemployment

Following the Marxist rebellion of 1987-89, a Presidential Commission on Youth, comprising independent intellectuals and professionals, was appointed in late 1989 to examine the causes of youth discontent and unrest. The Commission had consultations with a wide range of civil society, including youth organizations, private sector and government officials, among others. It produced three important conclusions:

First, there was a strong consensus that politicization and perceptions of abuse of power and injustice were the main causes of youth unrest in Sri Lanka. The Commission felt that the "politicization of employment" was a "direct cause of a great deal of resentment on the part of young people" (p. 2). The "chit system," which is the practice of receiving a letter from one's MP before finding public sector employment, was deemed by youth as incompatible with the basic norms of fairness, equity and merit. Accordingly, "the denial of merit has had a traumatic effect on the youth of the country who...appear to have harbored covert expectations of the dismantling of what they perceived as an inequitable system" (p. xviii). The emergence of corruption, bureaucratic inefficiencies, and apathy were also seen as contributing to a weakening of the social fabric.

Second, the Commission highlighted the failures of the education system in fulfilling the aspirations of the youth. It notes that while the entire school career is directed towards preparing students for the university entrance examination (A/Level), the ratio of entrants into universities is one of the lowest in the world. It states that "this process of elimination continues year after year, swelling the ranks of demoralized and disappointed youth, blaming the system of education— with considerable justification— for their unfulfilled aspirations and inability to direct themselves towards meaningful avenues of employment" (p. 30).

Finally, the Commission brought to light youth perceptions of the role of urban elite in using English language as a "sword of oppression" ("kaduwa") to deny social mobility to rural youth. The denial of access to English thus emerged as another important source of alienation and disenfranchisement of youth. The Commission states that "the vast majority of young people who appeared before us were strongly of the view that English should be taught in schools and made freely and readily available" (p. 80).^a

Note: a. Sri Lanka's education system is almost totally public, provided free of charge at all levels, and is very restrictive with regard to curriculum— English language as a medium of instruction is legally prohibited.

Source: "Report of the Presidential Commission on Youth," March, 1990.

CHAPTER 6: SUMMARY AND REFORM AGENDA

A. SUMMARY OF ANALYSIS

6.1 The decline in Sri Lanka's unemployment rate over the last decade is a positive trend, and suggests that there have been significant improvements in underlying labor market conditions. Notwithstanding these positive elements, this study has shown that Sri Lanka's labor market continues to suffer from serious distortions which have adverse effects not only on demand and supply in the labor market, but also on social and political stability within the country. For instance, some studies show that Sri Lanka has the highest youth suicide rate in the world, and job frustrations are seen to be one of the contributory factors. The sporadic youth uprisings in the past are another manifestation of the underlying social frustration of this group of Sri Lankans.

6.2 The most important contribution of this study is the evidence it has brought on labor market segmentation, as reflected in the large wage premiums (in addition to numerous non-wage benefits) provided in certain jobs referred to as "good" jobs. The main reasons for this artificial wage differential and market segmentation relate to public policies that provide protection in (i) the labor market through stringent job security regulations; (ii) the product market through tariffs and quasi-monopolies; and (iii) the public sector through the Government's employment and pay policies.

6.3 Removal of these distortionary policies would help eliminate the artificial premiums associated with "good" jobs, and create conditions for a sustained, structural improvement in the quality of "bad" jobs. More importantly, it would reduce labor costs and thereby increase job creation and employment prospects. Such a release of constraints will help give the necessary boost to move Sri Lanka from its current state of low-level equilibrium growth to a more dynamic growth path. It is clear however that even under such a scenario, it will take years before unemployment is completely eliminated in Sri Lanka (see Box 6.1 for international experiences on labor markets). For instance, even countries with stellar growth performances like Chile and Mauritius had double-digit unemployment rates for more than a decade after economic liberalization, and reached full employment only after about two decades. Under these circumstances, it is comforting to note that the unemployed are relatively well protected in Sri Lanka despite the absence of a formal unemployment benefit scheme. Education and health are free, a large income transfer program (Samurdhi) covers half the population,²⁷ and there still remains, albeit weakening, an extended family support system.

B. REFORM AGENDA

6.4 The most important challenge for Sri Lanka in the area of labor markets is to improve the supply of good private sector jobs by facilitating the transition of small enterprises operating in the informal sector into larger enterprises operating in the formal sector. This would provide a boost to the country's competitiveness and the private sector's ability to create jobs. Based on the distortionary policies mentioned above, the three areas in need of reform to help this transition and improve labor market conditions in Sri Lanka are: (i) trade and market

²⁷ In fact, the biggest problem with the Samurdhi is its extensive and untargeted coverage of beneficiaries.

liberalization; (ii) liberalization of labor regulations; and (iii) reform of public sector pay and employment policies. These are undoubtedly challenging areas of reform for Sri Lanka, but the country's recent experiences with politically difficult reforms have shown only positive outcomes.²⁸

(i) Trade and market liberalization:

6.5 Trade liberalization is the least controversial reform option and one that the Government has already been successfully implementing. Sri Lanka currently has the most liberal trade regime in South Asia,²⁹ but additional gains are possible as the country has lost some of its edge relative to a few of its competitors outside the region. The Government's announcement to move towards a two band tariff structure and further reduce the maximum rates by 2000 is undoubtedly a move in the right direction.

6.6 A related area is development of the domestic competitive environment, particularly by minimizing the strength of legal monopolies and quasi-monopolies held by some public sector corporations (e.g., Ceylon Petroleum Corporation, state banks, insurance, etc.). Owing to the large rents they obtain from protection, most of these corporations are able to provide not only high wage premiums, but also generous non-wage benefits such as various types of insurance, pension benefits sometimes together with provident fund lumpsums, etc. Sri Lanka has more than 150 statutory boards, public corporations and companies employing about 300,000 people. This sector is managed in a tight control framework similar to that imposed on the civil service, which is contradictory to the expected independence and autonomy of such entities. Moreover, this detailed regulatory framework does not focus on the most important issue, i.e., enterprise performance and productivity.

