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THE IMPACT OF ECONOMIC POLICY  
ON  
WOMEN IN THE INDONESIAN LABOR FORCE

by

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## I. INTRODUCTION

### A Country Profile

#### 1 Economic Profile

##### a Evolution of Policy and Performance<sup>1</sup>

In 1960, Indonesia was one of the poorest countries in the world. Economic growth was stagnant during the last years of the Old Order. But since 1966, Indonesia has made impressive economic progress. Per capita GDP has grown almost as fast as in the rapidly growing countries of East Asia -- an average annual rate of 4.5%, compared to 5.5% in East Asia. As a result, **per capita GDP increased from \$50 in 1967 to \$730 today**. Whereas 60% of the population (some 70 million people) lived in absolute poverty in 1970, today only 14% do (around 27 million people). Its growth record has been matched by similar improvements in the quality of life -- a dramatic increase in life expectancy, a halving of the infant mortality rate, and nearly universal primary school enrollment.

**The pattern of economic performance over time has been influenced by big shifts in the external environment and domestic policies.** Indonesia benefitted from the boom in oil and other commodity prices during the 1970s, then suffered from a decline in those prices as well as appreciation of the yen with respect to the dollar, increasing the dollar value of Indonesia's large yen-denominated debt during the 1980s. The positive terms of trade effect of the 1970s added 12% to GDP by 1981, while the negative external shocks of the 1980s subtracted 15% from GDP by 1988, especially after 1986. Then during the late 1980s, Indonesia was able to take advantage of the foreign capital from Japan and the Asian Tigers, looking for cheaper labor to produce labor-intensive textile and other export goods.

**Government policy has changed over time in response to these changes in the external environment.** Indonesian economic history since Independence has two major periods -- the "Old Order" (1948-65) under President Sukarno and the "New Order" (since 1967) under President Suharto. The "New Order" can, in turn, be further divided into three sub-periods: the initial years of the New Order (1967-73), the oil boom years (1973-82), and the adjustment period (1982-present). And finally, three separate phases the adjustment period can be discerned: the first adjustment period (1982-85), the second adjustment period (1985-88), and the non-oil export boom (1988-93).

**The stagnant economic growth of the early 1960s was largely due to inward-looking**

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<sup>1</sup> Discussion of the evolution of Indonesian economic performance and policy implementation draws heavily on Bhattacharya and Pangestu (1993) and the USAID/Indonesia Country Program Strategy (1994).

**economic policies implemented by the Sukarno government** These policies included government control of the financial sector became extensive, a pervasive system of import and investment licenses provided a new group of Indonesian importers and traders with access to considerable rents, businesses owned by ex-colonial interests were nationalized, state enterprises were set up to lead the national development effort, showcase projects were initiated that would soon become "white elephants", and in an act of international defiance (and probably also of international impotence), Indonesia withdrew from the IMF and World Bank. The result was chaotic triple-digit inflation rates, dwindling foreign exchange reserves and debt service requirements that exceeded foreign exchange earnings. An abortive coup in 1965, widely believed to have been instigated by the Communists, plunged the nation into violent political upheaval.

It was against this chaotic backdrop that **Suharto's "New Order"** regime came into power. The initial years of the New Order saw macroeconomic stability restored, aided by the "balanced budget" law of 1967 that prohibited domestic financing of budget deficits. Monetary growth was sharply curtailed and by 1969 the inflation rate was brought under 20%. The exchange rate was allowed to depreciate which enabled a revival of export growth. **The government also liberalized the trade and external payments regimes and took a more favorable view of private investment**

During the oil and commodity boom of the 1970s, Indonesia enjoyed significant windfalls, enabling the government to intensify its development efforts. **Compared with other oil-exporting developing nations, Indonesia used its enhanced revenues wisely** (World Bank, 1993a, p. 137), **investing heavily in physical infrastructure and human capital development**. Resources were channelled into rural infrastructure, which contributed significantly to the tremendous growth in agricultural productivity, and into expanding education, health services and family planning, as well as transfers of regional development funds to the Outer Islands. These investments were instrumental to Indonesia's success in reducing the incidence of poverty.

**Rapid growth during the 1970s, however, obscured the need to pursue market-oriented economic policies**, and throughout the 1970s the state came to play an increasingly dominant role in the economy. The trade regime turned inward-looking and restrictions were placed on foreign investment which reduced overall economic efficiency. Indonesia's over-reliance on oil earnings became a glaring liability when the oil boom ended in the early 1980s. In addition to a drop in oil and other commodity prices, world interest rates also rose. These external shocks led to a sharp reduction in exports and fiscal revenues and corresponding external and budgetary imbalances.

**From a macroeconomic perspective, the Suharto Government responded quickly and effectively to these external shocks**. The government quickly restored macroeconomic stability by cutting fiscal expenditures, launching tax and customs reforms to restore revenues over the medium term, and in 1983 took important steps to deregulate the financial sector by freeing up interest rates. By 1985, these policies brought down the current account deficit and reduced the country's dependence on oil exports. And throughout the period, the government continued to

pursue its long-term development objectives, protecting human capital expenditures even as the investment budget was cut in real terms **But on the downside, the government made trade and investment policies even more inward looking and subject to government control during 1982-85**

Then came the even sharper decline in oil prices in **1986**, combined with the run-up of debt (due to appreciation of the yen with respect to the dollar, since much of Indonesia's foreign debt was denominated in yen), made it necessary to implement a second round of stabilization measures. But more importantly, **the government became convinced**, as it had in the early years of the New Order during the late 1960s, **that liberalization of trade and investment were necessary in order to ignite a new phase of growth based on non-oil exports**. At first, the trade and investment deregulation was cautious. But in 1988, trade and investment deregulation accelerated, and was accompanied by a more thoroughgoing deregulation of the financial sector. This latter was required in order to finance the hoped-for new investment in non-oil export manufacturing enterprises.

**Entering the mid-1990s, important imbalances persist. But today's imbalances derive from problems of managing an increasingly complex and dynamic private sector** rather than those associated with the 1970s' government-dominated economy based on oil/gas, or one mired in recession as was the case in the 1980s. The government must refine its macroeconomic management policies to cope with surging private sector investment and consumer demand, and with the greater volatility of a deregulated financial system. For example, the 1988 financial sector deregulation contributed to rapid monetary growth, forcing the Bank Indonesia to tighten monetary policy in 1991. Tight monetary policy eventually led to a requirement that state enterprises buy government securities, imposing a severe cash crunch on these firms. Monetary policy loosened slightly in 1993, allowing the inflation rate to reach 10% in 1993 and 1994, up from 5% in 1992.

**Most disturbing of all, however, is the stagnation of non-oil export growth over the past two years**. non-oil/gas export growth fell from 28% in 1992 to 16% in 1993 (Pangestu and Azis, 1994). Incomplete data through September indicate near zero growth in non-oil exports for the first nine months of 1994. Within manufactured exports, the textiles and garment industry experienced 2% growth, down from over 30% in previous years (textiles account for nearly one-third of manufactured exports), but other manufactured exports continued to perform well.

