

Strategic Approaches to Job Creation and Employment in Indonesia

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Table of Contents

TABLE OF CONTENTS	I
FIGURES, TABLES, BOXES	II
GLOSSARY	VI
EXECUTIVE SUMMARY	VII
1. INTRODUCTION	1
2. ECONOMIC TRANSFORMATION AND THE STRUCTURE OF EMPLOYMENT IN INDONESIA	3
2.1 INTRODUCTION	3
2.2 ECONOMIC GROWTH AND TRANSFORMATION IN INDONESIA FROM 1970 TO 2002	3
2.3 THE CHANGING STRUCTURE OF EMPLOYMENT IN INDONESIA	9
ANNEX 2A: “CONFUSING NUMBERS THAT MISS THE POINT”	27
ANNEX 2B: SOME IMPORTANT DETAILS CONCERNING INDONESIAN LABOR FORCE AND EMPLOYMENT DATA	29
3. HOW HAVE INVESTMENT AND TRADE CREATED JOBS IN INDONESIA?	30
3.1 TRADE AND INVESTMENT REFORMS IN INDONESIA	30
3.2 IMPACT OF INVESTMENT AND INTERNATIONAL TRADE REFORMS ON JOB CREATION IN INDONESIA ..	33
3.3 INVESTMENT AND TRADE HAVE BEEN MAJOR SOURCES OF EMPLOYMENT GROWTH	38
3.4 INVESTMENT, TRADE AND INDUSTRIAL DEVELOPMENT - LINKAGES WITH THE RURAL SECTOR	45
3.5 SLOW RECOVERY IN INVESTMENT, EXPORTS AND EMPLOYMENT IN THE POST-CRISIS PERIOD	49
ANNEX 3A: AVERAGE NOMINAL TARIFF AND NON-TARIFF REDUCTIONS, 1986-2001	52
ANNEX 3B: INDONESIA - NEGATIVE INVESTMENT LISTS	53
ANNEX 3C: EMPLOYMENT CONCLUSIONS FROM INDONESIA’S INPUT-OUTPUT TABLE	55
ANNEX 3D: INVESTMENT APPROVALS BY ECONOMIC SECTOR	57
4. LOOKING FORWARD: CREATING MORE AND BETTER JOBS IN INDONESIA	58
4.1 INTRODUCTION	58
4.2 CONSIDERATIONS FOR INDONESIA’S JOB CREATION STRATEGY	59
4.3 CONCLUSION	63
ANNEX 4A: ASSUMPTIONS BEHIND THE EMPLOYMENT SIMULATIONS	64
SELECTED REFERENCES	65

List of Figures

	Page
Figure 2.1: Slow Recovery in Investment	7
Figure 2.2: Tradable Sectors versus Non-Tradable Sectors	8
Figure 2.3a: Workers by Industry, 1990, 1997, 1998 and 2002	12
Figure 2.3b: Workers by Status 1990, 1997, 1998 and 2002	12
Figure 2.4: Good jobs Lift Families Out of Poverty	21
Figure 2.5: Real Wages in the Formal and Informal Sectors	25
Figure 2.6: Formal and Informal Sector Employment Recovery	25
Figure 3.1: Trends in FDI Approvals, 1978 to 2002	36
Figure 3.2: Distribution of FDI Approvals by Major Economic Sector	36
Figure 3.3: Exports and Employment in Manufacturing	39
Figure 3.4: Investment and Employment in M&L Manufacturing	39
Figure 3.5: Exports and Employment in TGF	42
Figure 3.6: Exports and Employment in Technology and Human Capital Intensive Sectors	42

List of Tables

	Page
Table 2.1: GDP Growth Rates by Major Sector and Expenditure	4
Table 2.2: Percentage Share of GDP by major Economic Sector	5
Table 2.3: Poverty Incidence in Urban and Rural Indonesia	6
Table 2.4: Labor Force Trends	13
Table 2.5: Employment Trends	17
Table 2.6: Employment Growth by Economic Sector 1999-2002	18
Table 2.7: Unemployment Trends	23
Table 3.1: Shifts in Investment and Trade Policy	31
Table 3.2: Indonesian Exports 1981 to 2002	33
Table 3.3: FDI in the Medium and Large Scale Manufacturing Sector	37
Table 3.4: Sources of Employment Growth 1995 to 2002	40
Table 3.5: Employment growth in SMEs outside the major urban areas	47
Table 3.6: Growth in Employment During the Recovery Period	50

List of Boxes

	Page
Box 2.1: International Comparison of Indonesia's Labor Markets	14
Box 2.2: The Theoretical Model of Indonesia's Labor Market	16
Box 3.1: Employment Gains from Indonesia's Export Growth	41
Box 3.2: Are Investment and Trade Good for Workers?	44
Box 3.3: Tobacco and Furniture Industries - Linking up with the rural sector	46
Box 3.4: Deregulation and Investment in the Distribution Sector	47
Box 3.5: Infrastructure and Regional Industrial Development	49

List of Annexes

	Page
2A: "Confusing Numbers that Miss the Point	27
2B: Some Important Details Concerning Indonesian Labor Force and Employment Data	29
3A: Average nominal tariff and non-tariff reductions, 1986-2001	52
3B: Indonesia - Negative Investment Lists	53
3C: Indonesia's Changing Comparative Advantage	54
3D: Employment Conclusions from Indonesia's Input-Output Table	55
3E: Investment Approvals by Economic Sector	57
4A: Assumptions Behind the Employment Simulations	64

Glossary

AFTA	Asean Free Trade Area
Bappenas	Badan Perencanaan Pembangunan Nasional (National Development Planning Agency)
BKPM	Badan Koordinasi Penanaman Modal (Investment Coordination Board)
BPS	Badan Pusat Statistik (Central Bureau of Statistics)
BULOG	Badan Urusan Logistik (Food logistics agency)
CSIS	Center for Strategic and International Studies, Jakarta
FDI	Foreign Direct Investment
GOI	Government of Indonesia
HCI	Human capital intensive industries
IMF	International Monetary Fund
KHM	Kelayakan Hidup Minimum (Basic minimum living needs)
MLE	Medium and large-scale enterprises
KPPOD	Komite Pemantauan Pelaksanaan Otonomi Daerah (Committee for Monitoring the Implementation of Regional Autonomy)
MVA	Manufacturing value added
NTB	Non-tariff barrier
Sakernas	Survei Angkatan Kerja Nasional (National Labor Force Survey)
SMERU	Social Monitoring Early Response Unit
Susenas	Survei Sosio-Ekonomi Nasional (National Socio-Economic Survey)
TGF	Textile, garment and footwear sector
ULI	Unskilled labor intensive industries
USAID	Unites States of America International Aid Agency
WB	The World Bank
WTO	World Trade Organization

Executive Summary

Introduction

This report aims to inform USAID about the roles of trade and investment in employment creation in Indonesia. At the beginning of FY 04, USAID/Jakarta developed a Concept Paper for a new trade and investment growth strategy for Indonesia. The AID/Washington review of the Concept Paper resulted in requests for further analysis on trade and investment and its relation to employment generation as part of the full Mission strategy development. Through the “Parameters” cable to the Mission, specific and detailed requests for further information were required.

Specifically the Mission had been asked to address the following key concerns outlined in the Parameters cable:

Job Creation. The Mission must conduct further analysis to determine the most appropriate short-term and long-term approaches to creating jobs in Indonesia. This analysis should objectively consider the roles of trade and investment, agriculture, manufacturing, and the relevance of rural versus urban.

Approaches to Job Creation/Employment. The findings of this analysis should shape the overall jobs-creation/employment approach proposed by the Mission, and the strategic choices made as a result of the analysis will be reflected in the strategy document.

This study was commissioned to focus on the substantive issues outlined in the first paragraph (“Job Creation”), and to carry out analysis to determine the most appropriate approaches to creating jobs in Indonesia. The analysis considers the roles of trade and investment, agriculture, manufacturing, and the relevance of rural versus urban in employment creation. The report, however, also touches on key issues relevant for designing an employment-friendly strategy. The second requirement, “Approaches to Job Creation/Employment”, is the focus of USAID/Jakarta’s emerging strategy, taking into consideration the results of this study (“Job Creation”) and other analytical work undertaken to develop the strategic framework for the Mission’s new strategy.

Summary

Twelve strategic findings and recommendations are presented here, and are elaborated upon in the subsequent chapters of the report. These findings address the key issues facing Indonesia's employment growth through the crisis and the incipient recovery to date. To assist the reader, at the end of the Executive Summary, a "guide" to the key issues and recommendations addressed in the study is presented to allow the reader to focus on particular areas of interest.

1. The recovery in investment is key to job creation and growth in Indonesia in both the short term and longer term. Indonesia's economic growth rates have been modest during the recovery period primarily because of the slow recovery in investments and exports. Moderate economic growth rates have in turn slowed employment creation. In contrast to Indonesia, in the other crisis-hit countries the recovery in exports and investment have played important roles in their economic recoveries and employment creation. As the report discusses, slow progress in several key economic, legal and governance reforms have been a drag on investment and export recovery, the overall competitiveness of the economy, and therefore employment creation compared to regional neighbors. [Pp 4-8]

2. Provided governance and economic reforms are successfully implemented and the policy regime in Indonesia retains openness, the recovery in investment and employment is expected to accelerate. Improved governance and economic policies would lower costs of doing business. This in turn will stimulate investment and economic growth. As new capital is invested, employment of skilled and unskilled labor will increase. The policy obstacles to investment that need to be resolved are well documented. These include, among others, problems associated with customs procedures, tax policy, infrastructure bottlenecks, and uncertainty over property rights, corruption, legal recourse and high interest rates. Unfortunately in recent years some government policies have exacerbated the obstacles to investment. These include increasing institutional rigidities in the labor market that threaten to slow creation of better jobs in the economy, creeping and non-transparent forms of trade protection, and the proliferation of local government and domestic trade restrictions. Resolving these obstacles would create benefits that cut across all sectors in the economy. [Pp 60-63]

3. Investment and export recovery are key to creating "better" jobs – mainly in the modern/formal sector – in both the short-term and longer term. During the 1990s the Indonesian economy demonstrated its capacity to create millions of good jobs through investment and trade. This capacity to create good jobs continues post-crisis. Based on statistical analysis of recent employment and output data across sectors, around 760,000 new jobs (or 42 percent of total new jobs in the economy) – mostly on the construction sector – were created from the modest increase in investment spending since 2000. These trends suggest that the strong relationship between investment and jobs observed pre-crisis holds, but the problem lies with the slow recovery in investment across the economy. [P 40]

4. A high case scenario of 6 percent economic growth annually suggests that as many as 5-6 million new modern jobs could be created between 2004 and 2009. Over the next five years there could be as many as 10 million new labor market entrants. A high case scenario of 6 percent economic growth annually could create 5-6 million modern jobs (modern jobs for as many as 60 percent of new job seekers). The low case scenario of 4 percent economic growth annually would only create 3-4 million new modern sector jobs (covering 40 percent of new job seekers) with the informal sector absorbing 6-7 million new job seekers. [P 59]

5. Creating jobs in the formal/modern sector are pertinent to improving workers' welfare and poverty reduction in the long term. Modern sector jobs provide workers, on average, with higher wages and better working conditions compared to workers crowded into the informal or traditional sector. Workers in the modern sector have more opportunity to acquire modern workplace skills and to access training, which in turn gives them a better chance of increasing their lifetime earnings and welfare. In contrast, most (but not all) jobs in the traditional/informal sector are in low-productivity activities where earnings are low and unstable (e.g. street vendors, domestic staff, workers in the urban small-scale and cottage sectors and rural agriculture sector). There is a strong positive correlation between formal wage employment and poverty reduction as measured by household consumption. [Pp 19-21]

6. Although the labor force will grow more slowly in coming years, it will be better educated, more prime-aged and in need of better jobs than generally found in the informal sector. Also, in line with the shift to a more industrialized and service-oriented economy, the urban labor force has already grown to almost 44 percent of the total, and is increasing at some five percent per annum. The urban population is expected to surpass rural population within the next 10 years. [Pp 9-10]

7. Manufacturing played an important role in employment recovery, but other industries and services are becoming increasingly important as well. Manufacturing employment has steadily recovered with an average growth of 4.6 percent annually since 1998. In 2002 manufacturing employment growth slowed sharply mainly due to declines in textiles, garments and footwear industries. Other industries and services are becoming important generators of employment such as, electronics and machinery production (employment growth averaged 13.5 percent annually since 1998), processed foods (5 percent) and construction (4.2 percent). Based on current economic and employment growth rates we expect the non-agriculture sector (which accounts for 85 percent of the economy's output and 55 percent of the workforce) to continue to lead the recovery. [Pp 17-19]

8. The agriculture sector absorbed many displaced workers during the crisis in 1998, thereby providing an important social safety net. That sector will remain important in this regard. At the depth of the crisis in 1998, agriculture employment increased by 4.6 million while non-agriculture employment contracted by 2.3 million workers. This increase in agriculture employment was partly labor-supply driven, as displaced non-agriculture workers (many informal urban and rural workers) sought refuge in the agriculture sector. It was also due

to higher rural labor force participation rates (especially females) to mitigate the income effects of the crisis. Employment in agriculture posted only modest gains of 0.5 percent per annum during the recovery period. [Pp 17-19]

9. Strengthening urban to rural linkages remain critical for employment creation and poverty reduction. The rural sector remains important because 57 percent of the population lives in rural areas (but declining 1.2 percent annually) and the incidence of poverty is higher compared to the urban population. Also, recent household surveys indicate that farm households derive almost 50 percent of their income from off-farm activities and thus rural industry is an important channel for poverty reduction. Improved agriculture growth would provide knock-on effects to rural activities and poverty reduction. Also higher incomes and faster economic growth in the urban areas have important spillovers effects on rural incomes through rural-urban labor migration - and therefore remittances - and increased urban demand for commodities and products produced in the rural areas. [Pp 45-49]

10. An appropriate approach to employment creation in the short term is restoring aggregate demand in the economy – investment, consumption and exports – and removing policy obstacles to growth across all sectors. Consumption growth has been the main factor driving economic growth of between 3.4 to 3.7 percent since 2001, but it is unlikely to lift the economy to higher economic growth rates in the medium term. Higher economic growth rates will require increases in investment and exports. [P 60]

11. In the medium to long-term an appropriate employment strategy should increase its focus on generation of formal sector jobs. Ongoing demographic changes mean that better jobs are needed, not just to improve welfare, but also to respond to the rising aspirations of a better educated, older and more urbanized workforce. [P 60]

12. To achieve higher economic growth rates and to increase modern employment rates, governance and economic reforms need to be successfully implemented. Governance and economic reforms would lower production costs and enhance market flexibility important to stimulate investment and growth and increase modern employment rates. The study recommends that a pro-jobs growth strategy should address problems in the following areas [Pp 60-63]:

- **Governance reforms** – there is a need for predictable and consistent policies and regulations, policy coordination and transparency across ministries and levels of government, reduced corruption, and increased certainty over property rights and effective legal recourse.
- **Macroeconomic stability** – Indonesia has achieved a good degree of macroeconomic stability since 2002, although the benefits may take some time to feed through. Continued and concerted efforts in this area are needed to restore Indonesia’s investment performance, but must be complemented by improvements in the investment and trade climate.

- **Policies at the border** – Indonesia’s tariff rates are relatively low by regional standards however, the Ministries of Trade and Industry and Agriculture are increasing the use of non-tariff barriers to restrict international trade. Customs procedures and endemic corruption and inefficiencies at the ports have also raised the costs for importers.
- **Policies behind the border** – Indonesia needs to focus on many “behind the border” policy and investment climate issues relating to *inter alia* labor, investment and domestic trade policies; tax policy; decentralization; and infrastructure. High transaction costs associated with investment-related regulations and procedures raise the costs of doing business for all firms, but are particularly burdensome on small and medium-size firms; and, in particular
- Labor policy – directly related to employment generation, a flawed process for setting minimum wages (over 113 local governments and 30 provinces set their own rates), difficult and costly dismissal regulations, and restrictions on employment contracts and production outsourcing are raising the costs of hiring new workers and threaten to slow employment growth in the modern sector

Guide to the Report's Issues, Findings and Recommendations

Issues and Findings	Page Numbers
Role of investment and trade in job creation	33-51
Growth rates by major economic sectors	3-8
Investment decline in Indonesia	6-8, 33-39
Investment recovery in Indonesia	6-8, 31-39, 50-51
Labor force/demographic trends	9-26
Role of manufacturing, industry and services	4-8, 31-51
Role of agriculture	5-7, 46-51
Informal sector employment	9-26, 46-51
Formal sector employment	9-26, 46-51
Urban and rural relevance	3-26, 46-51
Focus of employment strategy in short term	60
Focus of employment strategy in the medium to long term	60
Governance reforms	60
Macro-economic stability	60
Policies at the border	60-61
Policies within the border	61-63

1. Introduction

This report analyzes patterns of employment creation in Indonesia during the pre-crisis, crisis and post-crisis periods, and analyzes the role of investment and trade in employment creation. This is important because it provides valuable information for Indonesia's job generation strategy. However, it proves to be even more important because the supply of better jobs in the formal sector that is essential for longer term economic growth and poverty reduction is growing more slowly than before the crisis and domestic policy obstacles are hindering investment necessary for reallocation of resources to dynamic sectors. In this report we refer to trade as both international and domestic trade. When we talk of investment we do not limit it to manufacturing or industry but refer to investments across all sectors and business entities.

We first look at the pattern of economic transformation and employment creation in Indonesia (Chapter Two), then at how investment and trade have created jobs in Indonesia (Chapter Three), and finally at policy obstacles that are a drag on investment recovery. The high case scenario of 6 percent economic growth annually would reverse recent trends of slow modern employment creation (Chapter Four).

Chapter Two looks at the pattern of employment creation in the pre-crisis, crisis and post-crisis periods in Indonesia to understand how it has changed, what sorts of jobs have been created, where, and whether in sufficient numbers. On the supply side, it finds that although the labor force will grow more slowly in coming years, it will be better educated and in need of higher quality jobs. Also, in line with the shift to a more industrialized and service-oriented economy, the urban labor force has already grown to almost 44 percent of the total, and is increasing at some five percent per annum. At current rates, urban population will probably surpass rural population within 10 years.

On the demand side it looks at employment creation by economic sector, and by status of employment, in particular. A breakdown by status of employment finds that formal sector job creation comfortably outpaced that in the informal sector before the crisis. Formal sector jobs pay higher wages than earnings in the informal sector, are more secure, are essential to faster economic growth, and are closely correlated with poverty reduction at the household level. During the crisis, the informal sector absorbed considerable number of displaced formal sector workers and new workers during the crisis. After the crisis, the formal sector rebounded, but in the last two years for which figures are available, formal sector employment growth has stalled.

Chapter Three looks at how investment and trade creates jobs in Indonesia. It finds that investment and trade were unequivocally engines of employment growth in the formal sector. The trade and investment reforms implemented in the late 1980s stimulated rapid expansion of exports of manufactured goods, and associated employment, particularly in labor-intensive sectors. Trade openness and investment also supported rises in real wages. Also, evidence from Indonesia's Input-Output Table suggests enormous total employment creation from investment and exports prior to the crisis, and these sources of employment growth remain important in the post-crisis period.

Indonesia's demonstrated capacity to create jobs through investment and trade continues. It is the low rates of investment that have slowed employment growth. Policy obstacles and poor investment climate have hurt investment recovery. These obstacles can be addressed through policy actions and improvements in the investment climate. This underlines the need for a broad-based investment and trade strategy with a focus on job creation in order to achieve Indonesia's poverty reduction objectives. A fundamental challenge that is becoming clear with the latest two years' employment statistics (2001 and 2002) is that formal sector employment creation has weakened considerably across all economic sectors, pushing more workers into the less productive informal sector. This does not bode well for long-term improvements in incomes.

Chapter Four looks forward to how investment and trade policies can lift investment and create more and better jobs in Indonesia, drawing out the implications of the analysis in Chapters Two and Three. It emphasizes the key areas in which policy efforts and investment climate improvements are needed. Most are very familiar but in many cases the situation has deteriorated threatening the creation of good jobs, and there is an urgent need for forward progress. In pursuing a job-generating growth strategy, Indonesia faces challenges on many fronts both in the short term and longer term. These include, among others, problems associated with customs procedures, tax policy, infrastructure bottlenecks, uncertainty over property rights, corruption, legal recourse and high interest rates. Unfortunately in recent years some government policies have exacerbated the obstacles to investment. These include increasing institutional rigidities in the labor market that threaten to slow creation of better jobs in the economy, creeping and non-transparent forms of trade protection, and proliferation of local government domestic trade restrictions. Resolving these obstacles would create benefits that cut across all sectors in the economy.