6.7 Sri Lanka has already experienced great success in creating a more competitive business environment. For instance, the privatization of telecommunications and plantations has not only increased the sectors' efficiency and productivity, but also improved the working conditions of employees. In privatized plantations for example, managers are now actively promoting new management styles with an emphasis on improving the "dignity of labor," increased mechanization, and improvements in the overall social and work environment. In retrospect, although the privatization of this sector was a long and tortuous process, it represents today the biggest success of policy implementation in recent years; the country has regained its place as the largest world exporter of tea, and there has been a significant increase in job creation in tea plantations, along with continued improvements in real wages. Based on these experiences, Sri Lanka would undoubtedly benefit greatly from more privatization of domestic enterprises, including private sector participation in infrastructure development (e.g., ports, railways, electricity and petroleum), and further liberalization of the financial sector which continues to be dominated by the two state commercial banks.

(ii) Reforming labor regulations:

6.8 Liberalization of product markets and tariff reduction alone will however not be fully effective without accompanying reforms in factor markets. As mentioned in previous sections,

²⁸ The education system is another important sphere in need of urgent and bold reforms, but this is of a long-term nature.

²⁹ For instance, the country's three band tariff rates have been reduced to 5, 10, and 30 (from 10, 20, and 35) for all except agricultural products (which remains at 35 percent) under the 1999 Budget.

reforms in the labor market have not evolved in consonance with the broad economic reforms that have been implemented in Sri Lanka over the last two decades. The Government's past attempts at reducing unemployment through the creation of EPZs/BOI industries and the promotion of outward migration have been quite successful in job creation and generating foreign exchange. They have not however addressed the most fundamental labor market bottleneck in Sri Lanka, i.e., the country's inflexible labor regulations. Instead, these attempts have only represented an indirect way of alleviating the negative fallouts of labor regulations and practices, and have at times resulted in regressive labor practices. Labor market reform is now an urgent need for Sri Lanka (Box 6.1).

Box 6.1: International Experience on Labor Markets

In a number of countries where economic reforms have produced a low inflation environment in the mid- to late-1990s, imbedded wage and/or employment rigidities have impeded serious advances in job creation. Economic growth generated fewer jobs than needed to absorb the growing labor force in a productive way. This situation was initially interpreted as a specific consequence of the early stages of the reform process, but it now appears to have become permanent, even in cases where the reform process is at an advanced stage and growth rates relatively high.

While undoubtedly the main engine of employment generation is economic growth, the relationship is greatly affected by the functioning, efficiency, and institutional structure of the labor market. For a given rate of economic growth, the induced employment growth largely depends on the flexibility of the labor market. This is best illustrated by the striking differential in job creation over the last two decades between on the one hand the US and European countries, and on the other hand Southeast Asian versus Latin American countries. Moreover, the labor cost elasticity (-0.8 to -0.3) usually tends to be twice the value of the output elasticity (0.15 to 0.5), and this latter response is also favorably affected, in terms of size and speed, by increases in the flexibility of labor markets. Thus there is a powerful impact of labor reforms on employment, especially when coupled with resumed sustainable GDP growth.

Source: Guasch (1999). *Labor Market Reform and Job Creation*.

6.9 A better approach would be to ensure that labor regulations provide job and income security to employees without penalizing employers and constraining the economy's ability to generate good jobs. In Sri Lanka, this implies a more flexible, expedite and transparent separation regime. Now that Sri Lanka has become a middle-income country, it could envisage a more flexible system similar to middle-income countries-- i.e., one where the employer is obligated to pay clearly defined severance allowances in case of dismissal for non-disciplinary reasons, but needs no authorization to proceed. Severance pay of this sort would provide more income security than what casual/daily workers currently enjoy and would encourage the creation of new permanent jobs (Box 6.2). A more drastic option which would yield positive long-run benefits in the area of job creation is the elimination of the TEWA for all new recruits while grandfathering the obligation for existing workers. But safety nets for the poor and most vulnerable are necessary during the transition period as there is bound to be a lag time in getting tangible benefits from even successful reforms. Sri Lanka should therefore try to converge to a system that balances increased labor market competition and mobility along with assurance of basic workers' rights— one at the expense of the other can be counterproductive, as the Sri Lankan experience has shown.

Box 6.2: Labor Market Reforms—the Latin American Experience

Chile, Colombia and Peru are examples of Latin American countries which have achieved significant growth in labor demand, real wage increases, and improvements in employment conditions largely due to the implementation of bold labor market reforms over the last two decades. All three countries reformed their labor codes to internalize the costs of labor disputes to the parties directly involved.

In particular, the traditional formula based severance payment system has been replaced by a fully-funded (defined contribution severance payment) system. This comprises of an individual capitalized fund into which employers make monthly contributions; it is accessible to a worker in the event of separation or retirement, and has portability to any job. Under Chile's PROTAC labor training program, employers and employees contribute 3.6 and 0.8 percent of the worker's wages, respectively, to a personalized account in a financial institution. In the event of separation, the worker has access to the full amount in the account, plus the differential (to be contributed by the firm) that amounts to a total compensation of one month per year of service, but with a maximum of eleven years. This type of fund has several advantages, the most important being that it is a nondistortionary and transparent separation regime. For instance, it does not create disincentives for workers to job search during the unemployed period and for firms to hire additional workers (as the firm does not have to face any certain or uncertain costs). Furthermore, since the fund is a de facto deferred compensation, it should not translate into higher labor costs. The system however is not fully efficient as it does not pool risks across workers and requires individual contribution rates higher than optimal.

Source: Guasch (1999). *Labor Market Reform and Job Creation*.

(iii) *Reforming the public sector's employment and pay policies:*

6.10 It is widely recognized that for political reasons, successive Sri Lankan governments have not been able to contain public sector employment over the years. This has had implications not only on the efficiency of public administration, but also on labor market dynamics as has been demonstrated by this study. The Government does not have many options in addressing the problem. Eventually it will have to reform public employment policies, with the view to subjecting recruitment to economic needs rather than political imperatives. The most effective way of doing this is to implement a comprehensive program of public administration reform that simultaneously addresses the most egregious governance weaknesses prevailing today. This policy would necessarily include institutional modernization, the introduction of mechanisms to minimize political interference in management of staff, the strengthening of financial control and accountability mechanisms, among others.