Although world demand for Indonesian exports may explain part of the decline in growth, a more important cause is the decline in export-related investment, beginning in 1991. But the decline in investment may have bottomed out in late 1994,<sup>2</sup> so non-oil export growth may pick

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<sup>2</sup> Import and investment approval data both lead to the conclusion that realized investment began to decline in 1991-92. After growing at 40% per year during 1988-91, imports of capital goods actually declined in 1992 and 1993. Investment flows are being diverted to other low-cost labor economies like China. Domestic investment approvals picked up in 1993, as did foreign investment approvals in 1994, but the lag between approval and actual

up in 1995. But other factors may have contributed to the decline in investment climate -- more problems in using the already-complicated duty drawback mechanism and some retrogression in the 1993 investment deregulation package -- while still others may continue to restrain non-oil export growth, primary among them the creeping appreciation of the real exchange rate since 1992 and repeated increases in the minimum wage. **For textiles and garments, the main problem has been sharply declining prices for exporters at the low end of the market.** Those at the high end say they can still compete, but that their main problems are related to the trade bureaucracy, which can add 25% to firms' overhead (Pangestu and Azis, 1994, p. 20).

**To summarize, alternating combinations of external booms and downturns, inward vs. outward looking policies, state control vs. a free market orientation, have resulted in the variable pattern of growth over the period 1960-93.** The major dimensions of Indonesia's growth pattern are illustrated in Table 2, with the data organized according to the sub-periods identified above. The rapid and fairly well sustained growth since 1965 has caused the structure of the Indonesian economy to undergo extensive transformation since the 1960s. Table 1 highlights these major structural transformations over the same period 1960-93.

First, trade (the sum of exports and imports) now exceeds 50% of GDP, up from 14% in 1965. This increasing openness was initially spurred by the liberalization of economic policy in the late 1960s, strengthened by the oil and commodity boom of the 1970s, and more recently by the non-oil export boom.

Second, investment and savings rates increased steadily, reaching extraordinarily high rates in 1980, near the end of the oil boom, but since then have declined to more moderate rates. These figures also demonstrate the fallacy of "culturally-based high Asian savings rates" -- gross national savings started the period at a paltry 8%.

Third, as is typical during a period of rapid economic growth, agriculture declined dramatically as a share of GDP -- to 40% of its 1965 share. Oil and mining dominated during the 1970s, with manufacturing emerging as the most dynamic sector since the early 1980s.

Fourth, the sharp decline in oil prices during the 1980s, along with negligible growth in output, has meant a sharp decline in the importance of oil as a source of foreign exchange earnings and fiscal revenue, trends aided by the tax reform begun during the early 1980s and the non-oil export growth beginning in later years of the decade.

Fifth, following the reforms of the 1980s, the private sector has begun to play an increasingly important role in the economy. The private sector's share of total investment has increased, as has its share of total external borrowing, and the private sector is estimated to have contributed almost three-fourths of overall growth since 1983.

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Table 1: STRUCTURAL CHANGE  
(as percent of GDP, unless otherwise stated)

	1965	1970	1980	1990	1993
<b>Openness</b>					
Total Trade	14 0	22 2	46 8	54 7	53 0
Imports	7 5	10 6	15 5	26 3	25 3
Oil/Gas Exports	2 5	4.6	19.8	12 7	7 0
Non Oil/Gas Exports	4.0	7 0	11 5	15 7	20 7
Gross Domestic Investment	8 0	15 8	24 3	36 1	30 6
Gross National Savings	7 9	14 3	33 0	31 9	28 5
<b>Sectoral Shares</b>					
Agriculture	55 0	47 5	24 0	21 4	17 6
Manufacturing	8 5	10 9	13 0	20 3	21 9
Other Industry	6 5	8 9	28 7	19 0	20 2
Services, etc	30 0	32 7	34 3	39 2	40 3
<b>Government Revenue</b>					
Oil/Gas Revenue		12 6*	21 4	19 5	18 8
		.	13 7	8 7	5 7
<b>External Debt (total)</b>					
Owed by Private Sector	50 0	35 6	26 8	61 1	65 8
		13 4	15 0	15 4	20 0
<b>As Percent of Exports</b>					
Oil Exports	40 0	40 5	78 5	44 8	25 4
Debt Service	11 0	6 0	13 9	27 3	29 3

Notes \* -- 1972

Table 2 GROWTH TRENDS IN KEY ECONOMIC AGGREGATES  
(real growth, in percent per annum)

	1960-67	1967-73	1973-81	1982-88	1988-93
GDP	1 7	7 9	7 5	3 3	6 8
Per Capita GDP	-0 5	5 5	5 2	1 3	5 0
<b>Non-Oil GDP</b>					
Agriculture	1 7	7.3	8 0	4 3	7 0
Manufacturing	1 6	4 1	3 4	2 9	3 1
Services	1.0	9 5	14 1	5 2	10 4
	2 0	9 0	10 0	5 0	7 3
<b>Fixed Investment</b>					
Public	1 1	23 5	11 7	-0 5	8 8
Private			11 0	-2 0	9 9
			12 3	0 7	8 1
Non-Oil Exports	2 1	25 6	0 0	7 6	17 6

Sources Central Bureau of Statistics (BPS) and World Bank Staff Estimates  
World Bank, *Trends in Developing Economies*  
World Bank, *World Tables*  
World Bank, *Indonesia Sustaining Development*, Report no 11737-IND,  
May 25, 1993  
IMF, *Government Financial Statistics*  
IMF, "Fiscal Adjustment in an Oil-Exporting Country The Case of  
Indonesia, PPAA/94/21

Sixth, external debt was significantly reduced between 1965 and 1980, large oil exports during the 1970s making foreign borrowing unnecessary. Heavier borrowing in the 1980s, in response to falling oil exports, was compounded by appreciation of the yen which raised the dollar value of Indonesia's yen-denominated debt. As a result, the external debt burden has reached worrisome levels in the 1990s, although the private sector has contracted most of the increase in external debt since 1990. Indonesia is now among the five largest developing country borrowers in the world.

b Regional Development and Income Inequality

Indonesia's decentralization policies must be understood in their historic context, in particular the memory of strong secessionist efforts in 1957-58 and recent separatist tensions in the provinces of Aceh and East Timor. Nevertheless, the government has begun to talk more explicitly of the need to grant more regional autonomy, but this has meant 'deconcentration' -- the transfer of certain responsibilities and function within the central government apparatus to lower level central government units -- than it has actual 'decentralization' -- devolution of authority to the regional governments as autonomous sub-national units of government.