2. Economic Transformation and the Structure of Employment in Indonesia

2.1 Introduction

This chapter summarizes recent trends in the Indonesian economy and labor markets over the pre-crisis, crisis and post-crisis periods. It is divided into the following two sections. The first section reviews Indonesia's economic transformation and sources of growth during the past two decades. The second section examines developments in the labor market. The objective is to lay the foundation for analysis in Chapter Three on the impact of investment and trade policies on job creation – especially better jobs mainly in the formal sector.

We also discuss several pertinent issues that are relevant to Indonesia in designing an appropriate employment strategy. In particular, a targeted employment strategy should anticipate the medium and longer-term demographic changes that are occurring in the Indonesian labor market such as an aging work force, more highly educated workers, and the increasing urbanization of the working-age population.

A key conclusion of this chapter is that any pro-employment strategy needs to focus tightly on two issues. First, it needs to create more modern/formal sector jobs. Second, it must assist those in the informal sector by facilitating their transition to the formal sector, and through improving access to markets. This would include ways to improve rural-urban linkages and better prepare rural out-migrants for productive life in urban areas.

2.2 Economic Growth and Transformation in Indonesia from 1970 to 2002

Standard economic theory tells us that economies with high rates of investment (physical and human capital) achieve relatively higher rates of economic growth and employment creation. Empirical evidence for developing countries confirms this investment-growth relationship (Stiglitz and Yusuf, 2001). Also high economic growth and development involves the transformation of a country from an agricultural based economy to an industrial-service based economy and increased urbanization (Henderson, 1988).

Indonesia has experienced a remarkable economic transformation over the past three decades. Until the economic crisis aggregate economic growth rates were high, underpinned by high rates of investment and savings by developing country standards. Relatively balanced growth across sectors was combined with substantial structural change.

Table 2.1: GDP Growth Rates by Major Economic Sector and Expenditure Group (% , average per year)

Economic sector		Agriculture	Industry	(Non-oil manufacturing only)	Services	Overall GDP
Pre-reform	1980-85	3.4	4.2	Na	6.9	5.0
Reform	1985-90	3.0	7.0	12.0	7.3	6.3
High growth	1990-97	2.5	9.1	11.5	6.9	7.0
Crisis	1998	-1.3	-14.0	-13.1	-16.5	-13.1
Recovery	1999	2.2	2.0	3.5	-1.0	0.8
	2000	1.9	5.9	7.0	5.2	4.9
	2001	1.0	3.3	5.0	4.6	3.4
	2002	1.7	3.7	4.2	4.4	3.7
	2003*	2.3	3.4	--	4.7	3.7
Expenditure group		Household consumption	Gov Consumption	Investment	Exports of goods	Imports
Pre-reform	1980-85	6.5	5.7	6.6	-2.3	9.1
Reform	1985-90	8.5	4.3	13.8	8.5	4.6
High growth	1990-97	9.7	2.8	11.2	9.4	14.3
Crisis	1998	-6.2	-15.4	-33.0	11.2	-5.3
Recovery	1999	4.6	0.7	-18.2	-31.8	-40.7
	2000	1.6	6.5	16.7	26.5	25.9
	2001	4.4	9.0	7.7	1.9	8.1
	2002	4.7	12.8	-0.2	-1.2	-8.3
	2003*	4.4	9.0	2.4	0.5	0.2

Source: National Income Accounts, BPS

Notes: * Preliminary, first three quarters of 2003 over same period in 2002

Industry includes manufacturing, mining, utilities and construction

Table 2.2: Percentage Share of GDP by major Economic Sector (constant 1993 prices), 1970- 2002

	Agriculture	Industry	(Non-oil manufacturing only)	Services
1970*	45.5	21.7	Na	32.8
1980*	30.7	30.9	9.9	38.4
1990	20.1	37.9	17.3	42.0
1997	14.9	43.2	22.4	42.0
1998	16.9	42.8	22.4	40.3
2002	15.9	43.6	24.0	40.4

Note: *Based on constant 1973 prices.

Strong agricultural sector expansion during the 1970s and 1980s slowed in the 1990s as manufacturing growth accelerated on the back of investment and export expansion. Agricultural expansion in the 1970s and 1980s was impressive by developing country standards growing about 3.4 percent per year. From the late 1980s the non-oil/gas manufacturing sector expanded faster than most other sectors, spurred by trade and investment reforms after 1986 (Table 2.1). As per capita incomes grew and foreign investment increased, much of the economy became more diversified; trade services, construction, financial and professional services all increased substantially.

High growth rates have been associated with substantial structural change in the economy (see Table 2.2). Agriculture's share of GDP declined from around 45.5 percent in 1970 to less than 15 percent by the mid-1990s. By contrast, manufacturing's share grew from just under 10 percent in the mid-1980s to 22 percent by 1997, overtaking agriculture in the early 1990s. Substantial transformation in the services sector also accompanied rapid economic growth and development of the economy. During the 1990s the composition of services moved towards modern trade, financial and professional services and the construction sector.

Balanced growth across sectors combined with structural change contributed to sustainable declines in poverty rates during the past three decades (Table 2.3). With about 80 percent of the population living in rural areas in the mid-1970s, rapid declines in rural poverty in the 1970s and 1980s were associated with agricultural development and especially rice production as well as government price support schemes (Timmer, 1993). However, public investments alone are likely to have diminishing returns over time. Indonesia's experienced shows that opening markets to international competition becomes a pre-requisite for continued economic growth and improvements in living standards. The manufacturing, construction and services sector played a dominant role in reducing poverty after 1987 (Papanek, 2003).

Table 2.3: Poverty Incidence in Urban and Rural Indonesia, 1976-2002

Year	Urban	Rural	Total	% Population Urban
1976	38.8	40.4	40.1	20.0
1980	29.0	28.4	28.6	22.2
1984	21.2	23.1	21.6	25.4
1987	20.1	16.4	17.4	27.9
1990a	16.8	14.3	15.1	30.5
1990b*	16.1	15.7	15.8	30.5
1993*	13.4	13.8	13.7	33.0
1996*	9.7	12.3	11.3	36.0
1996**	13.6	19.9	17.7	36.0
1998**	21.9	25.7	24.2	39.3
1999**	19.5	26.1	23.5	39.9
2000**	14.6	22.1	19.0	41.0
2002**	14.5	21.1	18.2	43.5

Notes: * Based on new methodology employed by the Central Bureau of Statistics.

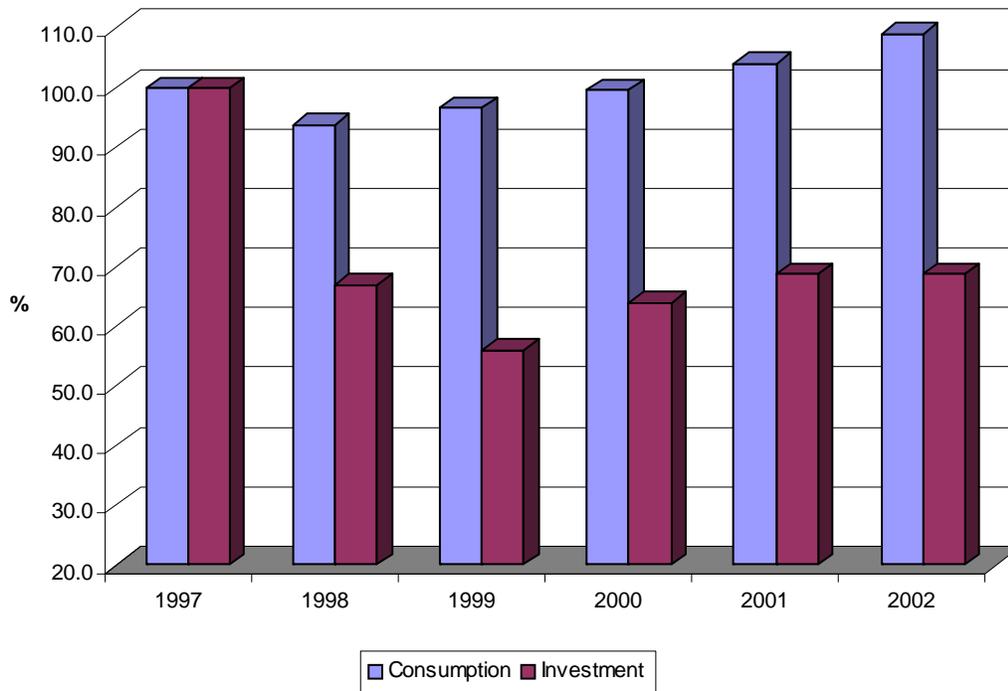
** New (higher) poverty line based on an expanded basket of goods.

Sources: Central Bureau of Statistics (1992), *Poverty and Income Distribution in Indonesia, 1976-1990*; Central Bureau of Statistics (2000) *Pengukuran Tingkat Kemiskinan di Indonesia 1976-1999: Metode BPS* (Measurement of Poverty in Indonesia 1976-1999: the BPS Methodology), Jakarta. Data for 1999 and 2002 are from the full SUSENAS (National Social Economic Survey), and for 1998 and 2000 for the sample SUSENAS.

Indonesia's economy contracted substantially during the financial crisis in 1998, which temporarily reversed this pattern of economic transformation. Non-agriculture sectors experienced a deep recession from 1998, and the crisis as a whole proved to be more severe and prolonged than elsewhere in East Asia. This was due to a complex interaction of economic, political and social instability. The economy contracted by 13 percent in 1998, stagnated in the first half of 1999 and strongly rebounded in 2000 with growth of 5%. The economy has slowed to 3.5 to 4 percent since 2001.

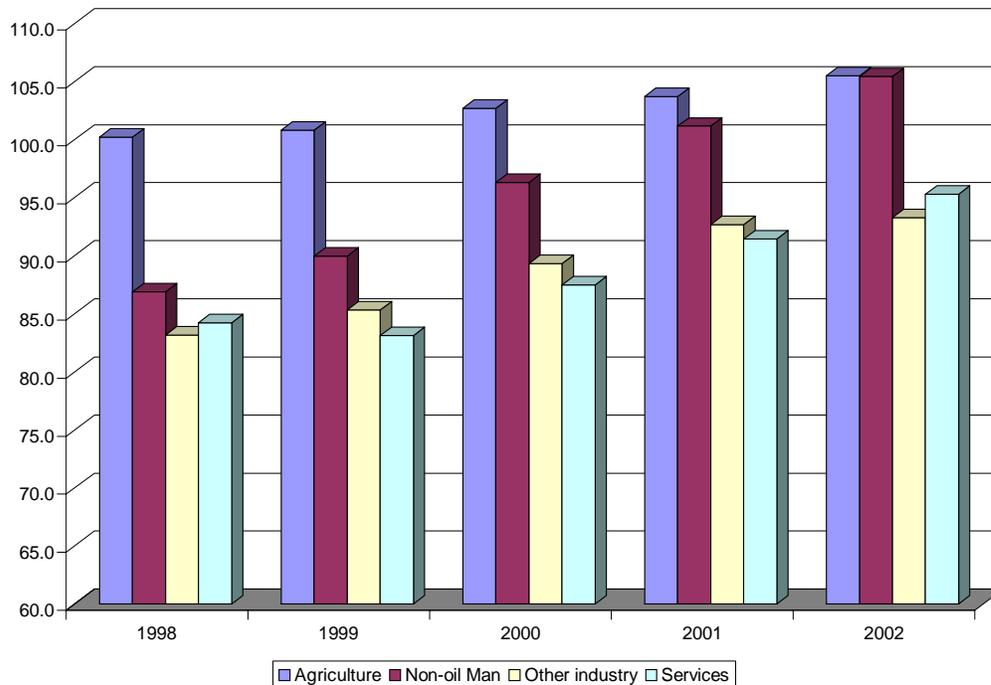
Several features of the Indonesian economic recovery since mid-1999 have affected employment growth. First, investment and exports have been slow to recover post-crisis. Consumption has been the main engine of growth since 2001, whereas prior to the crisis investment and exports played the leading role. Investment was extremely hard hit during the crisis, contracting by 33 percent in 1998 and another 18 percent in 1999, but partially rebounded in 2000 and 2001 (Table 2.1 and Figure 2.1). Unlike other crisis-hit countries, especially Korea, exports played a minor role in Indonesia during the initial stages of the recovery, despite a substantial depreciation in the real exchange rate of the rupiah in 1998. Exports surged in 2000, but dropped in 2001 and 2002.

Figure 2.1: Slow Recovery in Investment
(Real expenditures indexed to 1997 levels)



A second feature of the crisis and early recovery in Indonesia is the contrast between the tradable (manufacturing and agriculture) and non-tradable sectors (e.g. construction, services). In 1998, the construction and commerce sectors declined sharply resulting in substantial jobs losses, and only began to recover slowly in 2000. By contrast, the manufacturing sector contracted less than the major non-tradable sectors, and had recovered to pre-crisis levels by 2001 (Figure 2.2). A significant factor driving the recovery in the tradable sector (especially manufacturing) was the combination of a surge in exports in 2000 and domestic consumption growth. Within manufacturing, consumer or final products industries (such as processed foods and beverages) did not contract as much as others in 1998 and actually expanded in the initial recovery period, along with textiles and garments. Capital-intensive industries experienced a more severe contraction, and were slower to recover.

**Figure 2.2: Tradable Sectors Fell Less and Recovered Faster than Non-Tradable
(Real GDP levels indexed to 1997 levels = 100)**



Indonesia's economy has generally followed the same pattern of recovery of the other Southeast Asian crisis-hit countries of Korea, Malaysia, Thailand and the Philippines. Consumption has been the main engine of growth in all five countries. However, export growth and investment rates have been stronger in the other countries, which partly explain their higher economic growth rates. As the report discusses, slow progress in several key economic, legal and governance reforms have been a drag on investment and export recovery, on the overall competitiveness of the economy, and, therefore, on employment creation compared to regional neighbors.

As the Indonesian economy began to recover in 2000 the pre-crisis pattern of structural transformation resumed. However, this occurred at a very slow pace consistent with limited economic growth across all sectors of the economy. By 2003, the share of agriculture in GDP stood at 16 percent, manufacturing at 24 percent and services at 40 percent (see Table 2.2).

2.3 The Changing Structure of Employment in Indonesia

In this section we highlight recent developments in the labor market. For this purpose we first discuss the supply of labor, comprising demographic changes and recent trends in labor force participation rates. We then discuss developments in the employment situation, which is to say the demand for labor. We focus on employment in the formal and informal sectors and across major sectors, broadly grouped under non-agriculture sector and agriculture. We then discuss unemployment numbers and recent trends in real wages. From this discussion we draw out the key issues facing Indonesia in creating employment.

2.3.1 Supply Side Factors: The Labor Force

Indonesia is the most populous nation in East Asia after China, with employment in 2002 of 91.6mn. It has a population of roughly 215mn, a working age population of 148mn, and a labor force (including unemployed) of 97.7mn in 2002, of which “open unemployment” accounts for 6.1 mn.¹ Figure 2.3 uses breakdowns of employment by economic sector and employment status for selected years to show the structure of the working age population.

The size and growth of Indonesia’s labor force is determined by three major factors: (1) the size and growth of the total population; (2) the proportion of the total population of working age (15 or over); and (3) the proportion of working age individuals who actually want to work (the “participation rate”). The first two factors are essentially determined by demographics, and evolve only slowly over time. The third factor is more complicated, being affected by economic cycles and social change. Table 2.4 summarizes major trends in labor force composition and characteristics.

- **Indonesia’s total population growth has been declining for many years** due to lower fertility. Growth was 2.0% per annum in the 1980s slowing to 1.5% in the 1990s, and further small declines can be expected in the current decade and beyond.
- **Indonesia’s working age population has been growing relatively faster due to the young structure of the overall population** (2.5% per annum in the 1990s compared to 1.5%). However, the peak has passed and the growth rate of the working age population declined to around 2.0% at the turn of the century. Further decline is expected, helping to ease the pressure on labor markets in the future.
- **Growth rate of the labor force was high in the early 1990s, but it has declined markedly in recent years.** During the first half of the 1990s the labor force grew by about 2.5 percent per annum, but in the past several years annual growth has slipped below 1.5 percent (an average of some 1.25mn people per year). The overall participation rate was on a gently rising trend prior to the crisis, but has fallen back lately (see below). Rapid economic growth and development created new job

¹ The definition of “open unemployment” and other statistical peculiarities are discussed in Annex 2B.

opportunities in the modern sector in the 1990s and this encouraged more people to enter the labor market.

There have been important compositional changes in the labor force during the last two decades that have significant implications for an employment creation strategy. First, Indonesia's labor force is becoming more prime-aged. As noted in Table 2.4, young people (ages 15-24) represented almost one quarter of the labor force in 1990. By 2002, this was down below 20 percent. With aging, the population bulge has moved into the prime-age category (ages 25-49), and the share of older workers (ages 50 and above) has remained virtually unchanged.

Second, the labor force is becoming more educated making the growing trend towards informal sector employment particularly disturbing, and underlining the need to create higher quality jobs. Better-educated persons (upper secondary or above) account for one quarter of the labor force in 2002 compared with only 13 percent in 1990.²

Third, Indonesia's labor force has strong female participation, but this has declined slightly in the post-crisis period thereby tempering growth in the labor force. Female participation rates rose by six percentage points in the 12 years up to 1997 when they reached 49.7 percent. These rates are high by international standards and higher than in most East Asian countries (Manning 1999). Many females were attracted to jobs in industry and related services associated with rising exports in labor intensive industries during the 1990s high-growth period. Many of these jobs were in the formal, wage-paying sector. As measured here, women have consistently represented some 38 percent of the labor force, with the percentage peaking in 1998 and dropping off after the worst of the crisis had passed. Considering the sharp drop in female participation rates in recent years, there seems little likelihood of further appreciable declines.

Finally, Indonesia's labor force is increasingly urbanized. While most of Indonesia's labor force is in rural areas,³ that proportion has been declining steeply consistent with the shift from an agriculture-based to a more industrial-services economy. In recent years, the proportion of the labor force in rural areas declined from nearly 75 percent in 1990 to 58 percent in 2002. During the recovery period the rural labor force has declined by an average of 1.0 percent annually, while the urban labor force has grown by about 5 percent annually. Separate evidence (Thomas, Beegle and Frankenberg (2002)) indicates a great deal of mobility within Indonesia's rural labor market, particularly among women and especially during the economic crisis.

² It is noteworthy that serious issues remain as to the quality of this education.

³ This distinction is somewhat artificial due to the flexibility of the Indonesian labor force. The evidence of Indonesia's development indicates that rural members of the work force will migrate to wherever the jobs are.

During the crisis labor force participation rates actually rose as people, especially women, joined principally the informal labor force in order to mitigate the effect of economic crisis on family incomes. Female participation rates rose by two percentage points during and just after the crisis to peak at 51.7 percent in 2000. Both rural and urban sub-categories made significant contributions. Although participation rates rose, the composition changed significantly as large numbers of women moved from formal to informal sectors, and from the non-working population to the informal sector. Independent evidence (Thomas, Beegle and Frankenberg (2002)) indicates that a large number of women joined family businesses (including working on the family farm) during the crisis. In urban areas, both men and women joined or moved into the informal trading / service sectors.

After the crisis, the overall labor force participation rate peaked in Indonesia in 2000 at 67.8 percent and has since fallen to 65.7 percent. This decline has principally been due to rural and urban sector females withdrawing from the labor force: female labor force participation fell from 51.7 percent in 2000 to 47.7 percent in 2002. Apparently, crisis past, many female workers have withdrawn from the rural (agricultural) workforce. Also, in urban areas, this may reflect female layoffs in labor-intensive manufacturing sectors such as textiles, garments and footwear.