6.11 Yet, public administration reform will not be successful without a meaningful overhaul of the public sector's salary structure. This study has shown that public sector salaries, for all but professionals, are on average much higher than those elsewhere in the economy. In this area also, there are not many practical options. Sri Lanka can either stay the course on perpetuating high salary compression and payment of rents to staff in lower grades, at the price of facing difficulties in attracting/retaining high caliber professional staff and sustaining large budgetary costs; or introduce gradual and well-designed reforms of the existing pay structure over the next few years with the view to adjusting wages at both ends to ensure consistency with market realities. One possible solution is to have differential pay raises over time, based on merit and performance, for various categories of public sector workers,— this will have a double advantage of relaxing the compression within the salary structure, and reducing the gap relative to the non-public sector. However, this must be done in a well thought-out manner based on a clear set of criteria. In many ways, this would only represent a formalization of current arrangements in certain public sector departments and corporations where contractual assignments are provided

for external staff and autonomous agencies established in order to attract high caliber professionals.

6.12 Another important aspect of public sector remuneration that is also in need of adjustment to market conditions relates to retirement income. Sri Lanka has a generous defined benefit civil service pension scheme (CSPS) providing retirement income amounting to 85-90 percent of the last salary drawn. By contrast, the contributory provident fund scheme (Employees' Provident Fund/Employees' Trust Fund) offered to non-civil servants are often poorly enforced and adversely affected by negative returns.³⁰ It is therefore no surprise that the prevailing CSPS provides a strong incentive for workers to remain within the government service, thus constraining mobility between the government and non-government sectors. A higher return on retirement income funds through financial sector liberalization/development, reduced budget deficits and improved management of pension funds would undoubtedly facilitate the needed readjustment between public and non-public sector wages and labor mobility.

6.13 **Reaching consensus for sustainable reforms.** Given Sri Lanka's circumstances, the most critical prerequisite for the success of these challenging public sector reforms is the development of domestic consensus. Sri Lanka has a long history of conflictual political and social dynamics, which makes it all the more important that reforms, especially with respect to labor regulations and public sector employment and pay policies, be designed with the full collaboration of all stakeholders at an early stage. This undoubtedly is a difficult task given Sri Lanka's well entrenched norms on equity and social justice as well as the persistence of strong socialist ideologies among certain groups.³¹ The consultation process is likely to be long, but guaranteed of success if well supported. Past experience already provides a good example of how stakeholder support has been garnered for the implementation of even tougher reforms (e.g., privatization of plantations).

6.14 The discussion of reform options with major stakeholders (particularly trade unions) should however also clearly demonstrate the costs of inaction for Sri Lanka. The country's prolonged inability to generate adequate good quality jobs that satisfy the aspirations of a growing number of educated youth will be the most obvious fall-out of not introducing reforms in the labor market and public administration. Moreover, the Government's continued pandering to the demands of protected sector workers is at the high cost of marginalizing the large number of workers currently employed in Sri Lanka's informal sector. A "do nothing scenario" could therefore be more damaging for Sri Lanka than a bold implementation of reforms, especially since educated youth are likely to feel greater dissatisfaction (as evidenced in past insurrections) as the gap between the marginalized and the protected widens. Besides, the long-term social and economic costs of persistent public sector recruitment and interference in private sector activity will soon be far greater than the perceived short-run benefits— a net cost Sri Lanka can little afford today.

³⁰ There are also serious old age social security implications related to the Civil Service Pension Scheme. This scheme disburses Rs. 19 billion of pensions to 350,000 government employees each year, while the one-off EPF withdrawals for 70,000 members amount to only about Rs. 5 billion annually.

³¹ Leaders of the Clerical Services Union of Sri Lanka (the largest in Sri Lanka's public administration) stated that a uniform salary structure would be the ideal, not only in the public service, but throughout the economy.

TECHNICAL ANNEX

A.T1

Unemployment Rates by Age (All Country)

Age	Males			Females			All		
	Weekly basis		Annual Basis (broad)	Weekly basis		Annual Basis (broad)	Weekly basis		Annual Basis (broad)
	Narrow	Broad		Narrow	Broad		Narrow	Broad	
15-19	10.33	32.25	31.06	21.60	48.76	52.49	14.26	38.55	38.88
20-24	8.37	27.28	28.70	11.55	46.33	45.64	9.45	34.90	35.36
25-29	3.03	12.67	12.39	7.03	29.51	27.58	4.21	18.26	17.27
30-34	1.19	6.33	6.15	4.55	17.84	15.80	2.18	9.90	9.06
35-39	1.71	4.80	4.13	1.52	9.04	9.89	1.65	6.25	6.08
40-44	0.68	3.21	2.50	0.42	4.51	4.24	0.60	3.62	3.04
45-49	1.20	2.01	2.46	0.80	3.15	3.51	0.37	2.33	2.75
50-54	0.32	1.59	1.61	.	1.99	1.55	0.24	1.69	1.60
55-59	.	1.43	0.49	.	2.13	.	.	1.60	0.37
60-64	.	1.20	1.21	.	3.23	1.61	.	1.60	1.29
65-69	.	2.35	1.82	.	.	7.50	.	1.89	2.93
All	2.44	9.75	9.46	4.90	21.64	20.58	3.17	13.56	12.94

Note: The definitions used for the unemployment rates are provided in the text. Rates for cells with less than 100 observations are reported as missing.