**The government's regional development policy has become increasingly oriented toward addressing regional income disparities, especially as they relate to the eastern islands where the poorest provinces are located. The incidence of poverty varies widely among provinces. Official Bureau of Statistics figures for 1993 show a country-wide incidence of poverty slightly under 14%, with Jakarta the lowest incidence at 6%, Sulawesi and Bali next at 9-12%, a range of 12-16% on the rest of Java, 11-15% on Sumatra, and a range of 19-25% in the eastern islands, except for 36% in East Timor (Pangestu and Azis, 1994, p. 33). Although understandable, the emphasis on regional disparity -- the focus on requirements -- ignores other important issues such as the exploration of regional potential for industrial development and exports in the outer islands. The attempt to link North Sulawesi with the Philippines is one example of such a development-oriented strategy to reduce regional disparity.**

Since 1969, the government has used three mechanisms for transferring funds to lower levels of government, the so-called *INPRES* funds, to which a fourth was added in late 1993. They consist of (i) **block grants** to provincial and local governments for social and economic development expenditure as determined by the local governments themselves, (ii) **categorical grants** to provincial and local governments, earmarked by the central government for specific uses, usually in the areas of transportation, education and health, (iii) **operating expense grants** to pay the salaries of specific local government staff positions (no local autonomy in deciding which positions), and (iv) the recently-initiated IDT program of small **grants to village governments**, for 'quick yielding' development activities determined by grassroots village organization (women's groups are specifically mentioned as prime candidates). Transfer programs (i) through (iii) are allocated on a per capita basis, but (iv) will allocate a fixed amount to each of over 20,000 poor villages. **Historically, local governments as a whole have received about three-quarters of their financing from transfers (i) through (iii). In return, they have little fiscal autonomy to establish new taxes and set tax rates, e.g. rates on the**

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Table 3

TABLE 11 *Gini Index by Province 1984-93*

	Index				Change (%) <sup>a</sup>			
	1984	1987	1990	1993	84-87	87-90	90-93	84-93
<b>Significant improvement in Gini Index during 1984-93</b>								
East Nusa Tenggara	0.39	0.28	0.30	0.25	-28	7	-17	-36
South Sulawesi	0.35	0.27	0.30	0.27	-23	11	-10	-23
North Sulawesi	0.35	0.29	0.28	0.29	-17			17
Southeast Sulawesi	0.32	0.29	0.30	0.27	-9		10	-16
East Kalimantan	0.36	0.31	0.30	0.31	-14			-14
West Nusa Tenggara	0.31	0.29	0.30	0.27	-6		-10	-13
Lampung	0.29	0.28	0.27	0.26				-10
Central Kalimantan	0.29	0.24	0.25	0.26	-17			10
Averages	0.33	0.28	0.29	0.27				
<b>No significant change in Gini Index during 1984-93</b>								
Irian Jaya	0.37	0.38	0.33	0.37		-13	12	
South Kalimantan	0.26	0.28	0.25	0.27	8	-11	8	
Maluku	0.30	0.30	0.27	0.30		-10	11	
East Java	0.31	0.33	0.30	0.32	6	-9	7	
Central Java	0.31	0.28	0.29	0.30	-10			
Riau	0.26	0.25	0.26	0.27				
Central Sulawesi	0.30	0.27	0.27	0.29	-10		7	
West Java	0.30	0.30	0.32	0.30		7	6	
DI Yogyakarta	0.34	0.30	0.35	0.33	12	17	-6	
Averages	0.31	0.30	0.29	0.31				
<b>Significant increases in Gini Index over 1984-93</b>								
Bali	0.29	0.33	0.30	0.32	14	-9	7	10
South Sumatra	0.27	0.27	0.27	0.30			11	11
Aceh	0.26	0.26	0.22	0.29		15	32	12
North Sumatra	0.26	0.29	0.25	0.30	12	-14	20	15
West Sumatra	0.26	0.26	0.27	0.31			15	19
Jambi	0.20	0.23	0.23	0.24	15			20
West Kalimantan	0.25	0.26	0.28	0.30		8	7	20
Bengkulu	0.21	0.22	0.26	0.28		18	8	33
Averages	0.25	0.26	0.26	0.29				
<b>Special cases</b>								
East Timor	0.38	0.23	0.35	0.34	-39	52		-11
DKI Jakarta	0.29	0.34	0.31	0.33	17	-9	6	14
Indonesia	0.33	0.32	0.32	0.34			6	

<sup>a</sup>Blank entries indicate change less than 5%

From Pangestu and Azis, 1994, p. 112

centrally-administered local property tax Regional transfers have amounted to about 3% of GDP since the mid-1970s (Ranis and Stewart, 1994, pp 45-48)

Although the government has been tremendously successful in reducing the incidence of poverty through the indirect approach of economic policy, investment in physical infrastructure and human development by central government ministries, and regional transfers, **the government has determined that a more targeted approach will be required to reduce poverty further** Pangestu and Azis (1994 p 35), however, question whether the IDT program carries more political ingredients than real economic elements and are concerned that it has enormous opportunity costs, "since much of the regional development funds in the current and planned budget will be redirected to this program "

**Since the early 1980s, income inequality has changed little at the national level, although some changes have occurred at the provincial level** Nor have regional income disparities worsened, although the differences in per capita income between provinces remain large -- a factor of six between East Timor and East Kalimantan Pangestu and Azis (1994, pp 38-41) cite evidence on income distribution over the period 1984-93, using Gini coefficients calculated for each province and for the nation as a whole Table 3 reproduces the Gini-coefficient results Whereas income inequality on Java has not changed measurably, income inequality worsened in Sumatra and Kalimantan (where incomes had been more equally distributed than the national average), but improved in the eastern islands (where incomes had previously been more unequally distributed) For the nation as a whole, no discernible change occurred in the degree of income inequality, but the variability in income inequality among provinces declined Thus, **rapid income growth has not apparently worsened income equality nationwide and has actually lessened the disparity in income inequality among the provinces**

### c Economic Prospective

Indonesia's prospects for continued 6-7% real GDP growth -- necessary for the Indonesian economy to generate enough jobs to employ the still growing labor force -- depend on the government's ability to rekindle non-oil export growth by maintaining the momentum of economic reform But it is not enough to complete deregulation of the export sector, the government must extend deregulation to those sectors of the economy that provide inputs to domestic industry and consumer goods to domestic consumers

## 2 Demographic and Social Profile

### a General

Indonesia consists of nearly 14,000 islands, 60-70 of which are inhabited, spread across an archipelago running 3000 miles east to west Indonesia is a large country, with a total population of almost 180 million in 1990 (and around 200 million today), making it the fifth most populated country in the world The annual rate of population growth reached a peak of 2.4% during the 1970s, but declined to 1.8% during 1985-90 and now stands at 1.6% **Three**

socio-economic developments since the late 1960s account for the decline in fertility underlying these population growth figures. rapid economic growth, rapid expansion of girls' primary education, and expansion of family planning services See Table 4 for details on population growth during 1930-90, by province

b Household Structure

In 1990, out of a total Indonesian population of 179 million 39.7 million were heads of household, of which 5.3 million (13.3%) were females, 32.5 million were spouses, of which almost all (over 99%) were female, 85.1 million were children, of which 40.4 million (47.5%) were female, and 29.5 million were "others" Females account for about the same share of all heads of households in urban (13.7%) as in rural (13.1%) areas

c Religious and Ethnic Factors

Islam is by far the predominant religion, but Indonesian Islam is a milder form than one encounters as one finds in the Near East and Western Asia With 156 million Moslems recorded in the 1990 Census (87% of the total population), Indonesia is the country with the largest Moslem population in the world **Christian, Hindu and Buddhist minorities also live in Indonesia** 3.6% profess Catholicism, 5.5% consider themselves Protestants or other types of Christians, under 2% claim Hinduism as their religion, and a little over 1% are Buddhist Buddhism claims 2.6% of the urban population, Protestants and other Christians 6.6%, with lower than-national-average figures for Moslems and Hindus Christians predominate in Sulawesi and Hindus in Bali