Figure 2.3a: Workers by Industry 1990, 1997, 1998 and 2002

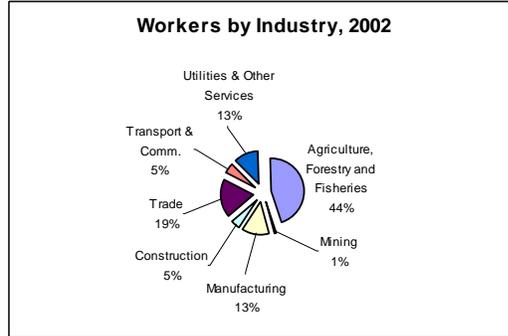
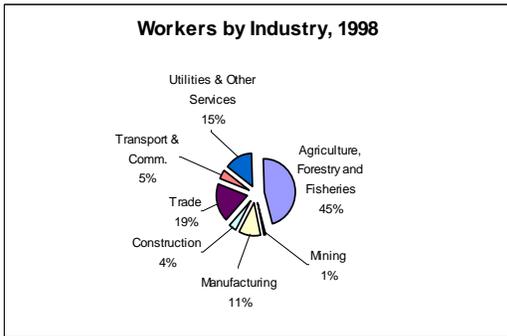
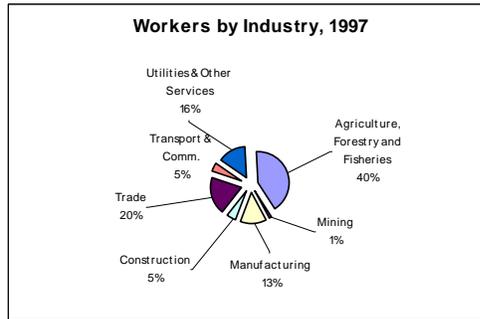
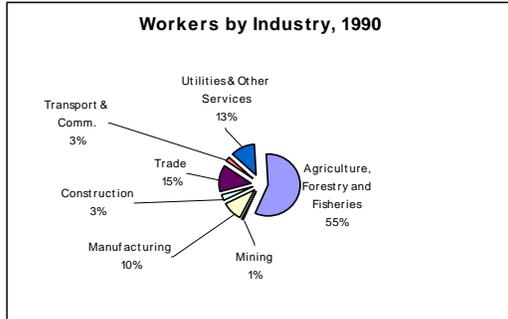


Figure 2.3b: Workers by Status 1990, 1997, 1998 and 2002

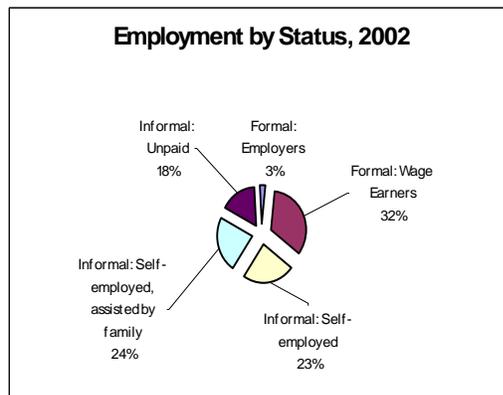
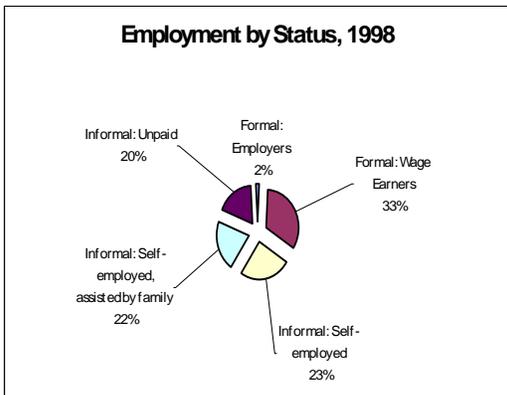
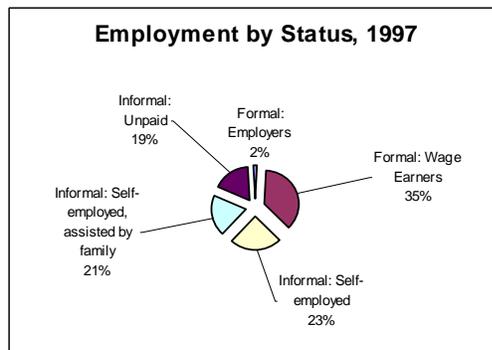
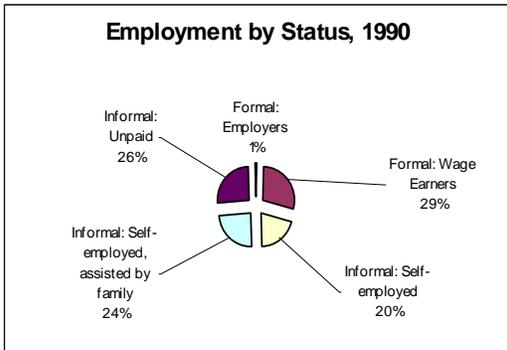


Table 2.4: Summary Table of Labor Force Trends

(% change per annum, shares as % of total)

	1990-97	1997-98	1998-2002	Share 1990	Share 2002
Working Age Population	2.5	2.6	1.8	100.0	100.0
Male	2.5	2.9	-15.0	49.1	49.7
Female	2.5	2.3	1.5	50.9	50.3
Urban	6.2	5.1	4.7	30.9	45.3
Rural	0.6	0.9	-0.3	69.1	54.7
Age 15-24	1.6	3.3	-0.5	30.0	25.8
Age 25-49	3.0	2.3	3.0	49.6	53.5
Age 50+	2.8	2.4	1.7	20.4	20.7
Education: Primary or Less	0.3	-0.3	0.2	73.6	57.7
Education: Lower secondary	5.8	6.9	5.1	13.8	20.4
Education: Upper Secondary	8.6	7.8	2.7	11.2	18.1
Education: Tertiary	13.2	10.1	5.9	1.5	3.8
Participation Rate (in 90, 98, 02)	66.4	66.9	65.7	...	...
Male (as %)	82.8	83.2	83.8	...	...
Female (as %)	50.5	51.2	47.7	...	...
Of which: Rural	56.2	56.6	52.6	...	...
Labor Force 1/	2.5	3.5	1.3	100.0	100.0
Male	2.6	2.7	2.2	61.2	63.5
Female	2.3	4.8	-0.2	38.8	36.5
Urban	7.5	4.7	5.1	25.5	41.8
Rural	0.4	2.9	-1.0	74.5	58.2
Age 15-24	1.5	2.5	-0.9	23.1	19.5
Age 25-49	2.9	3.2	2.2	57.6	61.1
Age 50+	2.6	5.5	0.7	19.3	19.4
Education: Primary or Less	0.0	2.0	-0.6	76.4	58.6
Education: Lower secondary	7.1	7.1	6.2	10.1	17.1
Education: Upper Secondary	9.4	5.1	2.6	11.5	19.3
Education: Tertiary	13.7	7.4	5.6	2.0	5.0
<i>Memo Item: Total Labor Force</i>	<i>75.4</i>	<i>92.7</i>	<i>97.7</i>	...	...
<i>(In millions, 1990, 1998 and 2002)</i>					
<i>Source: Sakernas</i>					
1/ Labor Force Definition is Employment plus Unemployment, where unemployment is 'Open Unemployment'.					

Box 2.1: International Comparison of Indonesia's Labor Markets

Indonesia's low levels of wages have led some commentators to argue for government interventions to raise wages, based upon international comparisons. Is there something unusual about the structure of Indonesia's labor markets? In particular, it is important to ask whether wages have been repressed in Indonesia, relative to other comparable countries, bearing in mind the previous authoritarian regime. World Bank data (see World Development Indicators) provide evidence in this regard, as follows.

Comparison of Labor Market Structure.

- The structure of employment is quite similar to Thailand, the Philippines and Vietnam. All have a large share employed in agriculture; employment in the formal sector is small for all countries, and only a little larger for Indonesia; and the participation of females in all three work forces is similar.
- The structure of employment differs substantially from more developed countries in the region, like South Korea and Malaysia. The share of agriculture and the informal sector is much smaller in those countries.

Comparison of Wages.

- Average wages in Indonesia are higher than in Vietnam but lower than in Thailand. But this is not a proper comparison. Thailand is further along the development path than Indonesia so we would expect wages to be higher there. It is better to compare the share of wages in value added or wages relative to per capita incomes
- On this basis, wages in Indonesia are not out of line with other comparable countries. Prior to the crisis the ratio of average wages to per capita income in Indonesia was similar to Thailand, higher than in Korea and Malaysia and lower than in Vietnam and Philippines. Post crisis, the ratio in Indonesia increased faster than in Thailand. The main reason has been Indonesia's large increases in minimum wages since 2000.

Comparison of Growth in Employment and Wages.

- Prior to the crisis, manufacturing real wages grew almost as rapidly in Indonesia as in Korea and Thailand. Since the crisis, real manufacturing wages have increased faster in Indonesia compared to real wages in Thailand.
- Manufacturing employment growth in Indonesia during the 80s and 90s was only slightly slower than Malaysia and Thailand, and much more rapid than the Philippines.

In summary, Indonesia's labor market structure is very similar to comparable countries in the region. Wages are low, but do not appear repressed relative to other countries in the region at similar stages of development. Moreover and prior to the crisis, real wages were increasing at rates comparable to Korea and Thailand; employment growth was similar to Malaysia and Thailand and much better than the Philippines.

Source: Manning 2003, Chapter 3.

2.3.2 Demand Side Factors: Job Creation

Aggregate employment in Indonesia continued to grow during the crisis period, and also in the post-crisis period but at a slower pace. Employment in Indonesia grew by an average of 2.2 percent per annum before the crisis (1990-97), 2.7 percent during the crisis, but by only 1.1 percent since the crisis (1998-2002).

Employment is a derived demand, created by increased spending on goods and services including in the international sectors, but other factors also affect its distribution across economic sectors. As the economy goes through economic cycles, so does total employment. Likewise, structural changes in the economy are reflected in employment patterns. In labor-surplus countries like Indonesia both cyclical and structural changes in GDP are reflected in the expansion or contraction of formal/modern and informal/traditional employment (Box 2.2).

Trade, investment and labor policies can either facilitate or inhibit the efficient transfer of workers from the informal sector to the formal sector. For example, trade and investment liberalization in the late 1980s helped facilitate the expansion of the modern sector. On the other hand, a binding or relatively high minimum wage may slow employment creation in the modern sector and crowd more workers into the informal sector, as has happened during the post-crisis period (SMERU, 2001).

In a dualistic labor surplus economy like Indonesia's labor market weaknesses show up in diverging trends between the formal and informal sectors and across economic sectors --not in aggregate employment (or unemployment) figures. The reason for this is that in the absence of unemployment insurance workers unable to find jobs in the modern sector will have to enter the informal sector to support themselves and their families, as happened during the recession in 1998. Therefore, to understand Indonesia's employment situation fully, it is more useful to look at employment trends across sectors and demographic groups. The remainder of this section looks more closely at trends in the employment structure from several directions since aggregate numbers mask weaknesses that will affect future growth and poverty reduction (see Tables 2.5 and 2.6).

- By economic sector (agriculture, manufacturing, services)
- By status of employment (formal versus informal); and
- More briefly by gender, location (urban versus rural), age and education level.

Box 2.2: The Theoretical Model of Indonesia's Labor Market

In this report, the theoretical underpinning for Indonesia's labor market is the so-called classical labor surplus model (see, for example, Manning 2003 and IMF 2002). In this characterization, the labor market is split into two distinct components, the formal ('modern') and informal ('traditional') sectors, with interactions between the two being crucial for adjustment to external shocks.

Unlike in industrial economies (see Box ---, 'Confusing Numbers that Miss the Point'), the extent to which labor is underutilized in a dualistic market is not well captured by the concept of 'unemployment'. Instead, those who cannot get a job in the modern sector simply take refuge in the informal sector, typically in insecure, low-paid, low-productivity jobs. Moreover, the amount of 'surplus' labor in the informal sector dwarfs that in the formal sector and that which is unemployed.

It is important to note three features of dynamics of labor market adjustment in this type of market. *First, a dominant feature of economic development in a labor surplus country is a continuing flow of labor out of the informal and into the formal sector.* Workers migrate to the formal sector, benefiting from the wage premium that will be just high enough to lure them workers into making the transition. By contrast, during an economic downturn workers retreat into the informal sector, partly because there is no unemployment insurance or other form of social security to cushion their job loss.

Second, the quality of jobs tends to be higher in the formal sector. As noted, wages will tend to be higher in the formal sector, but not much for unskilled workers. Nonetheless, employment and income will be more stable, and modern sector workers will have the opportunity to accumulate skills on the job that lead to higher wages over their lifetimes.

Third, eventually there will be a transition into a more integrated labor market. Wages begin to rise in both the formal and informal sectors only when the enormous supply of unskilled workers in the traditional sector begins to dry up. At this point (referred to as the "turning point") the modern sector begins to pull up wages in the traditional sector and accelerates improvements in general living standards. Economies like Korea's or Taiwan's have already made this transition, and it was relatively easy for small, integrated economies like Singapore or Hong Kong (see box X Korea's transition to a modern economy). The larger the population and traditional sector (e.g., Bangladesh, Indonesia, India and China), the longer the transition might take.

Source: Manning 2003.

Table 2.5: Summary Table of Employment Trends					
(% change per annum, shares in % of total)					
	1990-97	1997-98	1998-2002	Share in 1990	Share in 2002
By Status:					
Total Formal & Informal	2.2	2.7	1.1	100.0	100.0
Formal:	5.8	-4.5	1.6	29.2	35.3
Employers	14.0	4.0	16.2	0.8	3.0
Wage earners 1/	5.5	-4.9	0.7	28.4	32.3
Informal:	0.4	6.9	0.8	70.8	64.7
Self-employed 2/	4.3	3.3	0.8	20.2	23.1
Self-employed, assisted by family	0.1	9.5	2.8	24.4	24.0
Unpaid	-2.8	8.3	-1.6	26.3	17.6
Workers by Sector (excl. employers)	2.1	2.6	0.8	100.0	100.0
Tradables:	-0.7	7.3	1.3	66.4	58.5
Agriculture, Forestry & Fisheries	-2.3	13.3	0.5	55.5	44.7
Mining	7.8	-23.9	-1.7	0.7	0.7
Manufacturing	5.6	-9.6	4.6	10.1	13.1
Food, beverages & tobacco	7.3	-14.0	5.0	2.4	3.4
Textiles, garments and footwear	7.1	-5.5	4.0	2.2	3.3
Wood products	7.1	5.3	-5.0	2.0	2.2
Other	2.7	-20.5	13.5	3.6	4.7
Non-Tradables:	6.2	-3.4	-0.3	33.6	41.7
Construction	10.7	-16.4	4.2	2.7	4.5
Trade	6.4	-1.2	1.0	14.7	19.2
Transportation & Communication	8.6	0.6	2.8	3.1	5.0
Utilities and Other Services	4.9	-2.1	-3.4	13.1	12.7
By Area (incl. Employers):					
Urban	7.2	3.2	5.2	24.6	40.5
Rural	0.2	2.3	-1.2	75.4	59.5
By Age:					
15 to 24	0.2	0.6	-2.3	21.8	16.3
25 to 49	2.7	2.4	2.2	58.4	63.2
50+	2.6	5.3	0.7	19.8	20.6
By Education:					
Primary education or less	-0.2	1.7	-0.7	77.7	60.9
Lower secondary education	6.8	5.4	5.9	9.9	16.7
Upper secondary	9.1	3.2	2.6	10.5	17.6
Tertiary	13.3	6.7	5.9	1.9	4.8
By Gender:					
Male	2.4	1.7	2.1	61.3	63.9
Female	1.9	4.2	-0.5	38.7	36.1
Memo Item					
Total Employment (millions, 1990, 1998, 2002)	73.4	87.7	91.6	....	....
<i>Source: Sakernas</i>					
1/ Includes Casual Agricultural workers after 2000.					
2/ Includes Casual Non-Agricultural workers after 2000.					

Table 2.6: Employment Growth, by Economic Sector 1999-2002 1/
(in percent)

	1999-2000	2000-01	2001-02	Share in 2002
Agriculture	6.0	-2.8	2.1	45.1
Formal	-0.6	19.8	6.2	23.5
Informal	8.2	-6.4	1.3	55.7
Manufacturing	1.2	2.7	0.2	13.2
Formal	13.2	0.3	-4.0	25.1
Informal	-16.6	7.6	8.2	7.4
Construction	3.9	6.6	12.2	4.6
Formal	5.6	-31.8	-12.0	5.9
Informal	-4.8	220.0	40.9	3.9
Trade Services	5.6	-6.3	1.7	19.4
Formal	20.4	-3.1	5.2	11.0
Informal	2.9	-7.0	1.0	23.6
Trans & Comm.	9.3	-2.8	5.9	5.1
Formal	8.6	-1.6	-6.8	4.8
Informal	9.7	-3.4	12.9	5.2
Other Services	-17.9	14.7	-6.3	12.7
Formal	-12.7	4.6	-5.2	29.9
Informal	-38.0	70.0	-10.1	4.1
Total 1/	2.3	-0.4	1.3	100.0
Formal	1.3	1.6	-1.9	100.0
Informal	2.7	-1.4	2.9	100.0

1/ Excludes Employers, Mining and Utilities

Employment by Major Economic Sector

Employment growth has been strong in the non-agricultural sector since the late 1980s (see Table 2.5), and an increasing proportion of these new jobs have been in higher value added sectors. Before the crisis broke, this pattern of job creation contributed to widespread poverty reduction. Prior to the crisis, there were large, sustained increases in employment in all major economic sectors, except for agriculture. Initially, the export boom stimulated rapid employment growth in labor-intensive sectors within manufacturing, where barriers to trade and investment were first removed (Hill, 1996; Manning 1998). Employment growth accelerated in other manufacturing industries as well as modern trade services, professional services, the hospitality sector and construction as the economy diversified in the early to mid-1990s.

In sharp contrast to manufacturing and services, employment in agriculture declined by about 2.3 percent per year between 1990 and 1997. The “turning point” in the employment structure occurred in 1990 when absolute employment numbers in agriculture fell for the first time, as an expanding modern sector attracted workers away from the rural and agriculture sectors (see Manning 1998, p.105).

Employment performance during the crisis was particularly uneven and post-crisis recovery has been slower after an initial rebound in some sectors. During the crisis, employment dropped steeply in all the cyclical sectors (mining, manufacturing and construction) whilst agriculture rose significantly and some services sub-sectors exhibited resilience (Table 2.5). Since the crisis, manufacturing has led the recovery, with an average growth of 4.6 percent annually, followed by construction (4.2 percent), transportation (2.8 percent) and trade services (1.0 percent). Much of this employment growth occurred during the rebound in 1999 –2000, but slowed in 2002. Employment in agriculture posted only modest gains of 0.5 percent per annum during the recovery period.

The agriculture sector absorbed many displaced urban workers in 1998 and in this way provided an important social safety net. The agriculture sector will remain important in this regard, but it is not the key to the longer-term employment challenges facing Indonesia. At the depth of the crisis in 1998, agriculture employment increased by 4.6 million while non-agriculture employment contracted by 2.3 million workers. This increase in agriculture employment was not demand-driven but labor-supply-driven, as displaced non-agricultural workers (mainly informal urban and rural workers) sought refuge in the agriculture sector. However, it was also due to an increase in labor force participation rates (especially females) in the rural areas to mitigate the income effects of the crisis and its aftermath.

Employment Status: Formal and Informal Sector⁴

A formal versus informal breakdown of the employment structure is central to understanding employment pressures in Indonesia, and to designing sustainable poverty reduction strategies. The modern sector provides workers, on average, with higher wages and better working conditions compared to workers crowded into the informal or traditional sector (e.g. street vendors, domestic staff, workers in the urban small-scale and cottage sectors and rural agriculture sector). Workers in the modern sector have more opportunity to acquire modern workplace skills and to access training, which in

⁴ BPS’s annual labor force survey provides data on formal and informal employment with seven sub-categories. Of these, five are available for a long period of time and presented in Table 2.5. The other two series, ‘Casual Employees in Agriculture’ and ‘Casual Employees in Non-Agriculture’ begin in 2001 (see Annex 2B).

turn gives them a better chance of increasing their lifetime earnings and welfare. In contrast, most (but not all) jobs in the traditional/informal sector are in low-productivity activities where earnings are low and unstable.