A.T2

Unemployment Rates by Education (All Country)

Education	Males			Females			All		
	Weekly basis		Annual Basis (broad)	Weekly basis		Annual Basis (broad)	Weekly basis		Annual Basis (broad)
	Narrow	Broad		Narrow	Broad		Narrow	Broad	
No school	0.40	3.57	4.49	1.00	3.28	3.86	0.73	3.41	4.15
1-5 years	1.30	3.43	3.48	1.98	7.64	6.80	1.50	4.68	4.44
6-8 years	2.87	7.02	7.48	3.82	14.12	13.25	3.08	8.63	8.75
9-10 years	3.29	12.76	11.58	9.69	28.18	26.99	4.88	16.94	15.55
O/L	2.63	13.39	13.39	5.66	28.53	26.63	3.53	18.42	17.73
A/L	2.25	13.41	12.55	5.08	32.44	31.77	3.42	22.31	21.43
Degree	.	1.84	1.38	.	3.68	3.76	.	2.55	2.29
Post-graduate	.	.	.	.	8.33	8.33	.	3.03	3.12
All	2.44	9.75	9.46	4.90	21.64	20.59	3.17	13.56	12.94

Note: The definitions used for the unemployment rates are provided in the text. Rates for cells with less than 100 observations are reported as missing

A.T3

Unemployment Rates by Household Status (All Country)

Household Status	Males			Females			All		
	Weekly basis		Annual Basis (broad)	Weekly basis		Annual Basis (broad)	Weekly basis		Annual Basis (broad)
	Narrow	Broad		Narrow	Broad		Narrow	Broad	
Head	0.48	2.15	1.99	1.40	4.59	4.51	0.56	2.36	2.20
Wife/Husband	.	1.40	0.72	0.89	7.00	6.22	0.81	6.53	5.74
Son/Daughter	5.55	21.18	21.01	12.64	42.30	40.78	7.58	28.31	27.51
Others	3.53	10.12	10.21	3.45	16.98	17.89	3.50	12.72	13.06
All	2.44	9.75	9.46	4.90	21.64	20.58	3.17	13.56	12.94

Note: The definitions used for the unemployment rates are provided in the text. Rates for cells with less than 100 observations are reported as missing.

A.T4

Determinants of Unemployment

(Probit regressions, based on weekly, broad definition of unemployment; default status = employed)

Independent variables	Urban	Rural	Estate	All
Age (in years)	-0.2060 *** (-36.54)	-0.2225 *** (-25.09)	-0.3007 *** (-9.741)	-0.2136 *** (-46.62)
Age squared	0.0020 *** (27.47)	0.0022 *** (18.62)	0.0032 *** (7.004)	0.0021 *** (35.03)
Female	0.4813 *** (11.72)	0.3928 *** (6.120)	0.1108 (0.498)	0.4492 *** (13.27)
Sri Lankan Tamil	-0.4185 *** (-5.534)	0.3291 (1.000)	-0.4777 (-1.449)	-0.3993 *** (-5.867)
Indian Tamil	-0.6439 *** (-4.291)	-0.1389 (-0.549)	-0.2585 (-0.790)	-0.4480 *** (-4.247)
Moor	0.0886 (1.551)	0.0918 (0.509)	0.9381 (1.149)	0.0939 * (1.737)
Other non Sinhalese	-0.2180 (-1.365)	-	-	-0.2377 (1.496)
1-5 years of school	0.1839 * (1.940)	0.0019 (0.013)	0.6809 ** (1.996)	0.1712 ** (2.304)
6-8 years of school	-0.0617 (-0.568)	-0.3541 ** (-2.269)	0.7753 * (1.919)	-0.0814 (-0.961)
9-10 years of school	0.0440 (0.433)	0.0023 (0.016)	0.9621 ** (2.389)	0.1070 (1.346)
O/L	0.2078 ** (2.017)	0.4076 *** (2.708)	1.170 ** (2.317)	0.3381 *** (4.156)
A/L	0.1644 (1.520)	0.5718 *** (3.494)	-0.0536 (-0.065)	0.3371 *** (3.895)
University degree or post-graduate	-0.5774 *** (-2.819)	-0.1689 (-0.468)		-0.3970 ** (-2.280)
Vocational training (in years)	-0.0023 (0.937)	-0.0592 (-1.216)	-0.4772 (0.689)	-0.0100 (0.402)
Wife or husband of household head	0.0934 (1.040)	0.0237 (0.179)	-0.5191 (-1.241)	0.0233 (0.322)
Son or daughter of household head	0.4094 *** (6.006)	0.2142 ** (2.007)	-0.0592 (-0.183)	0.3462 *** (6.168)
Other non-household head	0.0179 (0.238)	0.0852 (0.683)	-0.5512 (-1.187)	0.0271 (0.428)
Rural				-0.1043 *** (-2.741)
Estate				0.0015 (0.016)
Province and quarter dummies	Yes	Yes	Yes	Yes
Number of observations	12424	5533	837	18797
Pseudo-R ²	0.6451	0.6652	0.7973	0.6534

Note: Z-values are reported in parentheses. Statistically significant coefficients at the 10, 5 and 1 % level are indicated by one, two and three asterisks respectively.

A.T5

Lowest Acceptable Wage over Average Wage by Education
(Based on weekly, broad definition of unemployment)

Education	Males			Females			All		
	Urban	Rural	All Country	Urban	Rural	All Country	Urban	Rural	All Country
No school	.	.	.	.	.	.	.	.	.
1-5 years	.	.	1.52	.	.	1.85	1.37	.	1.56
6-8 years	1.33	.	1.39	1.52	.	1.64	1.32	1.54	1.39
9-10 years	1.23	1.28	1.25	1.18	1.20	1.22	1.16	1.20	1.20
O/L	0.96	0.98	0.96	0.86	0.96	0.88	0.90	0.93	0.90
A/L	0.71	.	0.72	0.69	0.81	0.72	0.72	0.81	0.74
Degree	.	.	.	.	.	.	.	.	.
Post-graduate	.	.	.	.	.	.	.	.	.

Note: Ratios for cells with less than 100 observations are reported as missing.