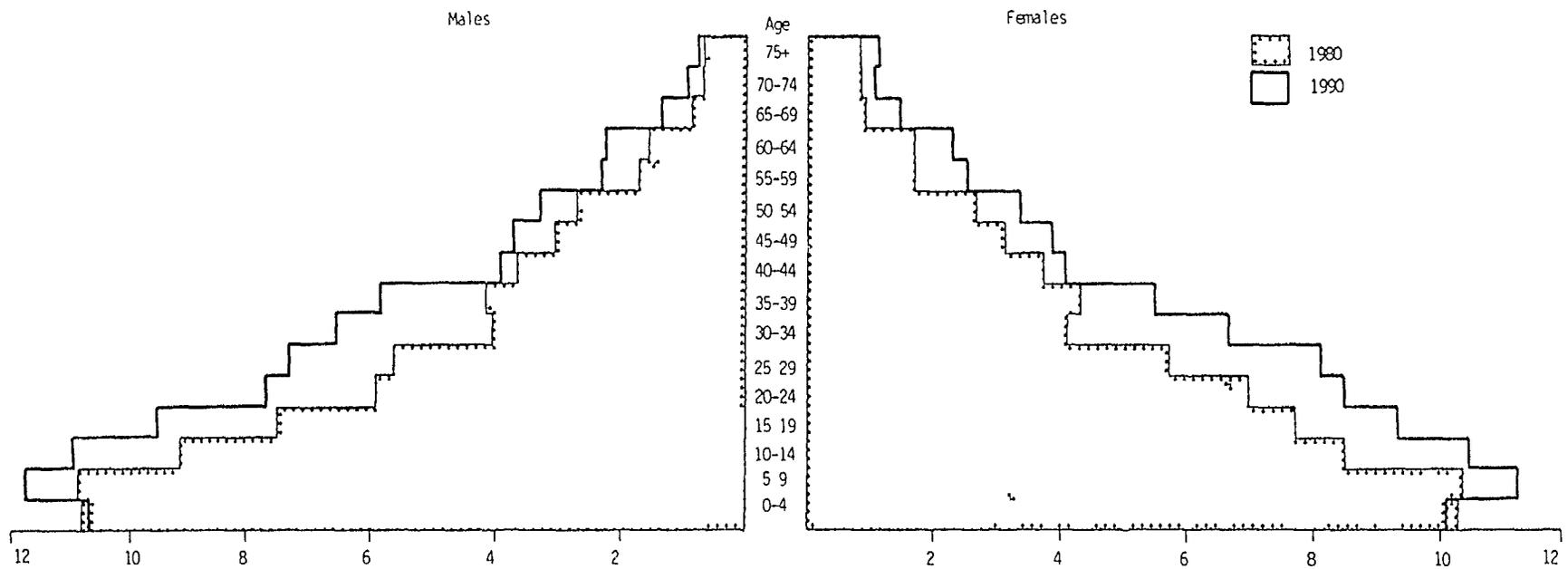
**The Indonesian population is also diverse ethnically** Although Malays constitute the major ethnic group, over 300 separate ethnic groups and 250 distinct languages exist throughout the archipelago

d Population Growth

Population grew by 21.5% over the intercensal period 1980-90 Indonesia's declining fertility rates have begun to impact noticeably on the growth rate as well as the age structure of the Indonesian population **The population "pyramid" from the 1990 Census is pinched at the youngest five-year age cohort** in 1980, the age cohorts for 0-4 and 5-9 year olds were equal in size, in 1990, the number of 0-4 year olds actually declined compared to 1980, and the number of 5-9 year olds increased by only 8% Indonesia has "turned the corner" on population growth This has **important implications for a stable school-age population through the first few decades of the next century, and a declining growth rate of the working-age population starting around the year 2000** Figure 1 illustrates the population "pyramid" pinched at the bottom Nevertheless, the rate of growth of the Indonesian labor force will continue to exceed the (declining) rate of population growth into the middle of the next century, because of the "population bubble" of men and women that must work its way through the working years, and because of the continuing increase in the female labor force participation rates of women over

Figure 1

Source 1980 and 1990 Population Censuses of Indonesia



From Ministry of Manpower 1997 p 42

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Table 4

**TABLE 14** Indonesia Population and Growth Rates by Province, 1930-1990

Source Central Bureau of Statistics, Population Census Reports, 1961, 1971, 1980 and 1990, Statistical Yearbook of Indonesia 1984, and SUPAS 1985

Region	Population ('000)						Average Growth Rate (% p.a.)					
	1930	1961	1971 <sup>a</sup>	1980	1985	1990	1930-61	1961-71	1971-80	1980-85	1985-90	1960-90
<b>Java</b>	<b>41 718</b>	<b>63,659</b>	<b>76,086</b>	<b>91,270</b>	<b>99,852</b>	<b>107,574</b>	<b>1.3</b>	<b>1.9</b>	<b>2.0</b>	<b>1.8</b>	<b>1.5</b>	<b>1.64</b>
DKI Jakarta	811	2,973	4 579	6,503	7 885	8 254	4.3	4.4	4.0	3.9	0.9	2.38
West Java	10,856	17 615	21 624	27 454	30,830	35,381	1.7	2.1	2.7	2.3	2.8	2.54
Central Java	13 706	18 407	21 877	25 373	26 945	28,522	1.0	1.7	1.7	1.2	1.1	1.17
DI Yogyakarta	1,559	2,241	2,489	2,751	2,930	2,913	1.2	1.1	1.1	1.3	-0.1	0.57
East Java	15 056	21 823	25,517	29 189	31 262	32,504	1.2	1.6	1.5	1.4	0.8	1.08
<b>Sumatra</b>	<b>8,255</b>	<b>15,739</b>	<b>20,809</b>	<b>28,017</b>	<b>32,643</b>	<b>36,455</b>	<b>2.1</b>	<b>2.8</b>	<b>3.4</b>	<b>3.1</b>	<b>2.3</b>	<b>2.67</b>
Lampung	361	1 668	2,777	4 625	5,905	6 006	5.1	5.2	5.8	5.0	0.3	2.61
Bengkulu	323	406	519	768	943	1 179	0.7	2.5	4.5	4.2	4.6	4.29
South Sumatra	1,378	2,773	3 441	4 630	5,370	6,277	2.3	2.2	3.4	3.0	3.2	3.20
Riau	493	1 235	1 642	2,169	2,548	3,306	3.0	2.9	3.1	3.3	5.3	4.21
Jambi	245	744	1 006	1 446	1 745	2,016	3.6	3.1	4.1	3.8	2.9	3.32
West Sumatra	1 910	2,319	2,793	3 407	3 698	3 999	0.6	1.9	2.2	1.7	1.6	1.60
North Sumatra	2,542	4,965	6 622	8,361	9 422	10,256	2.2	2.9	2.6	2.4	1.7	2.04
Aceh	1 003	1 629	2,009	2,611	2,972	3 416	1.6	2.1	3.0	2.6	2.8	2.69
<b>Kalimantan</b>	<b>2,170</b>	<b>4,102</b>	<b>5,155</b>	<b>6,723</b>	<b>7 722</b>	<b>9,110</b>	<b>2.1</b>	<b>2.3</b>	<b>3.0</b>	<b>2.8</b>	<b>3.4</b>	<b>3.04</b>
West Kalimantan	802	1 581	2,020	2,486	2,819	3 239	2.2	2.5	2.3	2.5	2.8	2.65
Central Kalimantan	203	497	702	954	1 118	1,396	2.9	3.5	3.5	3.2	4.5	3.81
South Kalimantan	836	1 473	1 699	2,065	2,273	2,598	1.8	1.4	2.2	1.9	2.7	2.30
East Kalimantan	329	551	734	1,218	1,512	1 877	1.7	2.9	5.8	4.4	4.4	4.32
<b>Sulawesi</b>	<b>4,231</b>	<b>7 079</b>	<b>8,528</b>	<b>10,409</b>	<b>11,554</b>	<b>12,521</b>	<b>1.7</b>	<b>1.9</b>	<b>2.2</b>	<b>2.1</b>	<b>1.6</b>	<b>1.88</b>
Central Sulawesi	390	693	914	1 290	1,511	1 711	1.9	2.8	3.9	3.2	2.5	2.82
North Sulawesi	748	1,310	1 719	2,115	2,313	2,479	1.8	2.8	2.3	1.8	1.4	1.59
South Sulawesi	2,657	4 517	5 181	6,062	6,610	6 982	1.7	1.4	1.8	1.7	1.1	1.41
Southeast Sulawesi	436	559	714	942	1 120	1,350	0.8	2.5	3.1	3.5	3.8	3.60
<b>Other Islands</b>	<b>4,219</b>	<b>7 106</b>	<b>8,630</b>	<b>11 071</b>	<b>12,316</b>	<b>13,661</b>	<b>1.7</b>	<b>2.0</b>	<b>2.8</b>	<b>2.2</b>	<b>2.1</b>	<b>2.12</b>
Bali	1 101	1 783	2,120	2,470	2,649	2,778	1.6	1.7	1.7	1.4	1.0	1.18
West Nusa Tenggara	1 016	1 808	2,203	2,725	2,995	3,370	1.9	2.0	2.4	1.9	2.4	2.12
East Nusa Tenggara	1,344	1 967	2,295	2,737	3 061	3 269	1.2	1.6	2.0	2.3	1.3	1.78
Maluku	579	790	1 089	1 410	1 609	1 856	1.0	3.3	2.9	2.7	2.9	2.74
Irian Jaya	179	758	923	1 174	1,371	1 641	4.8	2.0	2.7	3.2	3.7	3.35
East Timor	n.a.	n.a.	n.a.	555	631	748	n.a.	n.a.	n.a.	2.6	3.5	2.98
<b>Total Indonesia</b>	<b>60,593</b>	<b>97 085</b>	<b>119,208</b>	<b>147 490</b>	<b>164 047</b>	<b>179,322</b>	<b>1.5</b>	<b>2.1</b>	<b>2.4</b>	<b>2.2</b>	<b>1.8</b>	<b>1.96</b>