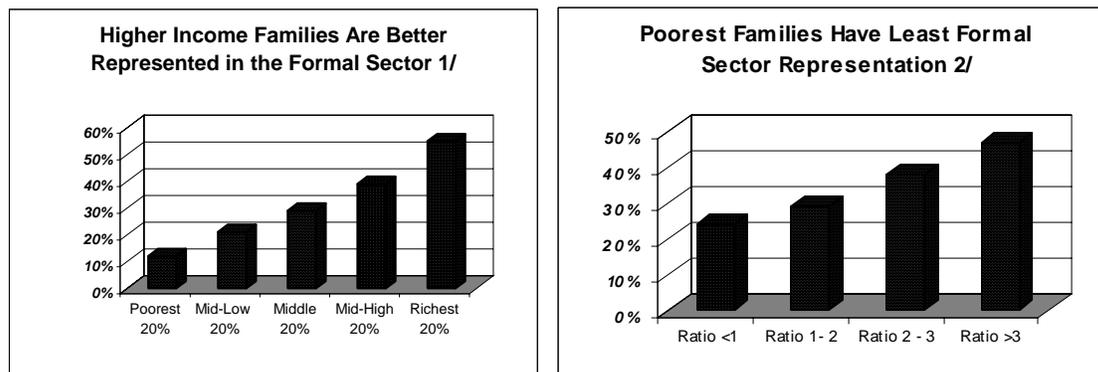
Educational level determines access to stable, modern sector jobs. The majority of workers with a high school education (or higher) have jobs in the modern sector, while the majority of workers in the traditional sector have primary education or less, making them vulnerable to falling into poverty whenever there are shocks to the economy.

Sustained expansion in the formal sector is crucial to reducing poverty because there is a large overlap between the poor and the informal sector. Seventy one percent of informal sector workers are in rural areas, which correlates closely with the 78 percent of poor people who are also in rural areas (World Bank 2003, p.56). Also, the rural poor are heavily reliant upon off-farm income (predominantly in non-agricultural jobs in the informal sector), which now constitutes 50 percent of their total income (World Bank 2003, p.56).

There is a strong correlation between formal wage employment and poverty reduction as measured by household consumption. Figure 2.4 shows that the incidence of poverty declines dramatically as representation increases in the formal sector. Clearly, any pro-poor development strategy needs to focus tightly on creating more modern sector jobs, while assisting those still in the informal sectors through wider access to markets on the other.⁵

⁵ World Bank (2003, p.83) expresses the issue very similarly in identifying key development challenges for rural transformation, namely, “Eliminate rural poverty and strengthen rural-urban linkages—including preparing outmigrants for a productive urban life.”

Figure 2.4: Good Jobs Lift Families Out of Poverty



^{1/} The consumption quintile classification of the percentage of households that have at least one full-time wage employer.

^{2/} The percentage of households with at least one full-time wage earner, classified by consumption relative to the provincial poverty line (using the standard BPS definition based on caloric intake).

Source: Susenas (2002)

Formal sector employment expanded rapidly pre-crisis, but dropped sharply during the crisis (see Table 2.5). As expected in a labor-surplus economy, the relatively small formal sector expanded rapidly pre-crisis, attracting large numbers of people from the informal sector. During the crisis, formal sector employment fell slightly, and there were large gains in the informal sector, split roughly equally between urban and rural areas. As a result, total employment actually *increased* during the crisis. Agricultural employment, in particular, soared by 13 percent in 1998.

Post-crisis formal sector employment has outpaced informal sector growth, but only moderately. During the recovery period formal sector jobs have grown faster (1.6 percent per annum) than those in the informal sector (0.6 percent). As a result of the larger size of the informal sector, gains in absolute numbers of jobs have been evenly split between the formal and informal sectors since 1998. Jobs in agriculture have increased at a very modest 0.5 percent per annum. Most importantly, post-crisis increases in formal employment (1.6 percent per annum) have not recovered to anywhere near pre-crisis rates of nearly six percent, and formal employment actually declined by two percent in 2002. The informal sector has traditionally served as a cyclical adjustment mechanism, but the danger of a longer-term structural increase in informal employment is now emerging. As the report shows in Chapter 3, accelerating the recovery in investment is key to increasing formal employment and raising incomes.

Other Breakdowns of Employment Structure Trends

Indonesia's employment structure can be broken down in several other ways, with implications for both employment policies, and investment and trade strategies.

Urban/Rural: Employment has gradually shifted from rural to urban areas with the modernization of the economy, but less rapidly after the crisis. The proportion of employment in rural areas decreased from 75 percent in 1990 to 60 percent in 2002, whilst urban employment increased to 40 percent of the total (Table 2.5). Urban employment continued to expand during the recovery, at about five percent per annum compared to seven percent prior to the crisis. Based on current trends urban working-age population and employment will probably surpass rural population and employment well before 2020 (ADB 1997). However, the shift within urban employment that occurred during the crisis from formal employment to informal employment has not nearly been fully reversed. Furthermore, there is evidence that informal urban sector jobs expanded relative to the formal urban sector in 2002.

Skilled / Unskilled Workers: Unskilled (or poorly educated) workers have had even greater difficulty finding good employment after the crisis, and skilled workers are taking up less demanding jobs. Prior to the crisis, the demand for skilled and unskilled workers grew in all sectors (with the exception of unskilled workers in agriculture). This is in line with the longer-term shift from agriculture to industry and services, and the corresponding rural-urban shift, as well as with the apparent increase in higher-end opportunities in agriculture as agricultural linkages to manufacturing and service sectors have developed. Since the crisis, skilled workers have found jobs in the formal sector more easily than unskilled workers, but due to their increasing supply many skilled workers have been restricted to the informal sector. Whilst this situation is primarily due to weak demand for both unskilled and skilled labor, with current trends towards a better-educated and prime-aged workforce the danger of a skill mismatch is emerging as a result of current policies. If modern employment opportunities continue to slow many educated workers will be forced to find less productive jobs in the informal sector or choose unemployment.

2.3.3 Unemployment⁶

Unemployment is not a good indicator of successful employment strategies in labor surplus economies such as Indonesia. Unemployment rates are widely used as a summary measure of the success (or failure) of modern economies to generate adequate numbers of jobs, but their value is limited in countries with “dualistic” labor markets (See Box 2.2). Rather, in a labor surplus economy, economic cycles lead to a movement of labor from formal to informal sectors in times of crisis, and back again during recovery and expansion. This is a crucial adjustment mechanism in economies that do not have sophisticated social safety net systems, and also means that the level of “open unemployment” remains relatively stable (See Table 2.7).

⁶ Unemployment is defined as the difference between total labor force and total employment, and is expressed as a percentage of the total labor force.

Unemployment rates are relatively low in Indonesia by international standards, and they have edged up only in the past few years. Using the conventional definition, unemployment had risen to 5.8 percent in 2002 from 4.7 percent immediately before the crisis,⁷ following a peak near 6.5 percent in 1999. However, generally speaking, the unemployment rate in Indonesia has tended to be remarkably stable, attesting to the flexibility of the labor market and the capacity of the informal sector to absorb workers (see Annex 2A: “Confusing Numbers That Miss the Point”).

Unemployment is relatively high among females, workers in urban areas (where job search is more intensive), and young people. By age group, the unemployment rate is very high and still rising for young people; in 2002, one in five under the age of 25 could not find a job. By education levels, the structure of unemployment in 2001 was strikingly similar to 1996 – high (and declining) for the best educated, and low (and rising) for the less educated.

Table 2.7: Summary Table of Unemployment Trends						
(As % the of labor force)						
	1990 1/	1997 1/	1998	2000	2001	2002
Open Unemployment, Total	2.5	4.7	5.5	6.1	5.1	5.8
By Gender:						
Males	2.5	4.1	5.0	5.7	4.5	5.2
Females	2.7	5.6	6.1	6.7	6.2	7.0
By Area:						
Urban	6.0	8.0	9.3	9.2	7.5	8.5
Rural	1.4	2.8	3.3	4.1	3.5	4.0
By Age:						
15-24	8.0	15.5	17.1	19.9	17.3	20.8
25-49	1.2	2.2	2.9	3.1	2.6	2.8
50+	0.2	0.3	0.5	0.4	0.5	0.4
By Education:						
Primary or less	0.9	1.7	2.0	2.5	2.0	2.3
Lower secondary	4.1	6.0	7.5	8.9	6.8	8.0
Upper secondary	11.3	13.0	14.6	13.7	12.3	13.7
Tertiary	7.9	10.4	11.0	10.4	8.9	9.1
Broader Definition of Total Unemployment						
- ILO relaxed definition (includes 'discouraged' workers)					7.9	9.0
<i>Source:</i> Sakernas						
1/ Break in series at 1994; see footnote 8 in SMERU (2001) for more information.						

⁷ There is evidence that unemployment had begun to rise before the crisis, as increasing numbers of young, educated people began to queue for their first jobs in the modern sector (Manning 1998). Durations of unemployment were long—nearly half of all young first-job seekers and a third of those previously employed were unemployed for 12 months or more on the early 1990s (Manning 2003)

Under-employment⁸ in Indonesia is much higher than just unemployment, but is of limited value in understanding the Indonesian labor market. Under-employment embraces those workers working relatively few hours per week. Adjusting for underemployment,⁹ leads to a popular view that the “total or global unemployment” in Indonesia (as opposed to “open unemployment”) is in the range of 25-40 percent. This is misleading for two reasons. First, it is not high for countries with large agriculture and rural sectors (Manning 2003, p. 33). Second, survey data indicates that many of those working less than 35 hours per week are unwilling to work longer hours, and adjusting for this factor effectively halves “total unemployment” (BPS 2000, cited in Manning 2003).

2.3.4 Wages and Productivity

Workers in all major sectors enjoyed significant growth in average real wages during the high growth period of the 1990s. Several studies show that average real wages in the manufacturing and services sectors grew in the range of six percent per year from 1990 to 1997 (Agrawal, 1996; Manning, 1999). Agricultural real wages also grew steadily in the range of 4-5 percent per year. Skilled workers enjoyed larger increases in real wages (received a “skill premium”) compared to unskilled workers (Suryahadi et al, 2002, 2003). Workers employed in foreign firms received on average higher wages compared to similar workers employed in comparable domestically owned firms (Lipsey and Sjöholm, 2000 and 2002). Real wage increases combined with rising employment, especially in the formal sector, meant that increasing numbers of workers were benefiting from high economic growth during the 1990s (Agrawal, 1996).

Real wages of Indonesian workers plunged during the crisis whilst aggregate employment continued to grow, but at a slow pace. Consequently, labor market adjustment during the crisis took the form of major (40-50%) declines in real wages and the shift of workers from the formal to the informal sector. These declines in real wages avoided larger job losses in the formal sector (Manning, 2000). The close relationship between falling real wages and expanding informal sector employment is illustrated in Figures 2.5 and 2.6.

After the crisis, real wages in the formal sector rose substantially whilst informal sector wages have stagnated (see Figure 2.5). By mid-2001 real wages in all major categories of the formal sector had rebounded to pre-crisis levels, and have continued to rise strongly. This is principally due to an aggressive minimum wage policy by the Indonesian government, both central government and many newly-empowered district

⁸ BPS defines under-employment as those persons working less than 35 hours per week.

⁹ In 2001, some 16% of employees worked less than 25 hours per week and one-third worked less than 35 hours.

governments. From 2000 to 2002 minimum wages increased in the range of 20-40 percent per annum in the major industrial centers. By contrast, real wages in the informal sector remain depressed, at some 20 percent below pre-crisis peaks. The minimum wage policy is one of several factors slowing modern, formal sector employment growth since 2001 (see Chapter Three). When seen together with the relative expansion in informal employment and the failure of formal employment to regain pre-crisis performance (Figure 2.6) it is clear that minimum wage policies are doing little to alleviate poverty.

Figure 2.5: Real Wages in the Formal Sector Significantly Outpace Those in the Informal Sector

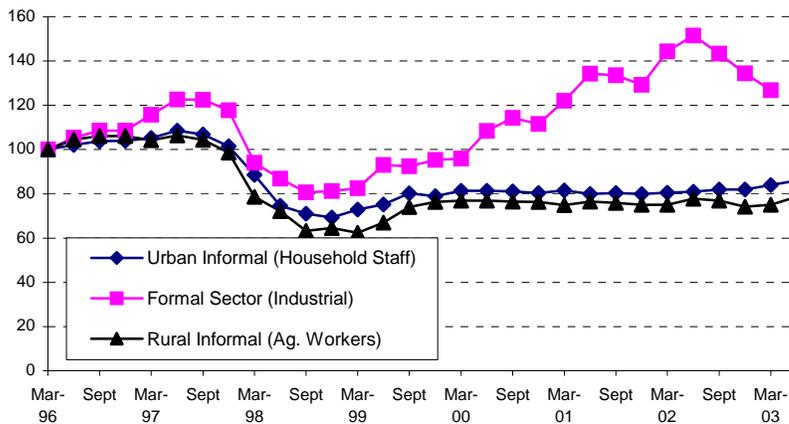
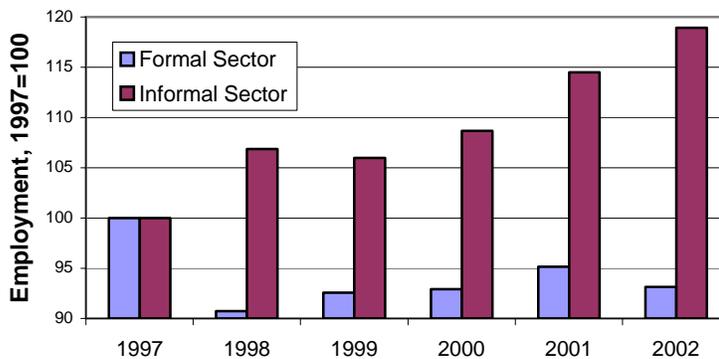


Figure 2.6: But Formal Sector Employment Lags Way Behind the Informal Sector



Slow recovery in formal employment is partly due to the fact that real wages in the industrial sector have grown faster than labor productivity. Prior to the crisis, the rapid increases in real wages followed large increases labor productivity, especially in medium and large-scale enterprises (Manning, 2002). During the post-crisis period wage increases in the medium and large-scale sector outstripped productivity growth. In the

manufacturing sector, manufacturing value added had just recovered to pre-crisis levels in mid-2001, while real wages were more than 25 percent higher than pre-crisis levels (Bappenas Labor Policy Review, 2003).

Annex 2A: “Confusing Numbers that Miss the Point”

A handy, longstanding rule-of-thumb in many industrial economies is the so-called Okun’s Law. According to this empirical relationship, a 3% point change in real GDP leads to a 1% point change in the unemployment rate. Several attempts have been made to extend this type of analysis to Indonesia, by examining the responsiveness of employment to real GDP. The results cover a wide range of estimates, leading some analysis to be wildly off the mark.

Waslin (2003) cites Bank Indonesia’s version of this rule of thumb as asserting that overall economic growth of 3.5% in 2002 was only sufficient to absorb 1.2 million workers (roughly growth of 1.3% of total employment) out of an expansion of some 2.5 million in the labor force in 2002. This implies that the elasticity (responsiveness) of total employment with respect to total output (GDP) is approximately 0.37% (i.e., a 10% increase in real GDP leads to an employment increase of 3.7%). In unpublished internal work, Bank Indonesia has found volatile relationships that range from 0.5 and 0.65 pre-crisis and dropping to 0.3 post-crisis.

Econometric work by Islam and Nazara (2000) indicates that the relationship changes over time in a range of .50 to .66, depending upon the sector and region where the output expansion occurs. For example, growth in labor-intensive industries or regions, leads to relatively large increases in employment.

As the crisis was deepening, the World Bank (1998) estimated that 2 million workers had lost their jobs by April 1998 and that that number would double or triple by the end of 1998. Such a plunge in employment (and a 5-6% point rise in the unemployment rate in the face of a 16% drop in GDP) would be roughly consistent with Okun’s Law. In the event, total employment *increased* by 2%, the labor force expanded, and the actual unemployment rate rose by less than 2 percentage points, roughly 1/3 of the World Bank’s forecast. In an even more startling over-statement, on December 19 the Financial Times (‘Relief as Indonesia to graduate from IMF programme’) referred to ‘tens of millions of new workers who enter the labour force each year’. As indicated in the main text, this estimate is high by a factor of 10 or more.

These elasticity estimates cover a wide range of possible outcomes. By way of example in this regard, the lower estimate (of 0.37%) implies that overall economic growth of 7-8% per annum is necessary just to hold unemployment constant (assuming that labor force growth is 2 ½ to 3%). At the other end of the range are the upper estimates of Islam and Nazara (namely 0.66), which imply that only 3 ½% growth is necessary to provide work for new entrants to the labor force.

In part, this wide range of estimates arises from varying estimates of the growth of the labor force. About 2.5% is often used, whereas BPS data indicate that the current rate is only about 1.5% (on the narrow, conventional definition of ‘unemployed’).

But the main reason for all this confusion is clear—these types of analysis do not take adequate account of the dualistic nature of Indonesia’s labor market (see Box 2.2). In the event of an economic downturn (or extended modest growth), relatively few workers actually become unemployed in labor markets like Indonesia’s. Instead, the great bulk simply take refuge in lower-paying, more insecure jobs the informal sector. Consequently, the main labor market

outcome of continued slow growth in Indonesia is not likely to be significantly higher unemployment. More likely, the result will be a continuing shift towards low quality, low paid jobs in the informal sector. As discussed in the main text, this may indeed be creating a structural problem for Indonesia, but the problem is a lack of quality jobs rather than high unemployment.

Annex 2B: Some Important Details Concerning Indonesian Labor Force and Employment Data

Analysis of Indonesian labor force data is complicated by several breaks in key series and by unusual terminology. In addressing these issues, the strategy of this paper was to ensure consistency with published data, to use conventional definitions whenever possible and to adjust series to make them as comparable as possible over time.

To begin with terminology, in Indonesia the term 'open unemployment' is often used instead of 'unemployment' as conventionally defined. This leads to terms like 'total unemployment' or 'global unemployment' being used to describe the sum of unemployment and 'under-employment'.

For its part, unemployment is defined in two ways in Indonesia (see Table 2.7). The first, "open employment" (the standard definition used in this report), is roughly in line with international conventions. The second definition (introduced in 2001) is adjusted to include so-called 'discouraged' workers (see Suhaimi and Jammal 2001). This refers to workers who want work, but have given up actively searching for a new job. Use of this measure increases both the labor force and the number of unemployed: the unemployment rate rises by about one-half, relative to the conventional definition (see Table 2.7).

Turning to breaks in series, there were important changes in the definition of some components of employment in 2001. At that time, BPS introduced two new sub-categories of 'Informal' employment, namely 'Casual Agriculture' and 'Casual Non-Agriculture' employees. Their introduction entailed re-definitions of other series, most notably affecting the distinction between 'formal' and 'informal' workers ('Casual Agricultural' workers had previously been classified as 'Wage Earners', which is part of 'formal' employment). Neglecting this re-definition would lead to a significant misreading, namely that formal employment fell substantially in 2001, and that informal employment surged. In reality, adjusting for the break shows that both formal and informal employment increased moderately (see Table 2.5).

A further minor complication is that there is no Sakernas report for 1995. In that year, the annual survey was replaced by Supas, which was subsequently abandoned. Finally, there is a break in the unemployment rate at 1994 because of another definitional change in the Survey (see footnote 8 in SMERU, 2001). No adjustment has been made for this break in this report because data prior to 1994 have little strategic importance for our purposes.

3. How Have Investment and Trade Created Jobs in Indonesia?

This chapter looks at how investment and trade have created jobs in Indonesia. During the 1990s the Indonesian economy demonstrated its capacity to create millions of good jobs through investment and trade. This capacity to create good jobs continues post-crisis. Indeed, statistical analysis of recent employment and output data across sectors indicates that investment – mainly construction - and trade created more than half of the new (formal and informal) jobs during the recovery period 2000 to 2002. This indicates that the problem of slow recovery in formal employment discussed in the previous chapter is partly due to the relatively low level of investment and export growth in the economy and not with the structural relationship between investment, trade and jobs. As we will discuss in the next chapter, provided reforms are successfully implemented and the policy regime in Indonesia retains openness, the recovery in investment and employment is expected to accelerate.

3.1 Trade and Investment Reforms in Indonesia

From the mid-1970s to the mid-1980s, Indonesia adopted an inward-looking import-substitution development strategy, but ultimately this proved unable to generate sufficient jobs for a growing labor force. During this period, awash with revenues from oil exports, the government eagerly pursued capital-intensive industries to replace imports. In addition, the government spent large sums of money in building infrastructure, including rural and agricultural infrastructure. The slump in oil revenues in the early 1980s and a general decline in primary commodity prices created a sudden external imbalance for the government. Consequently, the import substitution strategy left Indonesian industries inefficient and unable to generate sufficient jobs for the growing labor force. In turn, this threatened sustainable reductions in poverty rates. Table 3.1 gives an overview of the thrust of trade and investment policies in Indonesia from the early 1970s to the present day.