A.T6

Determinants of Actual and Reservation Wages (All Country)

(OLS regressions; based on log of wage in first job
and/or log of lowest acceptable wage; both in Rs. per month)

Independent variables	Employed (actual wage)	Unemployed (lowest wage)	All
Age (in years)	0.0068 *** (5.881)	0.0061 ** (2.356)	0.0045 *** (4.268)
Female	-0.2115 *** (-7.408)	-0.1727 *** (-5.569)	-0.1700 *** (-7.366)
Sri Lankan Tamil	-0.0694 (-1.634)	0.1074 (1.434)	-0.0654 * (-1.722)
Indian Tamil	0.0229 (0.363)	0.2318 * (1.915)	0.0236 (0.415)
Moor	0.0001 (0.002)	0.1104 ** (2.144)	0.0449 (1.201)
Other non Sinhalese	-0.4555 *** (-3.915)	0.3114 * (1.900)	-0.3119 *** (-3.095)
1-5 years of school	0.1201 ** (2.098)	-0.1467 (-0.747)	0.1454 *** (2.709)
6-8 years of school	0.3374 *** (5.797)	-0.0767 (-0.405)	0.3888 *** (7.196)
9-10 years of school	0.5393 *** (9.377)	-0.0298 (-0.161)	0.6091 *** (11.51)
O/L	0.8560 *** (14.92)	-0.0361 (-0.195)	0.8440 *** (15.97)
A/L	1.1049 *** (18.123)	0.1147 (0.614)	1.0628 *** (19.20)
University degree or post-graduate	1.3747 *** (18.78)	0.4254 (1.643)	1.3713 *** (20.00)
Vocational training (in years)	0.0916 *** (6.229)	0.0059 (0.251)	0.0802 *** (6.188)
Wife or husband of household head	0.0382 (0.918)	0.0066 (0.068)	0.0149 (0.401)
Son or daughter of household head	-0.0555 * (-1.703)	0.0590 (0.741)	-0.0147 (-0.504)
Other non-household head	-0.1017 *** (-2.828)	0.1218 (1.437)	-0.0875 *** (-2.702)
Rural	-0.1664 *** (-5.899)	0.0065 (0.184)	-0.1425 *** (-5.988)
Estate	-0.0619 (-1.143)	-0.1654 (-1.527)	-0.0766 (-1.565)
Province and quarter dummies	Yes	Yes	Yes
Number of observations	7085	1733	8818
Adjusted R ²	0.2022	0.0505	0.1730
Chow test			10.314 ***

Note: T-values are reported in parentheses. Statistically significant coefficients at the 10, 5 and 1 % level are indicated by one, two and three asterisks respectively.

A.T7

Determinants of Labor Earnings(OLS regression; based on
log of Rs. per month in first job)

Independent variables	Urban	Rural	Estate	All
Age (in years)	0.0008 (0.534)	0.0070** (2.308)	0.0090* (1.805)	0.0017 (1.309)
Experience (in years)	0.0083*** (4.258)	-0.0024 (-0.664)	-0.0039 (-0.798)	0.0055*** (3.380)
Female	-0.2075*** (-6.048)	-0.2175*** (-3.190)	-0.1770* (-1.691)	-0.2118*** (-7.070)
Sri Lankan Tamil	0.0425 (0.938)	-0.3578 (-1.447)	-0.2429** (-2.121)	-0.0257 (-0.6090)
Indian Tamil	0.0577 (0.705)	0.0730 (0.308)	-0.1937 (-1.549)	0.0716 (1.151)
Moor	0.0191 (0.421)	-0.0227 (-0.127)	-0.6888 (-1.273)	-0.0114 (-0.250)
Other non Sinhalese	-0.4230*** (-3.849)	0.1974 (0.193)		-0.4391*** (-3.812)
1-5 years of school	0.1449* (1.842)	0.0453 (0.369)	-0.0662 (-0.675)	0.0805 (1.4270)
6-8 years of school	0.3046*** (3.888)	0.2189* (1.755)	-0.0437 (-0.367)	0.2437*** (4.227)
9-10 years of school	0.3783*** (4.851)	0.3860*** (3.080)	-0.1059 (-0.698)	0.3396*** (5.835)
O/L	0.5909*** (7.424)	0.4204*** (3.170)	0.5868** (2.449)	0.5172*** (8.522)
A/L	0.7343*** (8.613)	0.4859*** (3.150)	0.4124 (1.065)	0.6484*** (9.621)
University degree or post-graduate	0.9368*** (9.650)	0.6434*** (3.088)	0.0330 (0.038)	0.8528*** (10.497)
Vocational training (in years)	0.0711*** (4.413)	0.0280 (0.756)	0.2524* (1.715)	0.0633*** (4.214)

(Continued)

A.T7 (Continued)

Independent variables	Urban	Rural	Estate	All
Wife or husband of household head	0.0332 (0.673)	-0.1342 (-1.472)	0.1584 (1.368)	0.0185 (0.451)
Son or daughter of household head	-0.0597 (-1.605)	-0.0513 (-0.723)	0.0736 (0.610)	-0.0580 (-1.795)
Other non-household head	-0.0470 (-1.165)	-0.1930** (-2.236)	-0.0605 (-0.365)	-0.0736** (-2.034)
Public sector job	0.4462*** (7.572)	0.4937*** (4.151)	0.7507*** (3.608)	0.4673*** (9.039)
1 or more years of seniority	0.2800*** (5.497)	0.2333** (2.459)	0.7047*** (4.156)	0.2944*** (6.582)
Tariff	0.0131*** (4.124)	0.0177*** (3.708)	0.0047 (0.504)	0.0130*** (5.196)
Receives payments in kind	-0.1816*** (-4.888)	0.0538 (0.845)	0.1718 (1.877)	-0.0867*** (-2.896)
Rural				-0.1246*** (-4.446)
Estate				-0.0174 (-0.310)
Sector, occupation, province and quarter dummies	Yes	Yes	Yes	Yes
Number of observations	4659	1869	485	7013
Adjusted R ²	0.2395	0.2381	0.1819	0.2431

Note: T-values are reported in parentheses. Statistically significant coefficients at the 10, 5 and 1 % level are indicated by one, two and three asterisks respectively.