<sup>a</sup> Includes adjustment for the exclusion of rural Irian Jaya.

From *Journal of Statistics*, 1985, 13, 1, 107-117

Table 14

e Regional Distribution of Population

**A majority (60%) of Indonesians still live on one island, Java, but Java's share of total population has declined steadily since 1900** when it is estimated that over 70% of Indonesians lived on Java. Although outward migration from Java continues up to the present, largely as a result of continuing transmigration programs of the government, inward migration increased dramatically during the 1980s. **Rapid growth of the non-oil sector since 1982 and its concentration on Java** (apart from the wood products and other natural resource based industries concentrated in Sumatra and Kalimantan) **is the cause of increasing inward migration to Java, especially to Java's urban areas**. As a result, net outward migration from Java is becoming negligible.

The changing demographic pattern within Java is also interesting. **Although Java's share of total population has been falling, West Java's share has been increasing** while Central and East Java (along with Bali, just off the East Java coast) have posted the slowest population growth rates among all Indonesian provinces. Again, this is due to the dynamic economic growth of the greater Jakarta metropolitan area.

f Overseas Migration

Turning to overseas migration, the official count of outward migrants has increased dramatically through the early 1990s, to 150,000 in 1993 (RI, 1993, p 118). **The majority of overseas migrants are women going to provide maid service in Saudi Arabia**. If illegal migration is of the same order or magnitude as the legal flow, the total outflow (around 300,000) would be equivalent to around 15% of the annual increment to the labor force, a significant contribution to the problem of absorbing increasing numbers of workers in Indonesia, and is of a similar order of magnitude to the number of unemployed (3.2% of 70 million = 225,000).

**The flow of expatriate workers into Indonesia has accelerated since 1990**. Expatriate workers numbered 38,000 in 1992, up from 21,000 in 1990. From 1984 to 1990, the number had hovered around 19,000, except for 1988 when the government clamped down on work permits, reducing the number of expatriate workers with work permits from 19,000 to 13,000 (RI, 1993, pp 172-3). This policy lasted only one year, however, as the government realized how important these highly trained workers were to a rapidly economy. **Since they are all highly skilled workers** -- half were managers or professionals in 1992, the other half technicians and foremen -- they play an important role in filling the gap the Indonesian education and training system is still unable to fill, that of preparing an adequate cadre of highly qualified technical and managerial personnel.

g Urbanization

As is the case throughout the world, Indonesia has undergone a process of urbanization during

most of this century (RI, 1993, p 65) Urban population grew at around 4% per year during 1930-71 and has grown at well over 5% per year since then. As a result, **urban population has increased its share from a mere 7% in 1930 to 31% in 1990, yet twice as many Indonesians still live in rural than urban areas**. Indonesia's rural population will continue to decline as a share of the total and it is expected that the absolute number of Indonesians living in rural areas will begin to decline early in the next century. Aside from the obvious case of Greater Jakarta, which is 100% urban, East Kalimantan and Greater Yogyakarta are the most urbanized provinces, at 44-49%

Poverty is also becoming an increasingly urban, rather than rural, phenomenon. The World Bank (1992, p 111) estimates that, **although two-thirds of Indonesia's absolutely poor still live in rural areas, the incidence of poverty has been greater in urban than in rural areas since 1980**. Indonesia has had great success in reducing the incidence of rural poverty, aided by rural/urban migration, but this same migration process has made it more difficult to reduce the incidence of poverty in the rapidly growing urban areas at the same pace. Regionally, the incidence of poverty is lowest in Sumatra and Kalimantan (around 9% in 1987), provinces where Indonesia's resource-based industries of oil/gas and wood products are located, higher in Java, higher still in Sulawesi and highest in the other islands.