In an attempt to create jobs and diversify the economy away from primary commodities and oil the government embarked on a comprehensive trade and investment liberalization program after 1985. This can be broken down into a structural reorientation period of some three years from 1986, followed by a high-growth period lasting until the crisis (Table 3.1). Tariff rates on imports of goods were slashed in half and most non-tariff barriers were eliminated by the mid-1990s (see Annex 3A). Despite this rapid trade liberalization, Indonesia's foreign trade regime still adversely affected incentives to export in

the early 1990s (Fane and Condon, 1996) and many remaining restrictions (including NTBs) affected growth and diversification in agriculture, in particular (Garcia-Garcia, 2001).

Table 3.1: Shifts in Investment and Trade Policy in Indonesia since the 1970s

Period	Growth performance	Policy regime	Selected policies
1971-82	Oil boom-led high economic growth (averaged 7.5% p.a.)	Import substitution	<ul style="list-style-type: none"> ▪ High import tariffs and numerous NTBs ▪ Substantial public investments in infrastructure and agriculture development ▪ Increasing restrictions on FDI
1982-86	Slow growth period (about 4% p.a.)	Increasing interventions	<ul style="list-style-type: none"> ▪ Proliferation of import controls and investment restrictions
1986-97	High growth period (7.3% p.a.)	Trade and investment reforms	<ul style="list-style-type: none"> ▪ See below
	1987-91 - export led	- major reforms	<p>Major reforms included:</p> <ul style="list-style-type: none"> ▪ Substantial cuts in import tariffs and elimination of many NTBs ▪ Opening up sectors to foreign investment; ▪ Relaxation of FDI equity restrictions for exporters
	1992-97 - increasing diversification	-- reform fatigue	<p>Slow down in the pace of reforms. But:</p> <ul style="list-style-type: none"> ▪ In 1995 a major tariff reform package setting out a schedule for further tariff reductions ▪ Major relaxation of equity and divestment restrictions on FDI outside the export sector
1998-2003	Economic crisis and recession in 1998 (-13%) Recovery period (1% in 1999; 4% from 2000-03).	GOI/IMF crisis-induced reform program from 1998-2003	<p>Major reforms covering</p> <ul style="list-style-type: none"> ▪ Reduction in tariffs especially on agricultural commodities ▪ Elimination of Bulog's monopoly over agricultural commodities, except in rice ▪ Elimination of government sanctioned cartels and marketing restrictions ▪ Deregulation of the domestic retail and wholesale sectors ▪ Enactment of several economic laws covering competition, bankruptcy ▪ Bank and Financial sector rehabilitation and reforms ▪ Corporate debt restructuring initiatives <p>Recent emergence of some protection from 2002 on:</p> <ul style="list-style-type: none"> ▪ Increase in import licensing across sectors ▪ Non-tariff barriers on sugar ▪ New Manpower law increases "restrictiveness" of labor regulations related to dismissals, severance payments and restricts temporary work and outsourcing of production

Substantial progress was also made in liberalizing the investment regime during this period. Relaxation of many, but not all, restrictions on investment began slightly later, and proceeded throughout the 1990s. Importantly, the number of industries closed or restricted in the negative investment list fell from 75 in 1989 to 34 in 1995, and 25 in 1998 (see Annex 3B). Equity restrictions and divestment rules affecting foreign investment were also eased gradually between 1986 and 1995. Initially, equity restrictions were effectively removed for FDI in export sectors. Then, in 1995 equity restrictions were greatly relaxed for FDI outside the export sector, except for those sectors included in the negative investment list.¹⁰

However, reform fatigue set in during the early 1990s and key sectors also remained closed to foreign investment. While the pace and extent of market-oriented economic reforms in Indonesia after 1986 was remarkable, reform fatigue began to show in the early 1990s. Few reductions in import tariff rates followed the initial intense activity until 1995. Also, many of the government-sanctioned monopolies and cartel arrangements, as well as other “sensitive”, regulated sectors, remained more or less untouched during the deregulation period. Finally, FDI remained restricted in several major sectors listed in the 1995 negative list including the retail and wholesale sector.

The Government of Indonesia / IMF reform program in 1998 dealt with many of the remaining restrictions on trade, industry and investment. On the international trade side, these reforms included reducing most import tariff rates below 10 percent (by 2001 the average tariff rate was 7.3 percent), and eliminating most of the remaining NTBs in agriculture. On the domestic trade side, reforms included removing the statutory basis of several monopolies and cartels including the State Logistics Agency’s (BULOG) monopoly over several agricultural commodities. Many of the investment restrictions on domestic distribution were also removed, including opening up these sectors to foreign investment.

Since 2000, however, there has been some back-tracking on reforms, and a return to “creeping”, non-transparent forms of protectionism. While tariff rates remain low, non-tariff barriers issued by the Ministry of Industry and Trade have proliferated. According to a recent WTO Trade policy review, more than 800 import lines are subject to some kind of NTB, although their “restrictiveness” on imports has not been quantified. Similarly, regional autonomy has seen a proliferation in local taxes and restrictions on domestic trade. Many of these reforms threaten to undermine the competitiveness of industry (Ray, 2003).

¹⁰ Under the 1995 package, foreign investors could own up to 95% equity in the venture and not be required to divest, or own 100% equity but must divest some equity in the future.

3.2 Impact of Investment and International Trade Reforms on Job Creation in Indonesia

The trade and investment reforms implemented in the late 1980s stimulated rapid expansion of exports of manufactured goods and associated employment. Table 3.2 shows that non-oil manufactured exports increased by almost 50 percent each year between 1986 and 1992, slowing to 19 percent per year between 1990 and 1996. By 1996 the share of manufactured exports (including resource-based manufactures such as plywood and palm oil) in total exports had increased to almost 50 percent from a negligible 8 percent in the mid-1980s. This expansion supported the creation of higher-quality, relatively value-adding employment in the modern manufacturing sector, including some agro-industries.

Table 3.2 Indonesian Exports 1981 to 2002

	1981	1986	1990	1996	2000	2001	2002
TOTAL <u>US\$mn</u>	25,165	14,805	25,675	53,443	62,124	56,321	57,159
Agriculture	1,570	1,754	2,083	2,913	2,709	2,439	2,568
Manufactured goods	501	1,839	9,041	26,177	36,808	32,361	31,804
----Natural resource based	--	--	3,850	5,052	3,697	3,507	3,381
----Unskilled labor based	--	--	4,943	11,023	13,512	12,432	11,153
----Physical capital based	--	--	1,018	2,145	3,963	3,450	3,843
----Human capital based	--	--	779	3,059	4,351	3,959	4,192
----Technology based	--	--	669	4,898	11,285	9,013	9,234
Other industrial/mining	2,431	2,940	3,480	12,631	8,240	8,885	10,674
Oil/gas	20,663	8,272	11,071	11,722	14,367	12,636	12,113
Share of total (%)							
Agriculture	6.2	11.8	8.1	5.5	4.4	4.3	4.5
Manufactured goods	2.0	12.4	35.2	49.0	59.2	57.5	55.6
Other industrial/mining	9.7	19.9	13.6	23.6	13.3	15.8	18.7
Oil/gas	82.1	55.9	43.1	21.9	23.1	22.4	21.2
Average growth per year							
	1981-86	1986-90	1990-97	1997-2000	2000-01	2001-02	
Total	-10.6	14.7	13.0	3.8	-9.3	1.5	
Agriculture	2.3	4.2	5.8	-1.8	-10.0	5.3	
Manufactured goods	29.5	49.0	19.4	8.9	-12.1	-1.7	
Other industrial/mining	3.8	4.3	24.0	-10.2	7.8	20.1	
Oil/gas	-16.7	7.6	1.8	5.2	-12.0	-4.1	

Source: Trade Statistics, BPS.

One of the main characteristics of Indonesia's export performance during the pre-crisis period was a shift in the composition of exports to labor-intensive industries. The share of total manufactured exports emanating from labor-intensive industries increased from 45 percent in mid-1980s to 61 percent by 1996. This pattern of manufacturing exports – dominated by labor-intensive products – is to be expected in a labor abundant, developing country like Indonesia. Table 3.2 shows the export of major manufactured products between 1990 and 2002 according to factor use (see Annex 3C for details of export products).

Indonesia's comparative advantage in unskilled labor-intensive (ULI) exports is clear from the extremely high growth that sector experienced during 1987-92. The takeoff in ULI exports in Indonesia occurred much later than in other Southeast Asian economies. As a result, the share of ULI exports increased substantially from 28 percent in 1987 to 48 percent by 1993, and then declined to 42 percent by 1996, as other types of exports began to takeoff. Various studies that have examined this sharp decline in export growth in ULI exports conclude that the causal factors were mainly slower demand in Indonesia's major export destinations, although structural factors such as increasing competition and declining productivity also contributed (Aswicahyono and Pangestu, 2000). Appreciation of the real rupiah exchange rate in the order of 20 percent between 1995 and 1997 also contributed to the slow down in ULI sectors. The performance of ULI export sectors will continue to come under pressure in the post-crisis period with increasing competition from other low-cost producers, especially China.

During the early 1990s Indonesia began to develop comparative advantage in human-capital intensive (HCI) and technology-intensive (TI) sectors. Despite their stronger technological component and somewhat higher skill requirements, these sectors are still linked to natural resource-based and unskilled labor-intensive sources (e.g. in relatively labor-intensive electronics assembly). Due to country specific factors, Indonesia suffered a late start in the electronics sector compared to its Southeast Asian neighbors, and its industries were just taking off prior to the crisis, in many cases with the help of investments from Asian tiger countries such as Korea. By 1996 the value of technology-intensive exports was almost the same as the share of natural resources-based manufactures. Electronic exports experienced spectacular growth in 2000, almost doubling over 1999 levels to reach \$6 billion in value.

Another important feature of export performance over the pre-crisis period is the relatively small share of agro-based manufactures. Indonesia has a revealed comparative advantage in this area, as noted by several sources including World Bank Consultative Group documents. Exports of processed foods are small relative to other exported manufactured goods, and are concentrated in a narrow range of products – primarily palm-oil, frozen fish, shrimps, and canned pineapple to mention a few. Trade restrictions on agriculture including high tariffs and non-tariff barriers and commodity distribution monopolies (e.g., BULOG and other state enterprises) hindered the development of this sector (Garcia-Garcia, 2000). Foreign investment restrictions are also believed to have inhibited growth in this sector

during the 1990s. Many of these restrictions were removed in 1998, but a few have recently returned. (e.g., non-tariff barriers on sugar imports). Supply constraints such as the dominance of small land parcels, uncertain property rights (only a small percentage of land is titled) and moderately restrictive land leasing restrictions have all diminished the attractiveness of agro-processing investments outside palm-oil. In particular, Indonesia's agro-based (non-palm oil) industry and exports have lagged those in neighboring countries, although in the last few years these commodities have been the fastest growing exports to China.

The export boom was a catalyst for both foreign and domestic investment in labor-intensive manufacturing industries in the late 1980s and early 1990s. Increased trade openness allowed Indonesia to realize its comparative advantage in labor-intensive industries, and supported by improvements in investment policy a new wave of investments occurred in labor-intensive manufacturing products. Foreign investment played an important role in these sectors. As the economy rapidly expanded and per capita incomes rose, investments increased in other manufacturing sectors, as well as trade services, banking and financial services, and construction.

Over the pre-crisis period, investment showed substantial increases, first in labor-intensive sectors but subsequently diversifying, and supported strong employment growth. One key indicator of investment demonstrates this clearly: investment approvals (both foreign and domestic).¹¹ Foreign direct investment approvals, for example, increased substantially after restrictions on foreign investment were eased in the 1980s and again after equity and divestment restrictions were relaxed in 1995 (Figure 3.1). An analysis of foreign approvals by major economic sector shows that a substantial proportion of approvals in the early years were in the manufacturing sector, especially the ULI export-oriented sectors. In the early 1990s foreign investment diversified to a wider range of manufacturing industries and other sectors, although foreign investment in services was still restricted during this period (see Figure 3.2). Domestic investment approvals were more diversified.

¹¹ Investment approvals are best interpreted as an indicator of investor interest and intentions, and not as a proxy for realized investment. Studies carried out prior to the crisis find that approvals are weak predictors of realized investment and that only a small proportion (perhaps anywhere between 10-25%) of approvals are ever implemented within three years after approval has been given. All foreign investment proposals are required to obtain approval from the Investment Coordinating Board (BKPM) before they can proceed. Thus, FDI approval figures are complete. However, domestic investment approval data are less reliable. Domestic investors only require BKPM's approval if they are requesting tax incentives. In recent years many of these incentives have been cut back and thus few domestic investors lodge applications with BKPM. Also, since decentralization, the authority to approve domestic investment proposals has been transferred to local governments and reporting data to the central government agency BKPM is believed to have broken down in recent years. Thus, for most of this paper we use FDI approvals as rough indicators of investors' intentions.

Figure 3.1: Trends in FDI Approvals, 1978 to 2002

(Number of total FDI projects approved and total US\$ billions)

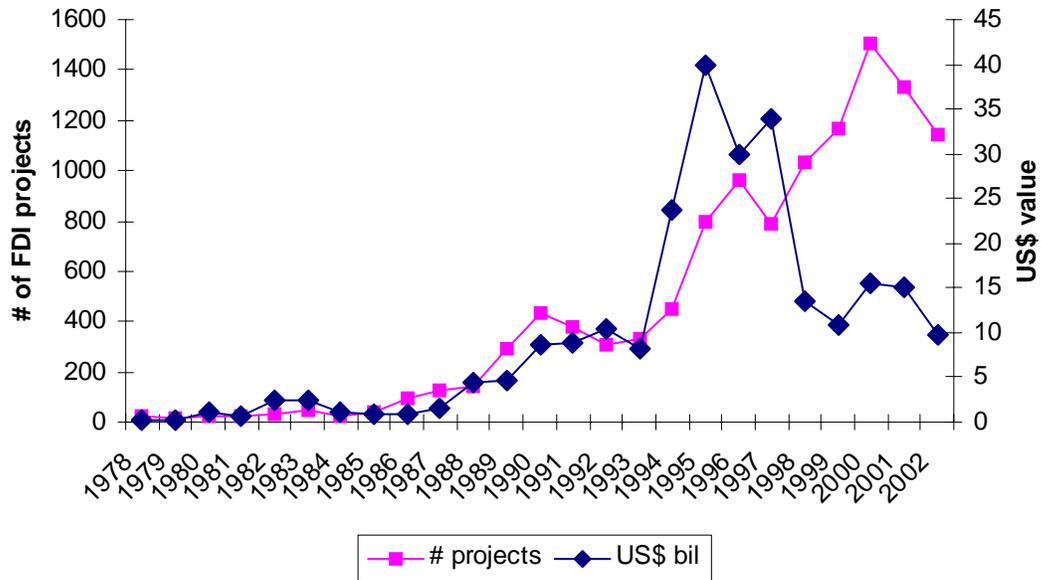
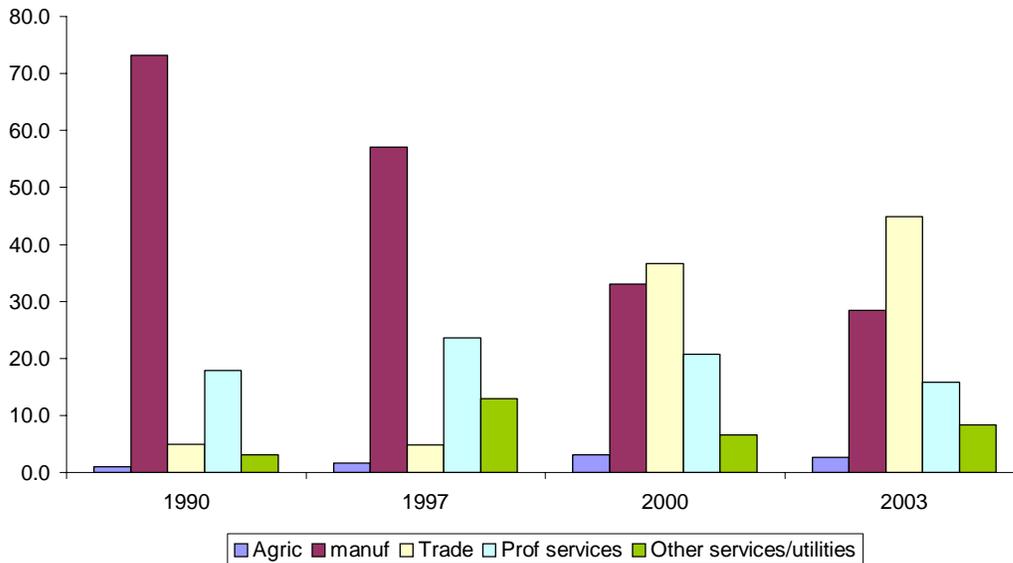


Figure 3.2: Distribution of FDI Approvals by Major Economic Sector 1990 to 2003



Foreign investment played an important role in the export boom and diversification of exports in the 1990s. Table 3.3 summarizes several features of foreign investment in the medium and large-scale manufacturing sector, for which data are available.

- Foreign firms' tend to be more export-oriented than domestic firms, as indicated by their higher export-output ratios.
- Although not shown in table 3.3, following liberalization of the trade and investment regime almost one quarter of all foreign investment in the non-oil and gas manufacturing sector flowed into the export-oriented sectors, first into ULI sectors of woven fabrics, garments and footwear, and later into a wider range of products such as furniture, chemicals and electronics.
- Foreign investors have increasingly become major employers in the manufacturing sector. The share of manufacturing employment accounted for by foreign-invested companies increased from 10 percent in 1990 to 18 percent by 1997, and continued to expand during the crisis period. Most strikingly, in the 1990-97 period, foreign firms accounted for 34 percent of the new (net) jobs created in medium and large-scale manufacturing establishments. They are also significant employers of unskilled workers.
- During the crisis, employment in FDI manufacturing firms did not contract, as employment did in domestic firms, and employment recovery was stronger in FDI firms. Foreign firms appeared to be more resilient than domestic firms as many of them are major exporters, were less exposed to problems associated with trade financing, and had stronger international supplier-buyer networks. However, since 2001 there have been numerous reports of foreign garment and footwear producers relocating offshore.

Table 3.3 FDI Contribution to Value Added, Exports and Employment in the M&L Manufacturing Sector, 1990-2000

	1990	1997	2000
FDI Share of total employment (%)	10.1	18.8	21.4
FDI share of total value added (%)	21.8	32.9	38.1
Share of MVA from exports – FDI firms	16.0	27.2	27.5
Share of MVA from exports – Dom. Firms	16.0	17.9	21.5
<u>Percentage employment growth (per yr)</u>	<u>1990-97</u>	<u>1997-98</u>	<u>1998-2000</u>
All firms	8.1	-1.1	2.9
FDI firms	27.4	0.6	9.1
Domestic firms	5.9	-1.5	1.5
<u>Percentage of new jobs created by FDI</u>	<u>%</u>		
High growth period -1990-97	34.2		
Recovery period 1999-2000	59.1		

Source: Annual M&L manufacturing survey, 1990-2000, BPS

Note: Medium and large-scale plants refer to establishments that employ 20 or more workers.