A.T8

Determinants of Labor Earnings by Education Level

(OLS regressions; based on
log of Rs. per month in first job)

Independent variables	Education level			
	5 years or less	6 to 10 years	O/L or A/L	Degree or more
Age (in years)	0.0038 (1.440)	0.0025 (1.181)	-0.0011 (-0.444)	0.0198 ** (2.563)
Experience (in years)	0.0004 (0.112)	0.0034 (1.205)	0.0109 *** (4.000)	-0.0048 (-0.639)
Female	-0.3398 *** (-4.492)	-0.1876 *** (-3.476)	-0.1427 *** (-3.345)	-0.2392 (-1.625)
Sri Lankan Tamil	-0.0822 (-0.918)	0.0455 (0.612)	-0.0769 (-1.130)	0.0299 (0.157)
Indian Tamil	0.0782 (0.719)	0.1222 (1.131)	-0.0428 (-0.270)	-0.0260 (-0.031)
Moor	0.0510 (0.408)	0.0489 (0.688)	-0.1108 (-1.637)	-0.2370 (-1.104)
Other non Sinhalese	0.2711 (0.676)	0.2311 (1.187)	-0.6792 *** (-4.417)	-3.978 *** (-9.355)
Vocational training (in years)	0.0371 (0.469)	0.0420 (1.248)	0.0615 *** (3.420)	0.0760 ** (2.215)
Wife or husband of household head	0.0736 (0.774)	-0.1684 ** (-2.193)	0.0068 (0.112)	0.1160 (0.657)
Son or daughter of household head	-0.0728 (-0.860)	-0.0483 (-0.942)	-0.1033 ** (-2.071)	-0.1328 (-0.798)
Other non-household head	-0.1743* (-1.767)	-0.0133 (-0.232)	-0.1381** (-2.517)	-0.1055 (-0.618)

(Continued)

A.T8 (Continued)

Independent variables	Education level			
	5 years or less	6 to 10 years	O/L or A/L	Degree or more
Public sector job	0.6628 *** (4.471)	0.4250 *** (5.134)	0.5218 *** (6.756)	0.6858 * (1.942)
1 or more years of seniority	0.3898 *** (3.481)	0.1894 *** (2.879)	0.4266 *** (6.047)	0.8793 ** (2.466)
Tariff	0.0026 (0.546)	0.0187 *** (4.743)	0.0164 *** (3.204)	-0.0131 (-0.478)
Receives payments in kind	-0.1254 ** (-1.910)	-0.0951 ** (-1.954)	-0.0320 (-0.661)	0.3495 (1.527)
Rural	-0.2335 *** (-2.917)	-0.0378 (-0.848)	-0.1222 *** (-2.979)	-0.0664 (-0.487)
Estate	0.1836* (1.734)	-0.2317** (-2.392)	-0.0165 (-0.122)	-0.8825 (-0.967)
Sector (if not tradable), occupation, Province and quarter dummies	Yes	Yes	Yes	Yes
Number of observations	1452	2674	2552	334
Adjusted R ²	0.0988	0.1011	0.1748	0.2213

Note: T-values are reported in parentheses. Statistically significant coefficients at the 10, 5 and 1 % level are indicated by one and two asterisks respectively.

A.T9

Effects of Unemployment on Nominal Wage Increases

(OLS regressions; with the change in the log of nominal wages by sector as the dependent variable)

	Specification			
Independent variables	(1)	(2)	(3)	(4)
Inflation rate (change in log of Colombo consumer prices)	0.6495 *** (3.844)	0.6749 *** (4.114)	0.6370 *** (3.870)	0.6370 *** (3.790)
Unemployment rate (in % of labor force)	0.0010 (0.232)	0.0004 (0.092)	0.0070 (1.164)	0.0070 (1.140)
Unemployment rate x Formal sector		-0.0022 ** (-2.432)	-0.0132 * (-1.803)	-0.0132 * (-1.766)
Independent term	0.0299 (0.582)	0.0511 (0.961)	-0.0415 (-0.513)	
Independent term x Formal sector			0.1580 (1.510)	
Sectoral dummies	No	No	No	Yes
Number of observations	79	79	79	79
Adjusted R ²	0.1953	0.2442	0.2569	0.2254

Note: Column (1) estimates a Phillips curve without introducing any differentiation across sectors. All of the other columns allow for a different effect of the unemployment rate depending on whether the sector is formal or informal. What varies between columns (2) and (4) is the specification of the independent term. Column (2) imposes the same independent term on all seven sectors; column (3) allows for a different independent term in the formal and informal sector; and column (4) for a different independent term for each of the seven sectors considered.

T-values are reported in parentheses. Statistically significant coefficients at the 10, 5 and 1 % level are indicated by one, two and three asterisks respectively.

A.T 10

The Structure of Employment in the Public Sector

(In percent; based on the 1995 Labor Force Survey)

	Education level				
	Up to 5 years	6-8 years	9-10 years	O/L and up	Total
Males	60.7	83.6	83.7	55.9	62.3
Females	39.3	16.4	16.3	44.1	37.7
Total	100.0	100.0	100.00	100.00	100.00
15-19 years old	5.7	1.4	1.9	0.4	1.0
20-24 years old	2.5	5.7	13.6	6.2	7.1
25-29 years old	9.8	8.6	14.4	16.0	15.0
30 years and above	82.0	84.3	70.1	77.4	77.0
Total	100.0	100.0	100.0	100.0	100.0
Less than one year seniority	3.3	2.1	5.1	5.0	4.8
One or more years	96.7	97.9	94.9	95.0	95.2
Total	100.0	100.0	100.0	100.0	100.0
Estates	15.6	10.7	1.3	0.1	1.8
Other agriculture	13.9	9.3	7.8	4.4	5.8
Transportation	4.9	11.4	19.3	7.4	9.4
Administration and defense	40.2	40.0	42.0	31.4	34.1
Education	2.5	2.1	5.9	32.5	24.8
Health	1.6	5.0	9.1	9.2	8.5
Others	21.3	21.4	14.7	15.1	15.7
Total	100.0	100.0	100.0	100.0	100.0
Total	5.3	6.1	16.2	72.5	100.0

A.T11

Descriptive Statistics Of the Employed and Unemployed
(Average characteristics of the sample, expressed as a percentage)

Individual characteristics	Employed		Unemployed, by definition	
	All	Wage Earners	Weekly Broad	Weekly narrow
Age (in years)	37.61	35.93	24.93	24.60
Female	29.1	32.1	51.4	45.8
Sri Lankan Tamil	7.6	9.8	4.6	5.5
Indian Tamil	3.3	4.6	2.0	2.6
Moor	8.4	6.5	9.6	12.3
Other non Sinhalese	0.9	0.9	0.8	0.3
1-5 years of school	17.5	15.9	4.3	8.1
6-8 years of school	18.1	16.1	10.1	17.5
9-10 years of school	24.1	21.9	31.8	37.7
O/L	21.5	22.9	32.0	24.1
A/L	10.6	13.5	20.4	11.5
University degree or post-graduate	3.5	4.8	0.6	0.000
Vocational training (in years)	0.232	0.269	0.218	18.2
Wife or husband of household head	13.7	13.4	5.1	3.4
Son or daughter of household head	29.5	31.8	77.1	73.8
Other non-household head	13.9	16.9	12.7	15.4
Rural	29.2	26.5	29.5	26.2
Estate	4.5	6.9	2.5	3.1
Number of observations	11666	7085	1735	382