#### h Education

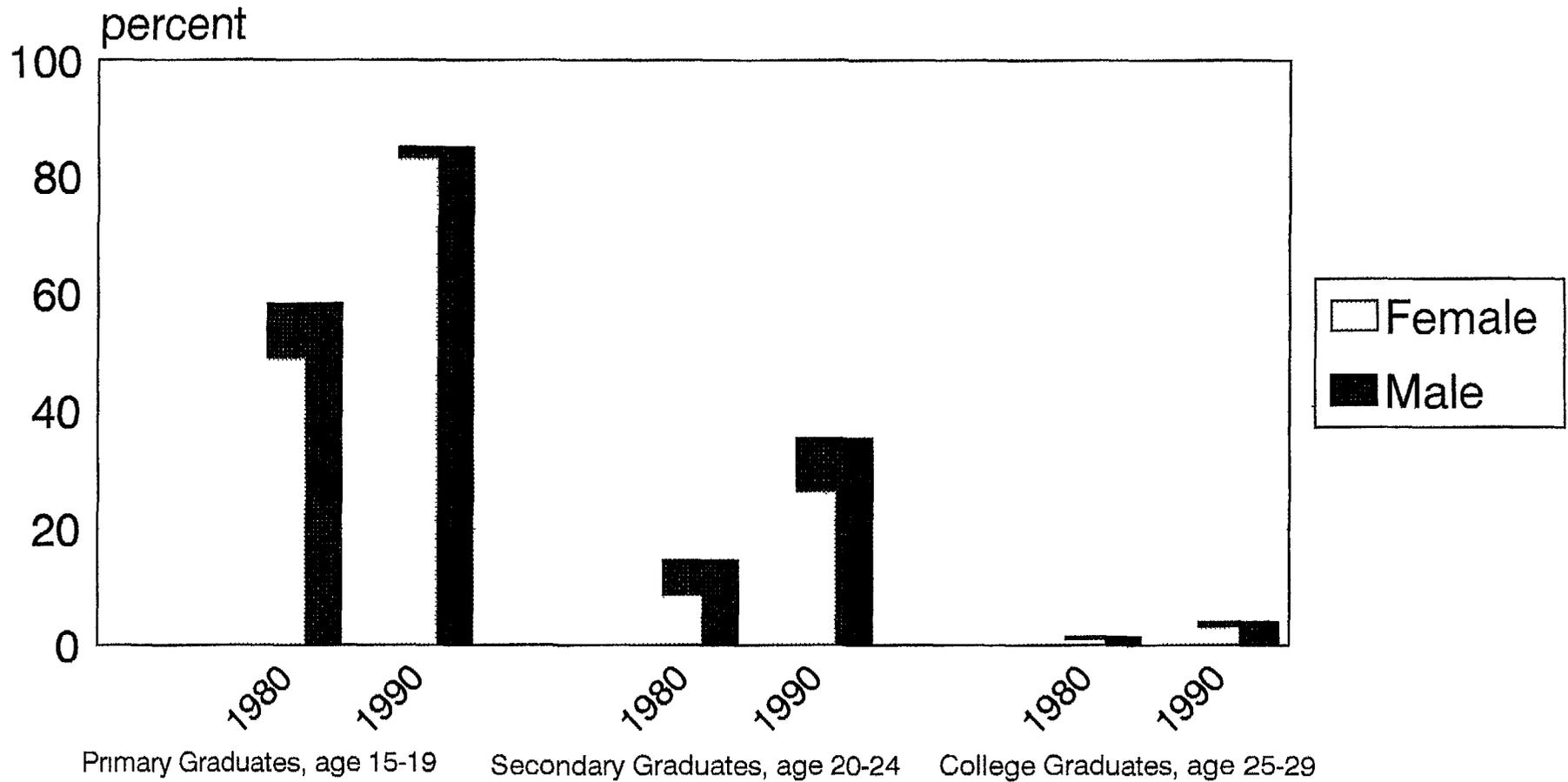
Education is mainly under the control of the Ministry of Education and Culture. In addition, the Ministry of Religious Affairs is in charge of Islamic religious schools at the primary level. Primary school, covering the first 6 years of schooling, was made compulsory in 1987. Secondary education, which is not compulsory, lasts for an additional 6 years -- 3 years of junior high school and 3 years of senior high school. Both levels of secondary school are divided into general and vocational systems. After finishing senior high school, some students go either to academy (levels I, II and III) or the university, either of which can lead to a bachelor degree. In the late 1980s there were 48 state and 744 private universities. Postgraduate work is carried out at the university level.

**Educational attainment has dramatically increased over the past 30 years, the rate of increase has been more rapid for women than men**. Table 5 illustrates the improvements in educational attainment over the period 1961-90. Indonesia has achieved universal primary education, but drop-out rates remain high (one drop-out for every three graduates during 1986-91). Table 6 details the numbers of primary and junior secondary school drop-outs. Primary drop-out rates, later entry into school and low grade achievement for age are especially high in rural areas, in large families, among children of low-income parents, among children of uneducated parents, in communities with lower adult educational levels, and in communities with low norms for homework effort. But higher school fees do not seem to discourage school entry, completion, or grade achievement.

**Although 25% of women aged 15 or over still had no schooling in 1990, these were all older women**. Nearly all boys and girls aged 15-19 now have at least some primary education (the

Figure 2

# Graduation Rates for Specific Age Groups



rb

Source U S Census Bureau (1993, Table I-ED2)

Table 5  
Indonesia Population Aged 15 Years and Over  
by Educational Attainment  
1961-1990

		Percentage of Population with					
	Year	No schooling	Incomplete Primary Schooling	Completed Primary Schooling	Completed Lower or Upper Secondary Schooling	Academic or University Education	Total Percentage
Males	1961	55.7	22.6	16.7	4.8	0.2	100.0
	1971	32.4	29.4	27.1	10.4	0.7	100.0
	1976	26.0	38.9	22.6	10.7	1.8	100.0
	1980	21.8	35.9	25.5	15.9	0.9	100.0
	1985	14.4	30.1	30.8	23.3	1.4	100.0
	1990	12.2	24.3	32.2	28.8	2.5	100.0
Females	1961	79.6	11.2	7.3	1.9	0.0	100.0
	1971	57.0	21.2	16.5	5.1	0.2	100.0
	1976	47.5	31.3	14.8	5.8	0.7	100.0
	1980	41.4	30.4	18.8	9.1	0.3	100.0
	1985	30.6	29.3	25.0	14.6	0.5	100.0
	1990	25.4	24.9	28.1	20.3	1.3	100.0
Both	1961	68.1	16.7	11.8	3.3	0.1	100.0
Sexes	1971	45.2	25.1	21.6	7.7	0.4	100.0
	1976	37.2	34.9	18.6	8.1	1.2	100.0
	1980	31.9	33.1	22.1	12.4	0.6	100.0
	1985	22.7	29.7	27.8	18.9	0.9	100.0
	1990	18.9	24.6	30.1	24.5	1.9	100.0

Source: Jones and Manning, 1992, 1990 Census of Indonesia

From ILO, 1993, Table 11

1990 Census showed figures of 97% for girls and 98% for boys in that age bracket) and primary school graduation rates for the nation as a whole are generally comparable among boys and girls. Average school attendance rates are above 90% nationwide, and even in rural areas primary school attendance averages 90% for both boys and girls. **In 1990, 85% of the boys and 83% of the girls aged 15-19 had completed primary school, up significantly from 1980 when only 58% of the boys and 49% of the girls aged 15-19 had graduated from primary school.**

EDUCATIONAL ATTAINMENT by GENDER -- 1980 and 1990  
in percent of age group cohort

Educational Attainment Level by Age Group	1980		1990	
	Male	Female	Male	Female
15-19 year olds, primary graduates	58.2	48.6	84.9	82.8
20-24 year olds, secondary graduates	14.6	8.3	35.3	26.0
25-29 year olds, college graduates	1.4	0.7	4.0	2.9

Note: Secondary graduates include the general and vocational tracks.  
Source: U.S. Census Bureau, 1993, Table I-ED2

However, important male/female educational differentials still exist at the secondary and tertiary levels of education. Although school attendance rates for boys and girls in the junior high age group vary by less than 10 percent, the gender differential in school attendance doubles at the senior high age group (ages 16-18). In urban areas, the gender differential in junior and senior secondary graduation rates track the attendance rates, but in rural areas, many more girls than boys attending secondary school do not graduate -- two-thirds as many girls as boys graduate from junior and senior secondary school.