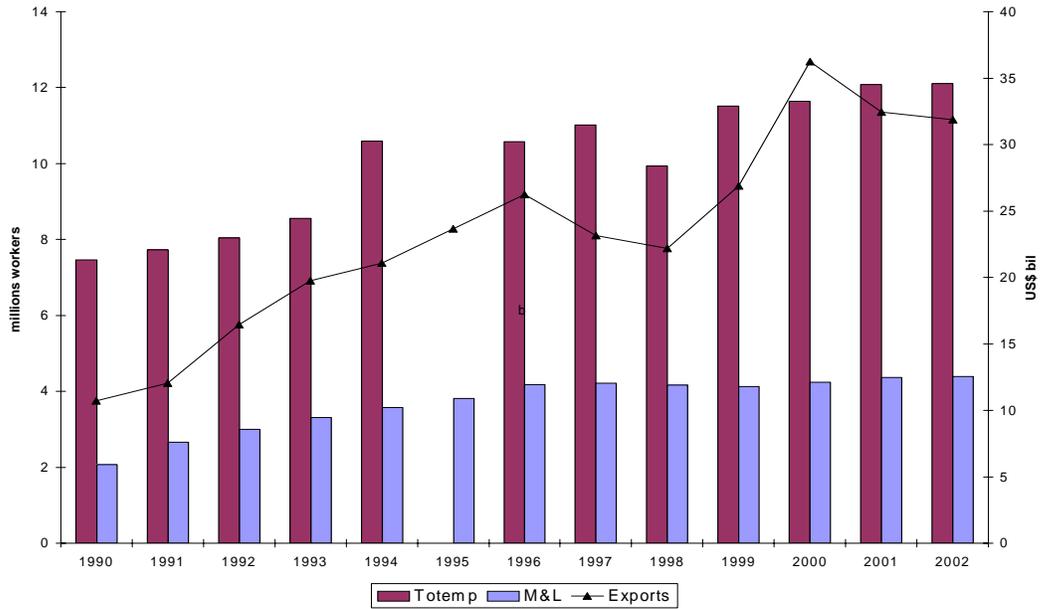
3.3 Investment and Trade have been Major Sources of Employment Growth

In this section we review the empirical evidence of the impact of investment and trade on employment. The focus is more on the manufacturing sector, primarily because manufacturing (and also many services) is associated with formal jobs and because manufacturing has valuable knock-on effects on employment in other sectors due to economy wide linkages. Also, investment and trade reforms happened long enough ago for us to see the effect of policy choices, and there are good time series data. Domestic trade and services have become increasingly important generators of employment and these are discussed as well.

Investment and exports have been an important source of employment growth in manufacturing industries. Figure 3.3 shows trends in exports and manufacturing employment from 1990 to 2002. It demonstrates clearly that the positive correlation between exports and employment established in the pre-crisis period holds both during the crisis and in the recovery period. In particular, the strong recovery in employment in 2000 is associated with the upturn in exports in that year. Also apparent from the figure is that rapid employment growth occurred across both the medium and large-scale sector (MLEs) sector and the cottage/small scale (SE) sector (proxied by the difference between total and MLE employment), although the growth rate was faster for larger enterprises as is to be expected with increasing industrialization of the economy.

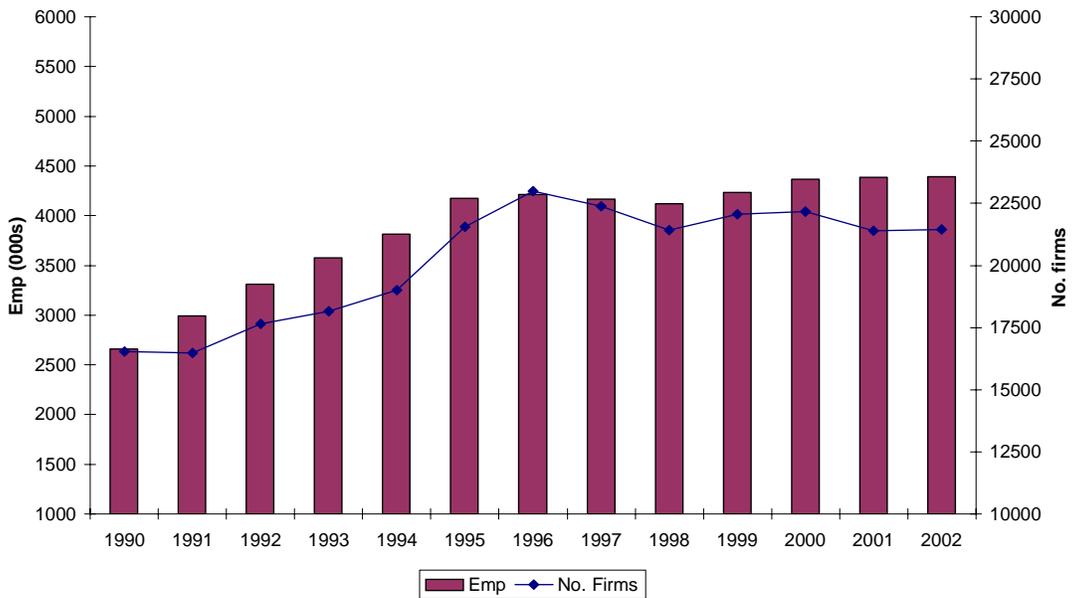
Investment generated employment growth in manufacturing during the pre-crisis period. Figure 3.4 shows the correlation between the number of manufacturing plants (as a proxy for trends in realized investment) and employment in the MLE sector. Again it is apparent that new investments were driving employment growth during this period. (See also Box 3.1: Employment Gains from Indonesia's Export Growth). The slow down in employment in the M&L manufacturing sector during the post-crisis is associated with low investment.

Figure 3.3: Exports and Employment in Manufacturing



Notes: Totemp refers to total manufacturing employment reported in the national labor force survey. M&L refers to employment in medium and large-scale manufacturing establishments.

Figure 3.4: Investment and Employment in M&L Manufacturing



Evidence from Indonesia’s Input-Output Table suggests enormous total employment creation as a result of exports, but its role has been declining over time as the economy diversifies (see Box 3.1 and Annex 3D). Using the I-O Table to map backward and forward linkages between the major economic sectors reveals that exports increased total employment by 7.9 million between 1996 and 2000 (Table 3.4), of which about 1.7 million jobs were in manufacturing, and 2.6 million were in trade services. These figures indicate that the knock-on effects of exports on employment are substantial. Private household consumption growth during 1995 and 2000 created 1.5 million new jobs. The sharp contraction in investment from 1998 to 1999 resulted in a loss of 2.4 million jobs, mainly in the construction sector, and that sector’s collapse played an important role in transmitting the economic crisis to the poor (Papanek, 2003).

Aggregate employment increased by 1.8 million during the recovery of 2000 to 2002. Exports contributed 280,000 new jobs or about 15 percent of the total – still a large contribution, but clearly less than in previous periods when exports grew rapidly. Household consumption growth contributed almost 400,000 jobs or one fifth. Even though household consumption has been the largest source of growth during the recovery it appears based on the I-O model that it has not been the major contributor to employment growth. Rather the largest contributor to new jobs over 2000-2002 was the modest recovery in investment. Around 760,000 new jobs (or 42 percent of new jobs) – mostly in construction¹² – were created from the increase in investment spending, and the recovery in this sector is important in improving the incomes of poor people. These trends suggest that the strong relationship between investment and jobs observed pre-crisis holds, but the problem lies with the slow recovery in investment. Full Input Output table findings for 2000-2002 are in Annex 3D.

Table 3.4: Sources of Employment Growth 1995 to 2002

GDP component	Number of new jobs created		Share of new jobs from 2000 through to 2002 (%)
	1996 to 2000	2000 to 2002	
Private household consumption	1,484,403	378,841	21.0
Government consumption	-1,102,916	351,066	19.4
Investment	-2,402,135	757,799	41.9
Exports of goods	7,973,454	280,463	15.2
Exports of services	611,539	31,404	1.7
Increase in total employment	5,968,069	1,806,910	100%

Notes: Authors’ estimates. Based on the 1995 and 2000 Input-Output tables and the National Labor Force Survey, 1996, 2000 and 2002. Period split as follows: 1996 pre-crisis period, 2000 beginning of the recovery, 2002 latest year.

¹² BPS includes housing and retail construction as part of investment spending. According to the national income accounts, construction accounted for about 81 percent of incremental investment spending during 2000-02.

Box 3.1: Employment Gains from Indonesia's Export Growth in the 1980s and 1990s

Figures 3.3 to 3.6 in the text depict a positive correlation between exports and employment in manufacturing. They do not tell us how many jobs were created in those sectors as a result of exports. Nor can the figures tell us how many indirect jobs were created through linkages with the manufacturing sector. Several recent studies have attempted to quantify both the direct and indirect employment creation effects of manufactured exports. For this purpose they used the Indonesian national Input-Output tables (I-O) to simulate the employment effects. The I-O table maps the backward and forward linkages between all specified sectors of the economy – agriculture, manufacturing and services. The I-O analysis is particularly useful for quantifying jobs created directly in the exporting sector (e.g., processed foods) and jobs indirectly created through backward linkages such as suppliers of inputs (farmers) or forward-linkages (truck drivers, insurance agents). Using this approach, Athukorala and Santosa (1997) found that total employment generated by exports of manufactured goods increased fourfold between 1985 and 1990 from 1.1 million to 4.4 million persons in 1990 and then more than doubled to 10.4 million by 1995, accounting for over half of net jobs created in the economy during this period. Fujita and James (1997) also using the I-O model decomposed the direct and indirect employment generated from exports of manufactured goods. They found that manufactured exports generated an additional 4.1 million jobs between 1980 and 1990, accounting for about 23 percent of all new net jobs (both formal and informal) created during this period. About one-quarter of these new jobs were actually created in the primary sector as a result of increased manufactured exports. They calculated that the share of indirect employment was about 40 percent of new export-related jobs, suggesting the indirect employment effects are considerable.

Sources: Prema-chandra Athukorala and Bambang Santosa (1997), 'Gains from Indonesian Export Growth: Do Linkages Matter?' Bulletin of Indonesian Economic Studies, Vol. 33(2).
Natsuki Fujita and William E. James (1997), 'Employment creation and manufactured exports in Indonesia: 1980-90', Bulletin of Indonesian Economic Studies, Vol. 33 (1).

Employment generation has varied considerably by manufacturing sub-sector, particularly unskilled labor intensive (ULI) and human capital intensive (HCI) sub-sectors, and particularly in the post-crisis period. Figure 3.3 hides considerable variation within the manufacturing sector depending on the degree of export-orientation of different sub-sectors. Figure 3.5 shows the correlation between exports and employment in textiles, garments and footwear (TGF) as the principal ULI sector, whilst Figure 3.6 shows the same for technology and human capital-intensive sectors. It is clear from Figure 3.5 that exports were an important engine of employment growth in the ULI sector. Moreover, most of the net jobs created from 1990 to 1996 came from medium and large-scale establishments, and in particular foreign-owned firms. The decline in TGF exports since 2001 has contributed to job losses in this sector. In contrast, exports of technology intensive (TI) and HCI products have

improved during the post-crisis period and this has contributed to employment gains in these sectors.

Figure 3.5: Exports and Employment in TGF

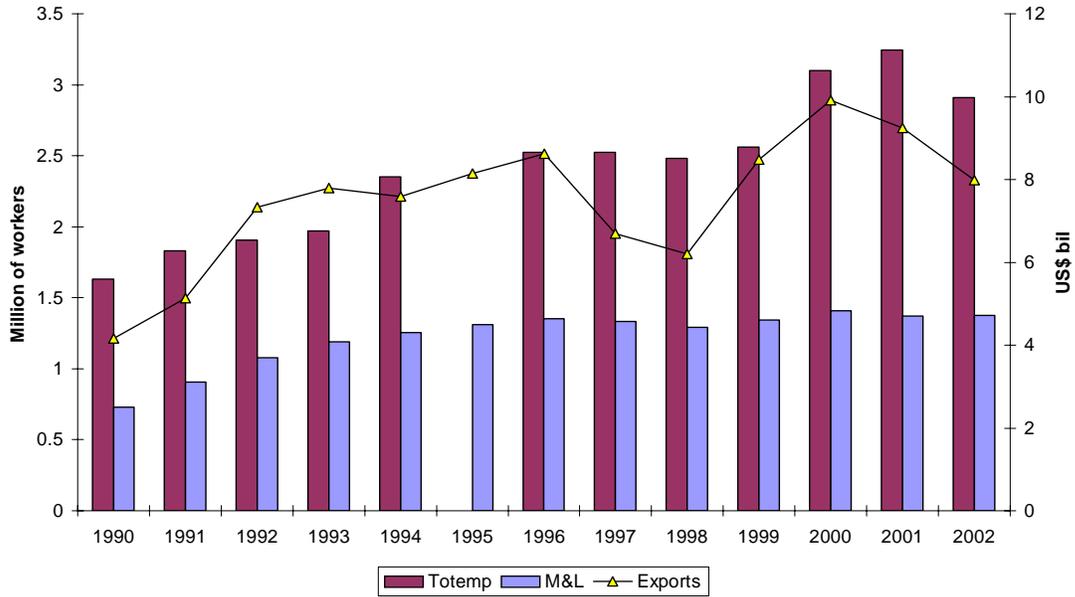
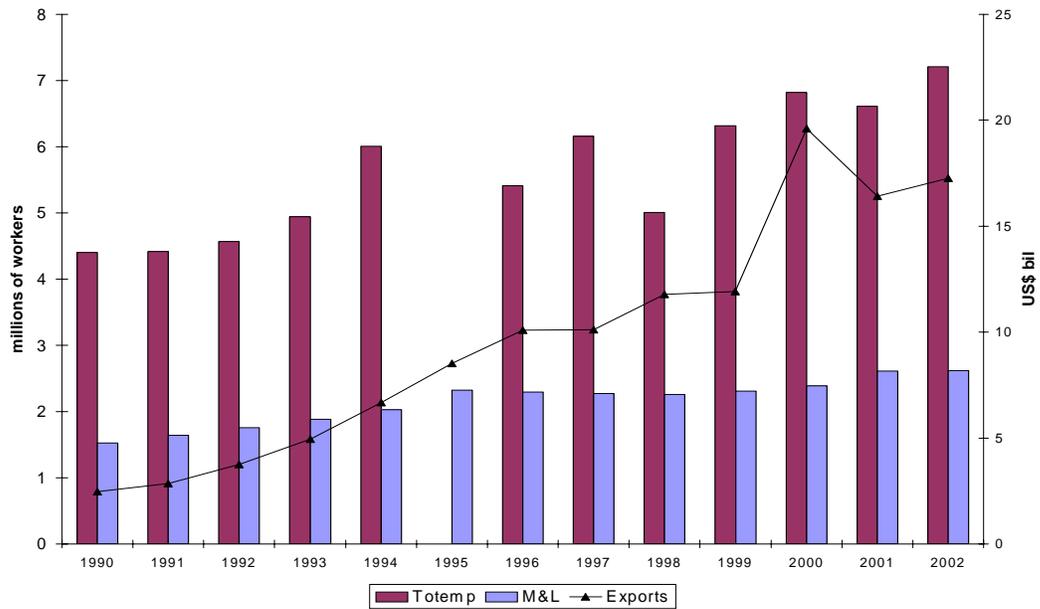


Figure 3.6: Exports and Employment in Technology and Human Capital Intensive Sectors



Imports played a significant role in facilitating economic growth and improving economic efficiency in Indonesia. Trade policy reforms made it easier for producers to import capital goods and intermediate inputs. This helped stimulate economic growth in at least two ways. First, imports of capital goods and intermediate inputs supported the export boom in the early 1990s (Siregar 1998). Second, increased import competition improved total factor productivity growth across the industrial sector and this in turn led to higher economic growth rates (Aswicahayono and Hill, 2001).

Imports of goods collapsed in 1998, rebounded strongly in 2000 but have since grown slowly resulting in substantial trade surpluses for Indonesia. The real depreciation of the exchange rate and slow recovery in domestic investment explain the slow recovery in imports since 2001. There is anecdotal evidence of some efficient import substitution occurring in the domestic market as a result of the depreciated real exchange rate.¹³

Several comprehensive empirical studies confirm that trade and investment reforms played a major role in employment and wage growth in Indonesia. Most importantly the evidence suggests that new investment, whether foreign or domestic, raised the demand for skilled labor, while the effect of trade openness was to raise the demand for unskilled labor. Agrawal (1996) provided an earlier assessment of the impact trade and investment reforms had on workers in the early 1990s. After reviewing employment, real wage and poverty data she concluded “Indonesia’s rapid, broadly based pattern of growth has led to a spectacular reduction in poverty in the last 25 years. The model of development Indonesia adopted – market-led growth combined with investments in physical and social infrastructure – has proved to be the one most successful in alleviating poverty and benefiting workers” (p1). The 2001 study by Suryahadi, Chen and Tyers provides the most recent, comprehensive analysis of investment, trade and employment issues relevant to this report (see Box 3.2).

¹³ The import-competing domestic automotive components and parts industry has expanded partly as a result of the real depreciation in the exchange rate.

Box 3.2: Are Investment and Trade Good for Workers?

Suryahadi, Chen and Tyers (2001) took a comprehensive look at the impact of trade and investment reforms on employment and wages in the Indonesian manufacturing sector using establishment data from the annual manufacturing survey of medium and large-scale firms from 1975 to 1993. Specifically they found that:

Increased trade openness – export expansion and greater import competition – raised the demand for unskilled workers faster than for skilled workers. As Indonesia opened up its market, it realized its comparative advantage in ULI industries and so ULI sectors experienced a terms of trade gain in the early 1990s.

New investment raised the demand for skilled workers faster than for unskilled workers. This happened because the technology embodied in new capital tends to be biased towards skilled labor.

Foreign investment tended to involve technology that used unskilled labor, and therefore raised the demand for unskilled labor faster than for skilled workers. They concluded that in the case of Indonesia, that it was the newness of capital, and not its foreignness, which increases the relative demand for skilled labor.

Overall, the effects of trade openness, new capital accumulation and FDI were to increase the relative demand for unskilled labor.

In terms of real wages, they found that trade openness, investment and FDI increased real wages of unskilled workers (which grew by about 6 percent from 1990 to 1996), but real wages of skilled workers rose faster. The relative difference in wage growth between the two groups is explained by differences in labor supply conditions. The supply of skilled workers was relatively tight, and so the increase in demand for skilled workers pushed up their real wages faster. Thus, skilled workers received a “skill premium”. In contrast, Indonesia is abundant in unskilled labor. In particular the rural sector remains a vast supplier of unskilled labor. A small transfer from its workforce to that of manufacturing may only moderately increase the unskilled wage rate, while causing a comparatively large proportional increase in unskilled employment in the manufacturing sector. Hence, while the surge in manufacturing capital accumulation during the late 1980s and early 1990s raised relative demand for unskilled labor, relatively wage growth was faster for skilled workers.

The authors highlighted the importance of both labor demand and supply considerations in increasing the gains from trade and investment. On the labor demand side, trade, investment and FDI are important sources of job growth. On the supply side, improving the skill base of Indonesian workers is also crucially important to increase benefits from trade and investment reforms. In considering the post-crisis recovery in employment and wages, the authors concluded, “Provided financial reforms are successful and the policy regime in Indonesia retains the trend towards openness, the recovery phase there might be expected to follow the pre-crisis pattern. As old capital comes back on line and new capital is invested, the demand for both skilled and unskilled labor will grow again, as will the real wages of both” (p. 266).

3.4 Investment, Trade and Industrial Development - Linkages with the Rural Sector

Rural and peri-urban areas have also benefited from economic growth over the past two decades. Rapidly increasing formalization, urbanization and education of the labor force has been a notable outcome of the economic expansion in the last two decades (Henderson and Kuncoro, 1996). However, rural and peri-urban economies (defined as those regions neighboring a large city) have also benefited from the growth through several mechanisms.

First, migration of labor to higher quality urban jobs helped reduce poverty, and worker remittances helped support rural incomes. As described in Chapter Two, higher growth in the formal and urban sectors during the 1990s pulled workers and their families away from low-productivity, poorly-paid jobs in the rural sector to better jobs in the formal and urban sectors. This labor mobility helped reduce poverty on a sustainable basis (Manning, 1998), and migrants to urban areas often sent remittances back to their families in rural areas.

Second, the effect of product markets and inter-sectoral linkages also helped reduce (rural) poverty. Product-market and inter-sectoral linkages between urban and rural, and formal and informal, sectors operate in various ways. Increasing agricultural value added growth is an important stimulus to rural industries due to proximity in markets and population.¹⁴ Also, higher incomes and faster economic growth in urban areas and from exports provide significant stimulus to agriculture and rural industries. Rising urban population and incomes increase the demand for agricultural commodities and products of rural industries. This multiplier effect helps reduce poverty, especially as farm households derive almost 50 percent of their income from off-farm activities. (see Box 3.3: Tobacco and Furniture Industries).

¹⁴ Carana (2003), 'Agricultural Sector Review, Indonesia'.

Box 3.3: Tobacco and Furniture Industries – Linking up with the rural sector

Resource-based manufacturing sectors have significant linkages with the rural and agriculture sectors through sourcing agricultural and other resource-based inputs, and with informal workers through the distribution system. The employment generated from investments in such manufacturing sub-sectors is considerable. Two examples demonstrate the employment effects of resource-based manufactures – the cigarette industry and the furniture industry.