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Sri Lanka at a glance

10/1/98

POVERTY and SOCIAL

1997

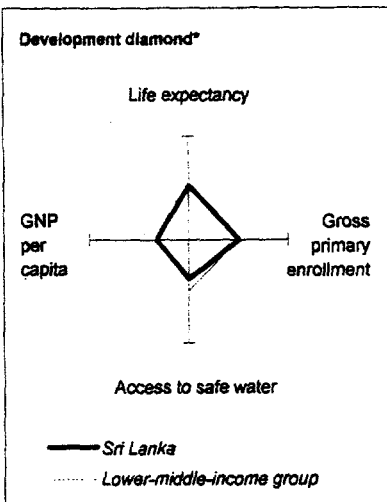
	Sri Lanka	South Asia	Lower-middle-income
Population, mid-year (millions)	18.5	1,289	2,285
GNP per capita (Atlas method, US\$)	800	390	1,230
GNP (Atlas method, US\$ billions)	14.8	502	2,818

Average annual growth, 1991-97

	Sri Lanka	South Asia	Lower-middle-income
Population (%)	1.2	1.9	1.2
Labor force (%)	1.8	2.2	1.3

Most recent estimate (latest year available, 1991-97)

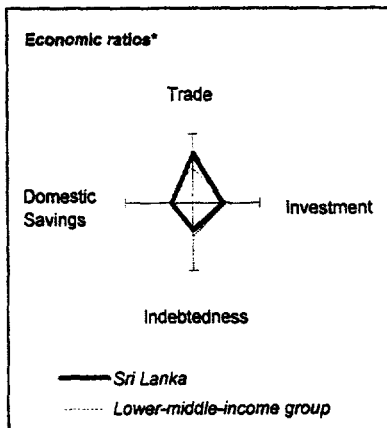
Poverty (% of population below national poverty line)	22	..	..
Urban population (% of total population)	23	27	42
Life expectancy at birth (years)	72	62	69
Infant mortality (per 1,000 live births)	18	71	36
Child malnutrition (% of children under 5)	38	63	..
Access to safe water (% of population)	64	77	84
Illiteracy (% of population age 15+)	10	51	19
Gross primary enrollment (% of school-age population)	113	99	111
Male	114	109	116
Female	112	89	113



KEY ECONOMIC RATIOS and LONG-TERM TRENDS

	1976	1986	1996	1997
GDP (US\$ billions)	3.6	6.4	13.8	14.8
Gross domestic investment/GDP	18.2	23.7	24.2	24.4
Exports of goods and services/GDP	29.0	23.7	35.0	36.5
Gross domestic savings/GDP	13.9	12.0	15.3	17.3
Gross national savings/GDP	14.8	19.0	19.0	21.4
Current account balance/GDP	-0.2	-6.5	-4.9	-2.6
Interest payments/GDP	0.6	1.9	2.1	1.8
Total debt/GDP	25.9	63.7	67.5	61.0
Total debt service/exports	24.4	20.9	13.6	16.2
Present value of debt/GDP	..	..	37.9	..
Present value of debt/exports	..	..	89.7	..

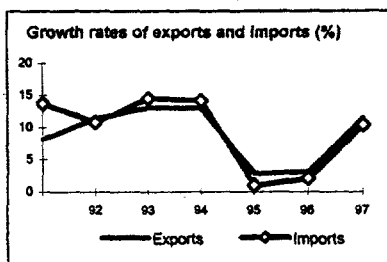
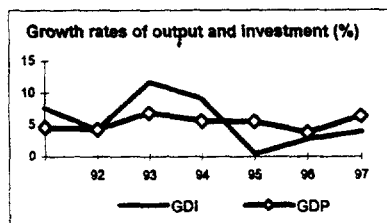
(average annual growth)	1976-86	1987-97	1996	1997	1998-02
GDP	5.3	5.0	3.8	6.4	..
GNP per capita	3.8	2.8	2.1	5.8	..
Exports of goods and services	4.7	9.1	3.2	11.8	..



STRUCTURE of the ECONOMY

(% of GDP)	1976	1986	1996	1997
Agriculture	29.0	27.1	22.4	21.9
Industry	27.1	26.6	25.1	25.5
Manufacturing	20.0	15.2	16.2	16.4
Services	43.9	46.3	52.4	52.6
Private consumption	78.1	77.7	74.1	72.3
General government consumption	10.0	10.3	10.5	10.4
Imports of goods and services	31.4	35.3	43.9	43.5

(average annual growth)	1976-86	1987-97	1996	1997
Agriculture	4.2	2.1	-4.6	3.1
Industry	4.9	6.1	6.0	7.9
Manufacturing	4.8	8.2	6.5	9.3
Services	6.7	5.6	5.8	6.8
Private consumption	6.2	4.9	1.7	6.6
General government consumption	6.1	5.6	18.6	10.3
Gross domestic investment	10.0	4.0	2.8	4.0
Imports of goods and services	9.9	7.1	2.1	10.5
Gross national product	5.4	4.0	3.2	6.9

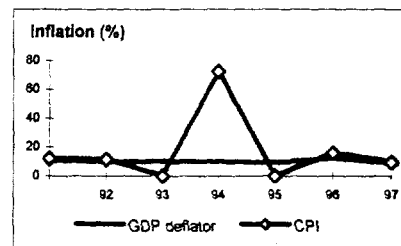


Note: 1997 data are preliminary estimates.

* The diamonds show four key indicators in the country (in bold) compared with its income-group average. If data are missing, the diamond will be incomplete.