Nevertheless, the major educational differences are not between boys and girls, rather, the rural/urban educational attainment differentials are the most worrisome. Rural school attendance is around 25% below urban attendance for junior high aged boys and girls and only half the urban rates for senior high aged boys and girls. **For university-aged boys and girls, rural attendance rates are only 20-30% those in urban areas!**

The data also indicate that **large numbers of primary school graduates are not going on to attend high school.** Indeed, at present, only around 64% of children aged 13-15 are attending school, significantly less than the 92% of children aged 6-12 attending school. The drop off in attendance and graduation is even more pronounced in rural than in urban areas. In the former, the drop-off in graduation rates from primary to junior secondary is by more than half and from junior to senior secondary by just half, whereas in urban areas most of those who make it through junior secondary also get through senior secondary.

10a

Table 6

**TABLE 103 Primary School Number of Pupils, Graduates and Drop-Outs, 1980/1981-1989/1991**

Source Ministry of Education and Culture, Informatics Centre, Rangkuman Statistik Persekolahan Tahun 1980/1981 - 1989/1991

Year	Total Number of Pupils	Total Graduates	Drop-Outs
1980/1981	22,551,870	2,027,754	1,143,678
1981/1982	23,862,488	2,300,372	1,175,474
1982/1983	24,700,075	2,508,102	877,912
1983/1984	25,804,380	2,924,003	783,496
1984/1985	26,567,688	3,289,390	920,147
1985/1986	26,550,915	3,359,188	1,068,235
1986/1987	26,444,756	3,340,715	993,006
1987/1988	26,649,890	3,389,548	1,077,212
1988/1989	26,725,364	3,355,733	1,219,260
1989/1990	26,528,590	3,336,590	1,098,302
1990/1991	26,348,376	n a	n a

Moreover it is clear that continuation rates on to lower secondary school (SMP) are not high. It is estimated by the Ministry of Education that around 1.2 million SD graduates each year do not proceed to SMP. Table 104 in fact shows that there has been a decline in the numbers of students in junior high school in Indonesia in recent years.

**TABLE 104 Junior High School Number of Pupils, Graduates and Drop-Outs, 1983/1984-1990/1991**

Source Ministry of Education Information Centre, Rangkuman Statistik Persekolahan Tahun 1983/1984 - 1990/1991

Year	Total Number of Pupils	Total Graduates	Drop-Outs
1983/1984	4,757,608	1,274,465	248,424
1984/1985	5,188,964	1,356,559	292,551
1985/1986	5,669,966	1,597,620	121,289
1986/1987	6,132,057	1,719,463	228,203
1987/1988	6,422,423	1,917,117	250,166
1988/1989	6,446,966	1,802,100	801,407
1989/1990	5,852,507	1,701,875	477,226
1990/1991	5,686,118	n a	n a

From Ministry of Manpower, 2007 Table 102 & 104

SCHOOL ATTENDANCE RATES -- 1990  
in percent of age group cohort

Age Group	Urban		Rural		Nationwide	
	Male	Female	Male	Female	Male	Female
6-12 year olds	95 1	95 1	89 9	90 1	91 4	91 6
13-15 year olds	83 0	75 8	60 0	56 2	66 9	62 5
16-18 year olds	64 2	54 6	33 0	27 0	43 7	37 3
19-24 year olds	26 0	18 0	8 2	4 2	15 1	9 3

Note Jr and Sr secondary graduates include general and vocational tracks  
Source Indonesia Census of Population -- 1990, Table 23

The biggest gap in attendance and graduation rates is between the secondary and tertiary levels. Once at the university level, male students outnumber women in the public education system by nearly two to one, with few women pursuing technical fields like engineering, mathematics and computers. Instead, women are channeled, or channel themselves, into fields like psychology, education and teaching, arts and mass communications. See Table 7 for details. Male/female graduation rates from diploma (and Academy) programs are about equal because of the large numbers of women that pursue teaching careers, but significantly fewer women than men graduate from the university -- 40% less in urban areas and 60% less in rural areas.

EDUCATIONAL ATTAINMENT by GENDER -- 1990  
in percent of age group cohort

Educational Attainment Level by Age Group	Urban		Rural		Nationwide	
	Male	Female	Male	Female	Male	Female
15-19, primary graduate	92 8	91 1	80 3	78 0	84 8	82 9
15-19, Jr secondary grad	59 1	55 5	38 1	26 2	39 2	37 0
20-24, Sr secondary grad	54 1	45 5	20 0	13 8	34 2	25 5
25-34, Diploma graduate	3 7	3 3	1 1	0 6	2 0	1 5
25-34, university graduate	5 5	3 2	0 8	0 3	2 4	1 3

Note Jr and Sr secondary graduates include general and vocational tracks  
Source Indonesia Census of Population -- 1990, Table 11

These results reflect the government policy focus on achieving universal primary education. As the government turns its attention to universal junior high education, junior high graduation rates for boys and girls will become more equal, but the gap between junior and senior high

11a

Table 7

**TABLE 110** Sex Ratio of Higher Education Students Undertaking Diploma (50) and Undergraduate (52) Programmes by Sector and Field of Study, 1987/1988-1991/1992

Source Ministry of Education and Culture, Informatics Centre, Data Peguruan Tinggi Negeri Tahun 1987/1988 dan 1991/1992

Area of Study	1987/88	1991/92
Administration	163 3	230 4
Architecture and Town Planning	323 1	261 0
Language	87 6	114 4
Economics	140 9	233 6
Law	-	171 3
Humanities	217 0	290 3
Environmental Studies	190 5	152 5
Social and Behavioural Sciences	132 4	153 8
Medicine and Health	217 8	99 1
Teaching	129 3	109 6
Forestry	307 2	562 6
Arts	189 5	135 8
Mass Communication	177 8	99 0
Management	74 3	-
Mathematics and Computer Sciences	205 0	400 4
Other	203 8	-
Services	70 8	31 3
Education	123 2	88 2
Fisheries	186 4	163 5
Agriculture	159 6	155 6
Trades	190 7	259 6
Animal Husbandry	189 2	160 0
Psychology	60 3	39 3
Technology	992 5	748 8
Transport and Communication	196 9	-
<b>Total</b>	<b>165 7</b>	<b>170 9</b>

From Ministry of Manpower, 1992 Table 110

graduation rates may widen. However, if this strategy is to succeed, greater effort must be placed on expanding the quantity and quality of education services in rural areas.