The cigarette industry directly employs more than 240,000 production workers in the smaller urban areas in Central and East Java, although these numbers have steadily declined over the last 20 years. According to recent data the industry provides extension services and sources tobacco from several thousands of tobacco farmers in Java and clove farmers in North Sulawesi. More than one million informal workers nation-wide distribute cigarettes as part of their trading activities. This industry is also an example of how rent-seeking activities by the politically connected hurt farmers. In 1990 the government established a cloves trading monopoly between a state enterprise and the then President Soeharto's son. The official purpose of the monopoly was to help farmers by increasing cloves prices by controlling supply. Prices did go up, but the rents went to the monopoly. By 1995 prices received by farmers were about a third of the world price. At the onset of the financial crisis the monopoly was disbanded and prices were then market-determined. During 2001 farmers were receiving prices more than 20 times the farmer's price under the former monopoly.

The success of the Indonesian furniture industry over the last ten years is one example of the positive spillovers that can occur through small-scale foreign investment. From the early 1990s small-scale foreign furniture makers invested in Jepara, a district in Central Java famous for its furniture making. The foreign companies brought with them new techniques, produced better quality furniture and tended to be more responsive to fashion trends in the US, Japanese and European markets. Through imitation and labor turnover, local firms' design capabilities improved. Foreign firms attracted more buyers to the area, which in turn had positive spillovers for local producers. As exports surged from under \$100 million in the late 1980s so did direct employment in the industry and particularly in the peri-urban areas around Semarang and Jepara. Today the industry exports over US\$ 1.5 billion of furniture around the world and directly employs more than 500,000 workers.

Small and medium enterprises in the rural and peri-urban manufacturing and services sectors experienced robust growth in value added and employment throughout the 1990s (Hill, 1996; Berry and Sandee, 2001). Table 3.5 reports employment growth rates in small and medium enterprises separately for the major industrial urban areas and outside them. The table shows that employment in SMEs located outside the major urban centers grew faster than SMEs located in the major centers during the high growth period 1990 to 1997. Hill (1996) note that, while industry has concentrated in several major urban areas due to various agglomeration factors, industrial growth has nevertheless been relatively evenly spread across

provinces. Another way for these linkages to occur is through the recent development of the modern urban retail sector and they have in turn stimulated new supply links and technology transfers to the rural sector (see Box 3.4: Deregulation and Investment in the Distribution Sector).

Table 3.5: Employment growth in SMEs outside the major urban areas

(% growth rate per annum)	1991-97	1997-98	1998-2000
Medium firms (100-499 employees)			
Major industrial centers	2.8	-5.0	4.3
Outside major industrial centers	7.7	-3.8	4.3
Small firms (20-99 employees)			
Major industrial centers	3.6	-3.6	2.1
Outside major industrial centers	7.8	-6.5	1.2

Source: Annual manufacturing survey of M&L plants, BPS

Note: Major industrial centers refer to Jabotabek, Bandung, Surabaya and surrounds and Medan.

Box 3.4: Deregulation and Investment in the Distribution Sector

In 1998, the government removed restrictions on foreign investment in the wholesale and retail sectors in the urban areas, including permitting foreign producers operating in Indonesia to distribute their own products in the domestic market – previously they had to distribute their products through a local partner. As a result foreign investment in the distribution sector has increased over the last five years – this sector has accounted for over one quarter of all FDI approvals since 2000. One major investor is French retailer Carrefour.

Carrefour established its first outlet in Jakarta in October 1998 and has since opened an additional ten outlets in the capital city and two in Bandung directly employing around 4,000 workers and indirectly 3,000 workers. The company's rapid expansion in the capital city has raised calls from local competitors and some government officials for reintroducing controls on foreign investment on the grounds that Carrefour, and modern retailers in general, are driving out small traders.

There is little evidence, however, to indicate that this is in fact the case. Recent data from market research company ACNielsen shows that modern supermarkets only account for about one quarter of total retail sales of non-durable goods in the 14 main urban centers (although growing rapidly), in contrast, modern supermarkets account for well over 50 percent of retail sales in the Philippines and Thailand. Moreover, modern retail outlets compete in different market segments, selling higher price and quality products compared to small traders. Finally, Carrefour and other large retailers assert that they source as much as 90% of their products from local suppliers, and Carrefour, in particular, has also sold about \$20 million of local products to its outlets in other countries.

Carrefour has rather taken market share from local modern retailers (Matahari and Hero). Carrefour's success is attributed to its lower product prices achieved by buying directly from producers, and by buying in bulk. Besides Carrefour, several local modern retailers have also

expanded in recent years. Ramayana - one of Indonesia's largest retail department chain operators – has opened more than 10 outlets per year outside Java. Mini-markets – which are in closer competition with smaller traders - have expanded rapidly in main urban centers. Expansion of the modern sector in recent years is also the result of regional autonomy, as local governments have assumed authority over granting investment approvals in the modern retail sector. In the past the director of domestic trade at the Ministry of Industry and Trade had authority to approve investments in the regions. This issue has created tensions between the center and the regions and the Ministry is reportedly preparing a presidential decree to assert greater control over investments in the modern retail sector.

Modern supermarkets represent only a fraction of retail trade sector employment, but their linkages with the economy and in particular the SME and rural sectors are potentially significant. P.T Matahari Putra Prima, a leading supermarket chain, has long run a successful vendor development program with more than 3,000 local producers supplying the bulk of products sold. Private distributors are now developing vendor programs with farmers to supply Carrefour, although concerns remain about the impact of large retailers on farmers not included in vendor programs.

Third, investment in rural infrastructure has been an important source of growth in the peri-urban and rural sectors. Rural infrastructure investment has reduced the transaction costs of producing, distributing and marketing products, and improved linkages with modern, urban sectors. In particular, improved roads, electricity coverage, and access to telecommunications have had a major impact on industrial development in the rural sector over the last 20 years. (see Box 3.5: Infrastructure and Regional Industrial Development).

But despite these improvements in rural infrastructure, economic growth in the rural sector lags behind urban economic growth rates and rural poverty remains high. Rural-urban linkages remain weak in several aspects and inadequate infrastructure is hindering growth and development of rural industries and long-term poverty decline. For example, telephone fixed line penetration rates remain low by regional standards and rural roads are in poor condition and deteriorating. Inter-island linkages between Java and Outer islands are particularly weak due to relatively high transportations costs. With farm households increasingly reliant on off-farm activities for income it is paramount that the investment climate in rural areas is improved.¹⁵

¹⁵ The development of non-farm income activities in the peri-urban sector is an important channel for reducing poverty in the rural areas. As noted earlier, recent studies show that farm households derive almost 50 percent of their income from off-farm activities, although agriculture growth remains an important stimulus to growth in the off-farm rural sector, and especially in the Outer islands.

Box 3.5: Infrastructure and Regional Industrial Development

Numerous recent studies on regional development emphasize the importance of investing in infrastructure and improving institutions related to land and permits to stimulate development of industry and off-farm income opportunities for the poor. A case study of 274 firms in several urban, peri-urban and rural districts of Central Java in the early 1990s found that infrastructure improvements such as roads, telephone, electricity, seaports and airports contributed to the development of the manufacturing sector in these areas. The study found that most of the manufacturing employment growth in the surveyed districts in the early 1990s emanated from new firms that started production after the trade and investment reforms were implemented in the late 1980s. In particular, the survey revealed that the availability of telephone connections was considered the most important component of infrastructure, followed by proximity to a highway. The study also revealed that market potential, as well as institutional factors related to land and permits, influence the spatial development of manufacturing industry.

These issues remain as important today as they were back in the early 1990s. Indeed, the overall quality of infrastructure in Indonesia has deteriorated since the crisis, as public spending had to be reduced sharply in real terms. Roads in and around major cities are heavily congested and rural roads are in poor and deteriorating condition (World Bank, CGI Brief, 2003:37). Proliferation of local government taxes, permits and other restrictions are also hindering rural industrial development. Addressing infrastructure problems will be crucially important for improving the national (urban and rural) investment climate.

Source: P Rietveld et al (1994), 'Infrastructure and Industrial Development: the case of Central Java', Bulletin of Indonesian Economic Studies, Vol 30 (2).

3.5 Slow Recovery in Investment, Trade and Employment in the Post-Crisis Period

Following modest post-crisis growth, formal sector employment prospects are now facing new international pressures and domestic constraints. As discussed in Chapter 2 during the post-crisis recovery formal sector employment has outpaced informal sector growth, but only moderately, and in 2002 formal employment declined. Manufacturing employment has grown steadily during the recovery period but also stagnated in 2002. Employment growth in several services sectors (e.g., trade and transportation) improved in 2002 (Table 3.6).

- Employment in TFG sectors has declined sharply in 2002 and many more job losses appear to be in the pipeline with the imminent ending of the quota system in 2005.

Increases in international competition from China and Vietnam and big increases in minimum wages are believed to have contributed to this decline (Figure 3.5).¹⁶

- Processed wood products (excluding furniture) have seen declines in employment since 1998 and this is primarily due to poor domestic policy environment.
- Employment in other manufacturing sectors,¹⁷ meanwhile, has been growing above average national growth rates (Figure 3.6).
- Employment in trade services (where many jobs are in the formal sector) has picked up in recent years, and this is consistent with the flow of investment to this sector (see Table 3.6 below).
- The investment-related construction sector has shown the biggest improvement in employment in line with growth in trade services, although many of the new jobs are casual employment (Table 3.6).

Table 3.6: Growth in Employment During the Recovery Period

Employment Growth, by Economic Sector 1999-2002 (%) 1/
(reproduced from Table 2.6 in Chapter Two)

	1999-2000	2000-01	2001-02	Share in 2002
Agriculture	6.0	-2.8	2.1	45.1
Manufacturing	1.2	2.7	0.2	13.2
Trade Services	5.6	-6.3	1.7	19.4
Construction	3.9	6.6	12.2	4.6
Trans & Comm.	9.3	-2.8	5.9	5.1
Other Services	-17.9	14.7	-6.3	12.7
Total 1/	2.3	-0.4	1.3	100.0
Formal 2/	1.3	1.6	-1.9	32.3
Informal	2.7	-1.4	2.9	64.7

1/ Excludes Employers, Mining and Utilities

2/Employers account for 3% of total employed persons

Several factors explain the weakening formal employment situation in 2001. First, Indonesia’s export performance since 2001 has been weak for both global demand and structural reasons, especially in labor-intensive sectors. Increased price competitiveness from the crisis did not feed immediately into manufactured goods export growth because of disruptions to export supply resulting from political turmoil and problems associated with trade financing. This in turn had a depressing impact on export values in 1998 and 1999. The

¹⁶ A recent survey carried out by the Center for Strategic and International Studies for a World Bank study (forthcoming) suggests that lower end garments and footwear exports are particularly vulnerable to increased competition from China. Higher-end garments and footwear producers, meanwhile, are currently less affected by Chinese competition in both their export and domestic markets. They conclude that the industry will continue to consolidate over the next decade.

¹⁷ This includes paper products, chemicals, lower-end electronics manufacturing and vehicle production.

single most important factor behind Indonesia's weak performance in 1998-99 was the decline in international prices for agriculture and industrial goods. During the crisis period export volumes of industrial and agricultural goods actually increased (Rosner, 2000). The relatively poor export performance since 2001 is partly due to the slow down in global demand for many of Indonesia's key exports. A recent assessment of Indonesia's share of exports in world markets show that Indonesia is moderately competitive in many products, but the products are in laggard sectors whose share in the world market has been shrinking. Thus, Indonesia's relatively poor export performance is also caused by its slow ability to shift to faster growing product markets (Aswicahyono and Mairir, 2003).

Unskilled labor intensive export industries such as TGF are beginning to suffer from a structural decline in performance. This is partly due to the imminent demise of the textile quota regime and the increasing competitiveness of regional neighbors such as China and Vietnam. Technology-intensive and human-capital intensive sectors have performed better in the post-crisis period, and also been supported by domestic consumption. Exports of resource-based products have also been relatively resilient. Some commentators have noted a shift towards revealed comparative advantage in resource-based products, and many such products have seen a rapid increase in exports to China from a low base (World Bank 2003).

The second factor is the slow recovery of investment in the post-crisis period. Aggregate GDP investment figures reviewed in Chapter Two show a slow recovery in investment across the economy, and this is the main reason behind moderate economic growth and employment performance since 1998. The GDP figures do not show which sectors are receiving new investment, for which we can refer to FDI investment approvals as indicative of investor's intentions (Annex 3E). The low value of investment approvals is consistent with the slow recovery of aggregate investment. However, the number of approved projects has actually held up in recent years indicating that investments are relatively small-scale ones.

Investment in the post-crisis period is shifting towards services sectors. Figure 3.2 shows that a notable change in the pattern of FDI during the post-crisis period is the shift away from investments in the tradable goods sectors towards the non-tradable sectors such as the wholesale and retail sectors, and property. Deregulation of the distribution sector and decentralization of domestic investment approvals have stimulated investments in this sector. Investments in this sector are also indicative of the dominance of consumption growth in GDP and help explain the pick-up in employment in this sector since 2001 (Table 3.6).

The low level of investment and slow recovery in trade are indicative of poor domestic investment climate and policy obstacles. Policy obstacles are highly relevant since they restrict the ability of firms to adapt to changes in demand and reallocate resources to emerging growth areas. Addressing those issues is fundamental to a successful job generation strategy, and they will be reviewed briefly in Chapter Four. Our high case scenario in Chapter four illustrates that increasing investment sufficiently enough to produce economic growth of 6 percent annually would reverse these employment trends.

ANNEX 3A: Average nominal tariff and non-tariff reductions, 1986-2001

Average nominal tariff and non-tariff reductions, 1986-2001

	1986	1988	1990	1991	1992	1993	1994	1995	2001
Average tariff	27	24	22	20	20	19.7	19.5	15	7.3
Import weighted Average tariff	13	14	12	11.9	11.9	13.7	12.5	9.5	Na
NTBs as a percentage of imports	43	21	17	13	13	12	12	Na	Na

Source: Pangestu (1995); and authors for 2001

ANNEX 3B: Indonesia - Negative Investment Lists

The Negative Investment List, Indonesia, 1989-2000 (number of sectors closed to investors)

	1989	1995	1998	2000
Sectors closed unless certain requirements met	47	9	--	20
Sectors closed to FDI	19	6	--	9
Sectors closed to 100% FDI equity	Na	8	9	8
Sectors absolutely closed	9	11	16	11
TOTAL	75	34	25	40

Notes: Category 3 was added in 1995.

Line ministries can and do impose investment restrictions on sectors not covered in the investment list.

Source: Investment Coordinating Board (BKPM)

ANNEX 3C: Indonesia's Changing Comparative Advantage

Exports of manufactured products according to Factor Use (US\$ millions)

Description	1990	1993	1996	2000	2001	2002
Natural resource-intensive						
(NRI)	3,850	5,359	5,052	3,697	3,507	3,381
% of total manufactures	34.2	27.2	19.3	10.0	10.8	10.6
<i>Major items:</i>						
Wood and Cork	3,586	5,129	4,843	3,260	2,932	2,853
Unskilled labor-intensive (ULI)	4,943	9,415	11,023	13,512	12,432	11,153
% of total manufactures	43.9	47.7	42.1	36.7	39.5	35.9
<i>Major items:</i>						
Textiles	1,470	2,637	2,834	3,505	3,202	2,896
Furniture	338	676	952	1,518	1,424	1,512
Clothing	2,001	3,502	3,591	4,734	4,531	3,945
Footwear	694	1,661	2,195	1,672	1,506	1,148
Physical capital-intensive (PCI)	1,018	1,091	2,145	3,963	3,450	3,843
% of total manufactures	9.0	5.5	8.2	10.8	11.0	12.4
<i>Major items:</i>						
Organic chemicals	100	244	505	1,140	1,069	1,124
Non Ferrous Metals, steel, iron	820	605	1,000	1,491	1,308	1,388
Machinery	39	141	349	911	708	938
Human capital-intensive (HCI)	779	1,833	3,059	4,351	3,959	4,192
% of total manufactures	6.9	9.3	11.7	11.8	12.6	13.5
<i>Major items:</i>						
Perfume + oils	184	133	199	318	320	369
Rubber products	85	106	299	371	352	455
Paper & Paper prods	182	494	942	2,261	2,006	2,074
Road Vehicles	46	334	348	489	475	561
Technology intensive (TI)	669	2,024	4,898	11,285	9,013	9,234
% of total manufactures	5.9	10.3	18.7	30.7	28.6	29.8
<i>Major items:</i>						
Plastics	55	68	313	665	518	494
Computers and peripherals	0	89	403	2,461	1,139	1,207
Automatic data processing eqt	1	47	357	1,205	904	978
Telecommunications/ electrical machinery	243	1367	3124	5954	5576	5685
	11,260	19,723	26,177	36,808	32,361	31,804

Source: Trade Statistics, BPS

ANNEX 3D: Employment Conclusions from Indonesia's Input-Output Table

The Indonesian Input-Output model is used to quantify the sources of employment growth during two periods: (i) from pre-crisis 1996 to the beginning of the recovery in 2000 and (ii) the recovery period 2000 to 2002. For this purpose the I-O tables 1995 and 2000 are used to map the backward and forward linkages between all specified sectors of the economy covering agriculture, manufacturing and services. The I-O analysis is particularly useful for quantifying jobs created directly and indirectly from growth in final demand. For example, we can quantify jobs created in the exporting sector (e.g., processed foods) and jobs indirectly created through backward linkages such as suppliers of inputs (farmers) or forward-linkages (truck drivers, insurance agents).

Employment is a derived demand arising from changes in aggregate demand – household consumption, government consumption, investment spending and exports of goods and services. These components are measured in value added in the I-O table at current prices. The I-O table does not report employment figures. For this we use employment data from the National Labor Force survey, 1996, 2000 and 2002 (see Chapter 2). Basically, the model uses the change in employment by sector and applies the I-O sectoral coefficients to allocate the gains/losses in employment across the major sources of aggregate demand.

The results for the period 2000 to 2002 are reported in this Annex. The results for 1995 to 2002 are available on request. To read the table: The columns refer to the major components of aggregate demand in the economy. The rows refer to the major productive sectors in the economy as listed in the I-O tables. The second last row reports the total change in employment, while the last row reports the share of new jobs due to the specific GDP component. Thus, the change in household consumption between 2000 and 2002 created 379,000 jobs throughout this period. Of these new jobs, 107,000 were in processed foods and beverages, and 76,000 in other manufactured jobs. The pick up in investment spending in 2000 to 2002, created 758,000 new jobs. Of these, 717,000 jobs (or 95%) were in the construction sector. As noted in the text, the Central Bureau of Statistics includes all construction activity as investment spending including housing and retail construction. Housing and retail construction sectors experienced robust growth throughout the recovery period. Slow down in value added export growth during this period was associated with 280,000 jobs or 15 percent of new jobs, much lower than in previous periods.