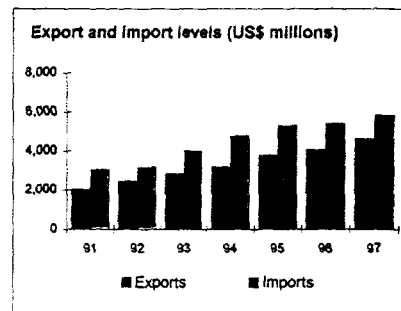
PRICES and GOVERNMENT FINANCE

	1976	1986	1996	1997
Domestic prices				
(% change)				
Consumer prices	..	8.0	15.9	9.6
Implicit GDP deflator	10.0	5.9	12.1	8.5
Government finance				
(% of GDP, includes current grants)				
Current revenue	..	20.7	19.9	19.4
Current budget balance	..	1.8	-2.9	-1.4
Overall surplus/deficit	..	-12.2	-8.5	-7.1



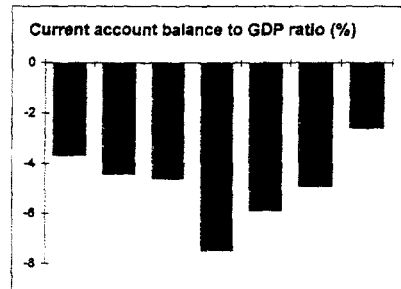
TRADE

	1976	1986	1996	1997
(US\$ millions)				
Total exports (fob)	..	1,216	4,095	4,639
Tea	..	330	615	719
Other agricultural goods	..	94	348	341
Manufactures	..	223	2,989	3,422
Total imports (cif)	..	1,947	5,438	5,852
Food	..	241	801	781
Fuel and energy	..	225	479	539
Capital goods	..	377	1,204	1,325
Export price index (1995=100)	..	84	103	106
Import price index (1995=100)	..	63	103	105
Terms of trade (1995=100)	..	132	100	100



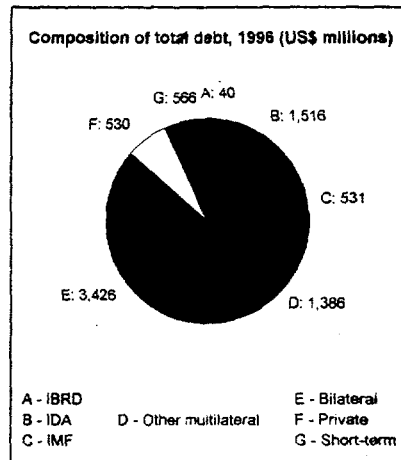
BALANCE of PAYMENTS

	1976	1986	1996	1997
(US\$ millions)				
Exports of goods and services	632	1,514	4,861	5,514
Imports of goods and services	683	2,264	6,099	6,568
Resource balance	-51	-750	-1,239	-1,054
Net income	-20	-138	-203	-165
Net current transfers	65	471	759	831
Current account balance	-6	-417	-683	-387
Financing items (net)	43	306	666	481
Changes in net reserves	-37	112	17	-94
Memo:				
Reserves including gold (US\$ millions)	..	..	1,937	2,029
Conversion rate (DEC, local/US\$)	8.4	28.0	55.5	60.0



EXTERNAL DEBT and RESOURCE FLOWS

	1976	1986	1996	1997
(US\$ millions)				
Total debt outstanding and disbursed	930	4,083	7,995	..
IBRD	36	72	40	31
IDA	44	498	1,516	1,514
Total debt service	158	399	427	..
IBRD	6	12	11	9
IDA	0	5	20	22
Composition of net resource flows				
Official grants	59	175	147	..
Official creditors	85	349	304	..
Private creditors	12	10	-67	..
Foreign direct investment	0	30	120	..
Portfolio equity	0	0	70	..
World Bank program				
Commitments	0	137	156	128
Disbursements	8	88	104	78
Principal repayments	4	6	16	16
Net flows	5	82	89	62
Interest payments	3	11	15	14
Net transfers	2	72	73	48



Sri Lanka Social Indicators

	Latest single year			Same region/income group	
	1970-75	1980-85	1990-96	South Asia	Low-income
POPULATION					
Total population, mid-year (millions)	13.5	15.8	18.3	1,265.8	3,238.2
Growth rate (% annual average)	1.5	1.4	1.2	1.9	1.8
Urban population (% of population)	22.0	21.1	22.4	26.6	29.1
Total fertility rate (births per woman)	4.0	2.9	2.3	3.4	3.2
POVERTY					
<i>(% of population)</i>					
National headcount index	..	..	35.3	..	..
Urban headcount index	..	..	28.4	..	..
Rural headcount index	..	..	38.1	..	..
INCOME					
GNP per capita (US\$)	310	370	740	380	490
Consumer price index (1987=100)	30	86	292	233	275
Food price index (1987=100)	..	86	302	..	..
INCOME/CONSUMPTION DISTRIBUTION					
<i>(% of income or consumption)</i>					
Lowest quintile	7.3	..	8.9	..	..
Highest quintile	42.8	..	39.3	..	..
SOCIAL INDICATORS					
Public expenditure					
Health (% of GDP)	..	..	1.4	0.8	1.5
Education (% of GNP)	..	2.6	3.2	3.0	3.6
Social security and welfare (% of GDP)	6.1	3.0	4.5	..	..
Net primary school enrollment rate					
<i>(% of age group)</i>					
Total	..	..	..	..	..
Male	..	..	..	..	..
Female	..	..	..	..	..
Access to safe water					
<i>(% of population)</i>					
Total	19	37	46	76	75
Urban	36	76	43	78	80
Rural	13	26	47	74	72
Immunization rate					
<i>(% under 12 months)</i>					
Measles	..	20	88	82	80
DPT	..	70	91	83	81
Child malnutrition (% under 5 years)	..	48	38	..	..
Life expectancy at birth					
<i>(years)</i>					
Total	65	67	73	62	63
Male	64	66	71	61	62
Female	66	68	75	63	64
Mortality					
Infant (per thousand live births)	48	25	15	73	68
Under 5 (per thousand live births)	100	48	19	93	94
Adult (15-59)					
Male (per 1,000 population)	214	210	172	239	231
Female (per 1,000 population)	196	152	108	230	206
Maternal (per 100,000 live births)	..	90	30	..	..