Employment Evidence from Indonesia's Input Output Table
Sources of employment growth from 2000 to 2002

Sector	Gov						Total change in jobs
	Household consumption	consumption	Investment	Stock	Exports goods	Exports service	
Paddy	-7431	-64	-50	-228	-1122	-119	-9014
Other food crops	-11209	-89	-33	-117	-303	-123	-11874
Other agriculture	-4247	-72	-268	-64	-2226	-77	-6954
Livestock and its products	-6024	-90	-87	89	-233	-228	-6572
Forestry	-808	-48	-829	-171	-1155	-21	-3031
Fishery	-5119	-25	-16	0	-419	-59	-5638
Mining and quarrying	25649	2127	20806	3969	126323	995	179870
Manufacture of food, bev and tobacco	107921	893	629	-64	15920	1712	127012
Other manufacturing	75692	5487	33025	2460	154426	2426	273517
Petroleum refinery	11977	759	5727	2476	46185	589	67713
Electricity, gas and water supply	63516	5606	8255	492	27695	2087	107651
Construction	28804	10597	717212	548	16535	2987	776682
Trade	-287428	-13494	-69536	-3682	-170311	-13332	-557783
Restaurant and hotel	-100000	-5131	-3523	-108	-4843	-22590	-136195
Transport and communication	64222	3364	10957	681	28262	11243	118729
Financial intermediaries etc	65417	2989	12782	360	16998	10598	109145
General government and defense	42469	219850	902	30	1343	4161	268754
Other services	315316	118307	21322	630	25217	31084	511874
Unspecified sector	122	101	526	34	2171	72	3026
Total	378841	351067	757800	7335	280463	31404	1806910
Sources of employment growth (%)	21.0%	19.4%	41.9%	0.4%	15.5%	1.7%	100.0%

Authors' calculations: Data sources: Input Output table 2000, updated to 2002; labor force survey 2000 and 2002

Annex 3E: Investment Approvals by Economic Sector

Number of Projects: Investment approvals by major economic sector

Foreign Investment Approvals													
Economic sector	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Agriculture	4	2	3	6	15	26	43	13	53	44	46	33	27
Manufacturing	312	277	190	182	293	454	460	450	410	439	499	425	331
Utilities	0	0	0	3	5	6	8	8	6	2	2	4	3
Construction	6	0	9	15	15	43	62	58	36	22	30	29	40
Trade services	21	13	24	40	46	89	121	38	215	417	554	498	490
Trans&comm.	7	6	4	13	10	47	20	36	23	61	68	84	66
Finance	17	13	12	12	23	25	37	20	19	20	29	20	6
Other services	59	60	57	53	36	101	187	166	192	158	285	218	164
	426	371	299	324	443	791	938	789	954	1163	1513	1311	1127

Domestic Investment Approvals													
Agriculture	110	70	26	43	75	86	154	146	47	29	34	16	27
Manufacturing	921	476	232	282	405	360	314	304	147	126	199	109	331
Utilities	0	0	0	2	2	2	7	6	2	1	1	0	3
Construction	5	9	3	7	11	20	28	20	9	6	12	5	40
Trade services	86	63	36	46	96	65	64	56	34	29	32	12	490
Trans&comm.	58	55	80	101	158	156	115	100	45	19	44	44	66
Finance	39	49	18	36	33	18	53	31	13	6	4	3	6
Other services	45	42	14	16	26	34	58	48	23	17	26	6	164
	1264	764	409	533	806	741	793	711	320	233	352	195	1127

Source: Investment coordinating Board BKPM,

4. Looking Forward: Creating More and Better Jobs in Indonesia

4.1 Introduction

This study has specifically sought to show the importance of *how* the Indonesian labor market operates, and *how* investment and trade have contributed to job creation. This chapter looks forward to how improvement in the investment climate can stimulate increased investment and jobs.

Investment and trade will continue to create employment, but domestic policy constraints have slowed the recovery in investment. Increased global competition has affected employment prospects in Indonesia's traditional export markets. As discussed in Chapter Three, recent research indicates that Indonesia remains moderately competitive in many of its export markets, but many of these products are in slow growing markets, and Indonesia has been slow to shift to faster growing markets. Indeed, many sectors, both export- and domestic market-oriented have been slow to make adjustments to changing conditions. It is not that the mechanism whereby investment and trade create jobs no longer operates properly, but that domestic policy obstacles, in particular, are preventing it from operating. Thus, it is important that Indonesia improves the investment climate so that resources can move to growing sectors. Unfortunately, Indonesia's policy choices in recent years have proceeded in the opposite direction from what is required – for example, creeping, non-transparent protection of less efficient sectors, and increasing regulation creating rigidities in the labor market.

The purpose of this chapter, therefore, is to summarize the main issues that Indonesia needs to address through its job creation strategy. The point is not that the mechanism whereby investment and trade creates jobs is faulty but that a broad-based trade and investment strategy should focus on improving the conditions for producers to make long term investment decisions, thereby creating more good jobs. Above all this is about ensuring that investment, both domestic and foreign, that domestic trade as well as international trade can be conducted expeditiously. There is substantial agreement on the key issues, and we do not intend to revisit in great detail what has been well analyzed elsewhere. (e.g. WB 2003, CGI presentations, GOI White Paper). Rather, we highlight some of the key topics of investment and trade with particular emphasis on their importance for better job creation.

Whether Indonesia will achieve sufficiently high economic growth rates to reverse recent trends in employment depends crucially on the policy choices the country makes today and in the near future. Slow progress in key areas of reform or a creeping, non-transparent reversal of previous reforms could mean a continuation of modest growth in the range of three to four percent, and stagnant or even declining formal employment. Alternatively, tackling difficult issues such as governance and corruption and significantly improving the investment climate so that it becomes predictable and consistent, and does not impose excessive regulatory compliance costs on producers, would restore Indonesia to a higher growth path.

The high case scenario of 6 percent economic growth could create 5-6 million modern jobs between 2004 and 2009. With annual labor force growth of two percent we project about 10.6 million new job seekers over the next five years. Six percent annual economic growth annually could create 5-6 million modern sector jobs for these workers, with the remaining five million new entrants working in informal activities or choosing unemployment. In contrast, economic growth of four percent per annum would only create about 3.5 million modern sector jobs, with as many as seven million new job seekers crowding into the informal sector (see Annex 4A).

4.2 Considerations for Indonesia's Job Creation Strategy

An appropriate approach to employment creation in the short term is restoring aggregate demand in the economy – investment, consumption and exports – and removing policy obstacles to growth across all sectors. Consumption growth has been the main factor driving economic growth of between 3.4 to 3.7 percent since 2001, but it is unlikely to lift the economy to higher economic growth rates in the medium term. Higher economic growth rates will require increases in investment and exports.

In the medium to long-term an appropriate employment strategy should increase its focus on generation of formal sector jobs. Ongoing demographic changes mean that better jobs are needed, not just to improve welfare, but also to respond to the rising aspirations of a better educated, older and more urbanized workforce.

External circumstances will impact how Indonesia goes about creating jobs to some extent, but there is much Indonesia can do (and not do) in terms of policies and the investment climate in order to shift Indonesia to a higher growth path. These policy activities can be conveniently grouped under four headings: (i) Governance, (ii) Macroeconomic stability, (iii) Policies at the border and (iv) Policies behind the border. Governance and economic reforms would lower the risks and costs of doing business and enhance market flexibility important to stimulate investment and economic growth and thereby increase modern employment rates. Progress on these fronts will assist necessary structural adjustment towards potential growth areas in the economy and help produce more high-quality jobs for an increasingly educated workforce, and create the value-adding growth necessary for sustainable poverty reduction. These should be critical

components of a broad-based economic strategy for Indonesia. Some of these reforms – reform of taxes and investment procedures/regulations - will impact investment fairly quickly, while others – legal and governance reforms - will take longer to implement and show their effects.

4.2.1 Governance

Improving governance is crucially important to lower production costs and improve the investment climate. Good governance would improve policy predictability and consistency necessary for a stable investment environment. Chipping away at institutional reforms, for example customs reform, would reduce costs and uncertainty in international trade. Improved transparency in trade policy-making capacity and investment procedures would also improve certainty and reduce rent-seeking activities. Similarly, strengthening property rights and improving the judicial system would improve predictability for the private sector and certainty that contracts would be enforced.

4.2.2 Macroeconomic Stability

Indonesia has achieved a good degree of macroeconomic stability since 2002 but it will take some time before its benefits are felt. A stable macroeconomic environment is fundamentally important for investment to take place, and for foreign investors (who have an international choice of location) it is a crucial determinant of investment location. Indonesia has achieved a good degree of macroeconomic stability since 2002 with an improved fiscal situation, falling inflation, a stabilized exchange rate and gradually declining interest rates. This has not translated into greater investment or economic growth in 2003, but it is natural for there to be some delay before confidence is restored. Also, since macroeconomic stability is a necessary but not sufficient condition for investment, a recovery in investment and growth will require progress on policies and the investment climate as well. Finally, macroeconomic stability is clearly affected by political stability, and elections in 2004 mean that significant investment recovery is unlikely before 2005.

4.2.3 Policies at the Border: International Trade, Customs and Port Operations

Recent developments in international trade policies and practice threaten to constrain trade and investment growth and accompanying employment generation. While tariff rates remain low, non-tariff barriers issued by the Ministry of Industry and trade have proliferated. More than 800 import lines are currently subject to some kind of NTB.

A broad-based trade and investment strategy also needs to respond proactively to the opportunities available through international trading arrangements. Active pursuit of ASEAN integration should be an important policy priority for Indonesia not

least since major international investors intend to treat AFTA increasingly as a single input and output market rather than focusing production and sales on national units. There are also opportunities available from bilateral trading arrangements, for example with the US.

Improvements in customs procedures and port operations would reduce costs involved in trade. Weaknesses in customs valuation procedures and their implementation, in addition to endemic corruption, increase the costs of trade, and affect competitiveness. Port tariffs are amongst the highest in the region while productivity is relatively low, making port operations less competitive. The government is introducing customs reforms, but effective *implementation* of these reforms is crucial to improve governance and lower costs involved in trade facilitation.

4.2.4 Policies Behind the Border – including Investment and Labor Policies, Decentralization and Infrastructure

Indonesia continues to score badly on its investment climate. Most investors look for a stable and predictable policy environment to reduce investment risk. Factors that affect investors' perceptions about the risk of doing business in a country include effective policy coordination, quality and clarity of regulations, control of corruption and legal certainty. Indonesia continues to score badly in most of these areas. Overlapping national and sub-national legislation, increasingly restrictive labor regulations are examples of the unfriendly policy environment that is hurting jobs. Some core issues are highlighted below.

Labor Policy

Recent labor market developments in Indonesia are threatening to slow modern sector job creation. Several recent and pending developments in Indonesia's labor market policies and practices threaten to raise the costs of hiring new workers and in turn slow modern employment creation. These developments include minimum wage legislation, severance pay regulations, restrictions on use of temporary employment contracts and production outsourcing. These regulations, if implemented in a restrictive manner, will reduce new job opportunities in the modern sector and encourage smaller firms to migrate to the informal sector to avoid excessive compliance costs (Bappenas Labor Policy Review, 2003). While recent developments in minimum wage policy adjustments at the local level have been more rationale and based on wider stakeholder consultations than in previous years, pending changes to the minimum wage regulations threaten to push up wages beyond inflation and productivity gains, and will also contribute to an uncertain and confrontational industrial relations environment.¹⁸

¹⁸ A draft decree intends to replace the current benchmark for MW adjustments – the basket of basic minimum living needs or KHM – with a larger basket of items, thus potentially raising the MW by significant amounts in 2006, the proposed year for implementation.

Investment Policy

Indonesia needs to increase investment levels through improvement of the policy and general business environment affecting all companies. Accelerating the sluggish recovery of both foreign and domestic investment in the post-crisis context requires efforts to improve the operating environment generally, and to stimulate business start-ups. The main concerns of businesses are highlighted in this chapter, but the government needs to keep an open and regular dialogue with representatives of the private sector in order to be informed of new issues and be aware of progress. The proposed new investment law, meanwhile, although a welcome step towards consolidation of investment-related legislation, is not the central problem.

Improving the overall investment policy environment would stimulate SME growth. SMEs have been an essential component of job creation and growth in all successful economies, especially in Asia, both in modern industrial sectors, and in building linkages between the agricultural sector and the rest of the economy. In addition to the investment environment issues that affect all companies, they are particularly affected by the potentially onerous local official and unofficial fees, taxes and trade restrictions that are estimated to amount to as much as 30 percent of gross profits (Asia Foundation, 1998).

Domestic Trade Policy

Recently emerging barriers to domestic trade as a result of decentralization significantly raise costs and undermine competitiveness. As a result of decentralization many district authorities have begun to impose levies on inter-district trade in order to raise revenues. One survey conducted by SMERU found that new levies raised the cost of some raw materials to consumers in Jakarta by up to 10 percent. Such practices will severely undermine domestic trade and investment, constrain SME growth and encourage investors to migrate to the informal sector.

Decentralization

Decentralization in the longer term will help stimulate economic growth and poverty reduction, but in the short term has already shown its possible negative effects. The early stages of decentralization have resulted in additional burdens on business in Indonesia, including an additional level of bureaucracy and corruption, additional licensing requirements and taxes / levies on inter-district trade, as discussed above. In the medium and long term, however, the emergence of proactive, investment-friendly local governments will lead to healthy competition and pockets of dynamism that will have a catalytic effect on the country as a whole. The KPPOD Regional Autonomy Watch has already identified (and publicized) several more investment-friendly regions, and plans to make this an annual competition. District-level authority to approve investments has already led to a rapid increase in establishments of regional retail outlets following national-level deregulation of the sector in the late 1990s. Many local and foreign companies are keenly aware of such emerging differences across districts, and are already beginning to consider investment decisions with such differences in mind. Finally, however, district level autonomy needs to be supported by the removal of anti-

competitive regulations at the national level and allowing districts to make their own, informed public policy and public investment decisions.

Infrastructure

Inadequate infrastructure remains a brake on Indonesia's growth prospects. The overall quality of infrastructure in Indonesia has deteriorated since the crisis, as public spending had to be reduced sharply in real terms. Roads in and around major cities are heavily congested and rural roads are in poor and deteriorating conditions (World Bank, CGI Brief, 2003:37). Fixed telephone line penetration rates remain low by regional standards and rural roads are in poor condition and deteriorating. There are growing concerns of other bottlenecks emerging over the next few years such as electricity distribution. Addressing infrastructure problems will be crucially important for improving the national (urban and rural) investment climate. Such investment would help reduce poverty through the strong multiplier effect on job creation. This has to be accompanied by deregulation of existing monopolies in some cases, which is necessary to stimulate private investment in infrastructure projects (WB CGI 2003 Private Sector Investment Climate session).

4.3 Conclusion

This chapter has highlighted numerous important policy and business environment constraints on investment and trade. Many are issues that have long-existed but are now more urgent, while others are due to new external challenges and internal policy developments. In any case, it is clear that these challenges cannot be just left to sort themselves out. Rather, concerted efforts – a broad-based investment and trade strategy – are needed to generate high-quality employment through investment and trade.

Annex 4A: Assumptions Behind the Employment Simulations

The simulations reported in this study are based on the dualistic labor surplus model. In this model the informal sector is treated as a residual. We assume the labor force grows at 2 percent annually between 2004 and 2009 (the recent labor force growth rate). Workers who cannot find modern jobs enter the informal sector, thus, adjustment occurs in the informal sector. For simplicity we assume the rate of open unemployment stays at the current rate of 5.8%.

The parameters of the model are based on econometric work in SMERU (2001) and Bird and Manning (2002). The estimated modern employment-GDP elasticity is 0.5 – for every 1% increase in real GDP, formal employment expands by 0.5% (this elasticity is in the range of elasticities found by Islam and Nazara, 2000). The other important parameter is the employment-minimum wage elasticity. Based on the SMERU study a 1% increase in real minimum wages would reduce modern employment by 0.1%. For simplicity we assume that real minimum wages remain constant throughout the simulation period.

Selected References

Asia Development Bank (1997), *Emerging Asia: Changes and Challenges*, Manila: ADB

Agrawal, N. (1996), 'The Benefits of Growth for Indonesian Workers', Policy Research working paper No. 1637, The World Bank, Washington D.C.

Aswicahyono, H. and M. Pangestu (2000), 'Indonesia's Recovery: Exports and Regaining competitiveness', *Developing Economies*, Vol. 38(4): 454-89.

Aswicahyono, H. and I. Maider (2003), 'Real Sector in Indonesia: Crisis-Related and longer Term issues', *The Indonesian Quarterly*, Vol. 31(2): 180-96.

Bappenas (2003), *Labor Policy Review*, National Development Planning Agency, Jakarta.

Berry, A., Rodriguez, E., and H Sandee (2001), 'Small and Medium Enterprise Dynamics in Indonesia', *Bulletin of Indonesian Economic Studies*, Vol. 37(3): 363-384.

Bird, K. and C. Manning (2002), 'The Impact of Minimum Wages on Employment and Earnings in the Informal Sector,' Paper Presented at the 8th East Asian Economic Association, Kuala Lumpur, November 4-5.

Bird, K. and C. Manning (2003), 'Economic Reform, Labor Markets and Poverty: The Indonesian Experience', in *Trade Policy, Growth and Poverty in Asian Developing Countries*, edited by Routledge Press, London.

CARANA Corporation (2003), 'Agricultural Sector Review, Indonesia', Technical Report prepared under USAID Contract #497-C-00-98-00014-00

Duncan, T., K. Beegle and E. Frankenberg (2000), 'Labor Market Transitions of Men and Women During an Economic Crisis: Evidence from Indonesia,' Labor and Population Program, Working Paper Series 00-11, Rand, Santa Monica, California.

Fane, G. and T. Condon (1996), 'Trade Reform in Indonesia, 1987-95,' *Bulletin of Indonesian Economic Studies* Vol. 32(3): 33-54.

Garcia-Garcia, J (2000), 'Indonesia's Trade and Price Interventions: Pro-Java and Pro-Urban', *Bulletin of Indonesian Economic Studies*, Vol. 36(3): 93-112.

Henderson, J.V (1988), *Urban Development: Theory, Fact and Illusion*, Oxford University Press.

Henderson, J.V. and A. Kuncoro (1996), 'Industrial Centralization in Indonesia,' *The World Bank Economic Review*, Vol. 10: 513-540.

Hill, H (1994), *Indonesia's New Order: The Dynamics of Socio-Economic Transformation*, Allen and Unwin, Sydney.

Hill, H (1996), *The Indonesian Economy Since 1966: Southeast Asian's Emerging Giant*, Cambridge University Press, Cambridge.

International Monetary Fund (2002), 'Selected Issues in Indonesia', Washington D.C.

Islam N. and S. Nazara (2000), 'Minimum Wage and the Welfare of Indonesian Workers,' Occasional Discussion Paper Series No. 3, International Labour Organization.

Lipsey, R. and F. Sjöholm (2001), 'Foreign Direct Investment and Wages in Indonesian Manufacturing', NBER Working Paper No. 8299.

Lipsey, R.E. and F. Sjöholm (2002), 'Changes in Foreign Ownership and Wages in Indonesian Manufacturing', paper presented at the 8th Convention of the East Asian Economic Association, November, 2002, Kuala Lumpur.

Manning, C. (1998), *Indonesian Labour in Transition: An East Asian Success Story?* Trade and Development Series, Cambridge University Press, Cambridge.

Manning, C. (1999), 'Labour Markets in ASEAN-4 and the NIEs: An Update', *Asian-Pacific Economic Bulletin*, 13(1).

Manning, C. (2000), 'Labour Market Adjustments to Indonesia Economic Crisis: Contexts, Trends, and Implications,' *Bulletin of Indonesian Economic Studies*, Vol. 36(1): 105-36

Manning, C. (2003), 'Labor Policy and Employment Creation: An Emerging Crisis,' Technical Report prepared by Bappenas under USAID Contract #497-C-00-98-00045-00.

Papanek, G. (forthcoming), 'Poverty during Economic Decline, Spectacular Growth and Crisis-The Case of Indonesia.

Rama, M. (2003), 'Globalization and Workers in Developing Countries,' Policy Research Working Paper 2958, Development Research Group, The World Bank, Washington, D.C.

Ray, D. (2003), 'Survey of Recent Developments', *Bulletin of Indonesian Economic Studies*, Vol. 39(3): 245-272.

Rosner, P. (2000), 'Indonesia's Non-Oil Export performance during the Economic Crisis: Distinguishing price Trends from Quantity Trends', *Bulletin of Indonesian Economic Studies*, Vol. 36(2): 61-96.

SMERU (2001), 'The Impact of Minimum Wages in the Formal Urban Sector', Jakarta.

Stiglitz, J.E. and S. Yusuf (2001), *Rethinking the East Asian Miracle*, The World Bank and Oxford University Press.

Suryahadi, A, Chen, P., and R. Tyers (2001), 'Openness, Technological Change and Labor Demand in Pre-Crisis Indonesia', *Asian Economic Journal*, Vol. 15(3): 239-274.

Suryahadi, A., W. Widyanti, D. Perwira and S. Sumarto, (2003), 'Minimum Wage Policy and its Impact on Employment in the Urban Formal Sector', *Bulletin of Indonesian Economic Studies*, 39(1): 29-50.

Suhaimi, U and Y. Jammal (2001), 'Measuring Open Unemployment in Sakernas,' Report #35 and Statistical Paper #7 in Statistical Assistance to the Government of Indonesia under USAID Contract No. PCE-I-00-99-00009-00.

Timmer, C. P. (1993), 'Rural Bias the East and Southeast Asian Rice Economy: Indonesian in Comparative Perspective', *Journal of Development Studies*, Vol. 29: 149-76.

Waslin, M. (2003), 'Survey of Recent Developments,' *Bulletin of Indonesian Economic Studies*, 39(1): 5-26.

World Bank (annually), *World Development Indicators*, Washington, D.C.

World Bank (2003), 'Beyond Macroeconomic Stability', CGI Brief, Report No. 27374-IND.