Turning to the quality of education, student achievement is substantially lower in rural areas and off Java. Controlling for objective measures of school quality, student achievement is dramatically higher in communities where a larger proportion of adults have completed primary school. Therefore, past INPRES<sup>3</sup>-led expansion of primary education will pay unexpectedly high dividends in the near future as children of educated parents perform better because of the educated parents. **Teacher achievement is a strong determinant of student achievement, and teacher achievement is higher on Java than off-Java.** Per pupil book expenditure has a very strong effect on student performance, but a school's physical condition does not. **The lower quality education provided in rural areas, as indicated by lower student and teacher achievement there, reduces the payoff to education and thereby reduces the perceived value of an education to rural parents and students.**

**The primary school teaching force is young, tenured and under qualified.** few of the 1.5 million primary teachers have education beyond senior secondary teacher training, half are under 35, which means they will be teaching for the next 25 years under current civil service rules. Therefore, if their skills are not upgraded, the quality of primary education will continue to suffer well into the next century.

## B Summary, Conclusions and Recommendations

### 1 Guidelines for Support of Women's Organizations

**Support should only be provided to organizations for the purpose of improving women's participation in the labor force or as businesswomen, or on improving the quality of women's human capital.** The organizations to be supported should either already be working with this purpose in mind or willing to adapt its agenda to include this purpose, and agree to use any POWER resources only for that purpose. Withhold A I D support from women's organizations that distract women from such productive participation (e.g. *Dharma Wanita* and many women-run NGOs focused on non-economic issues). Many women's organizations divert women's attention from their basic roles in life, reproduction, economic participation in the labor force, and community service.

**Women's organizations should be encouraged to work with and promote their agenda through mainstream organizations.** For example

Women's Studies Centers should be encouraged to work with mainstream

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<sup>3</sup> INPRES is the Indonesian Government's regional investment program. Past INPRES programs consisted of block grants to provincial and local governments, as well as categorical grants for specific types of investments or salary expenditures.

departments -- such as economics, sociology, business and technical fields -- with the goal of getting those mainstream departments to conduct research on women's role in the economy and introduce these findings into the classrooms of these mainstream departments. This is preferable to independent Women's Studies Centers working on women's issues in isolation.

The Women's Ministry (SMRW) should continue working through the mainstream ministries to propagate its agenda. The aspects of SMRW's agenda relevant to POWER include support for greater gender-disaggregation in the socio-economic data collected by the Central Bureau of Statistics and on participation in mainstream ministry training programs, support for studies on the relationship between economic policy and women's participation in the economy, such as the ones identified above, training for female civil servants in substantive areas, including economic policy, etc.

**Women's organizations should be provided with information on how economic policy impacts women as workers and as businesspersons.** This information transfer should take the form of seminars by policy analysts who have conducted such or research or understand the studies that have been conducted. What the women's organizations do not need is TA in gender awareness and feminism.

## 2 Possible Entry Points for POWER

### a Guiding Principles

**Deregulate the economy further and extend deregulation beyond the export sector to include industries supplying the domestic market,** both those providing inputs and those selling directly to final consumers. Further deregulation is necessary to keep the GDP growth rate high and will tend to concentrate growth in labor-intensive activities. Together, rapid growth of a labor-intensive nature will generate lots of jobs for the more rapidly growing female labor force. Nothing could be more important for poor women than this.

**Expand secondary education and improve the quality of education at all levels** with the same vigor as exhibited in the program to attain universal primary education, with special emphasis on four features:

**girls' secondary education** because the returns to girls' education are higher than to boys' education and the differential increases at higher levels of education,

**rural areas** where educational attainment beyond the primary level lags far behind urban areas for both boys and girls, but more so for the latter,

**quality education,** such as better teacher training, higher teacher pay scales, decentralized management of schools, and a curriculum reform, specially for

girls, and

**special literacy programs for older women** might be in order because gender-based education differentials are much greater among men and women above 30 than for those under 30

**Adopt labor policies that make the labor market more competitive and even-handed**, such as emphasizing anti-discrimination legislation, **but avoid actions that would make labor markets less efficient**, such as quotas and affirmative action programs to favor women or a minimum wage policy that actually bites, the likely result of which will be a cut back in the level of production workers

b Possible Entry Points for POWER

**Entry Point #1 Promote further deregulation of the Indonesian economy to generate more jobs for women**

The pace at which the Indonesian economy generates overall employment opportunities, during the next five-year and 25-year planning periods, is the most important factor in determining how many jobs will be available for women **The pace of employment generation achieved over the past seven years must be maintained** (or if possible, stepped up) To accomplish this, the Indonesian economy must continue to grow at a rapid pace, and must continue to follow a labor-intensive growth strategy

**For this to occur, further deregulation of the economy will be necessary**, building on the intensive reform effort since 1988 A positive sign in this regard is the GOI commitment to eliminate all trade barriers with APEC-member countries by the year 2010, enunciated at the October 1994 meeting of APEC It is indicative of GOI commitment to continued trade liberalization that Indonesia was the host and prime mover among the Asian members of APEC

In addition to the aggregate number of new jobs created, **the sectoral distribution is also important from the perspective of female employment opportunities** Three sectors are of prime importance **the rapidly expanding formal manufacturing sector, the formal service sector**, especially trade, tourism and banking (but not the civil service, where employment levels are unlikely to grow much because of Central Government fiscal restraint on new hiring), **and off-farm employment in rural areas**, through a dynamic growth of agro-industries The latter would be especially helpful in order to compensate for the release of labor from the agriculture sector as a result of increases in agricultural productivity projected by some analysts over the medium-term planning period Disagreement exists on the likely pace of agricultural productivity growth Naylor (1994) argues that mechanization of plowing and weeding could reduce by two-thirds the need for (largely female) labor devoted to these two tasks In contrast, USAID advisors under Development Studies Project (DSPP, Agriculture and Rural Sector Support Program (ARSSP) and Trade and Investment Promotion Project (TIPP) argue that such technological change would only occur if driven by rapidly rising rural wages, that is, a shortage

of rural labor, which does not seem to be the case. But small-scale Javanese rice farmers have begun to use mechanized, hand-operated tillers not in evidence five years ago.

**More gender-disaggregated data must be collected in order to permit detailed analysis of the role of women in the labor force and the factors that impact on their participation.** For example, in order to verify the hypothesis that certain export manufacturing industries are heavily female labor intensive and determine how wage differentials vary among manufacturing sub-sectors, gender-disaggregated data on employment and wages in three-digit manufacturing industries is needed. Some of this data may be available from SAKERNAS (the quarterly National Labor Force Survey). If it is not, a special survey would be necessary.

The structure of Indonesian businesses consists of large-, medium- and small-sized manufacturing firms. Each generates large numbers of employment opportunities for women. But one size-category may be generating employment opportunities more rapidly than others. And different sets of policy interventions and infrastructure investments may affect the growth of each size-category of business differentially.

**The *Indonesian Family Life Survey* constitutes one of the richest databases available for analyzing gender-based impacts of socioeconomic policies and investment programs.** With USAID support, the RAND corporation and the Demographic Institute of the University of Indonesia surveyed 7000 households in 13 Indonesian provinces. Analysis of this data can assess the impact of economic and social (e.g. educational) policies, and the impact of investment in physical and social infrastructure, on female labor force participation (FLFP), wage differentials and household structure. It will permit analysis of how FLFP and wage rates are related to family decisions to migrate and invest in children's education. Any such analysis of the Family Life Survey data should link expatriate to Indonesian researchers to maximize the in-country benefit of such research.

### **Interventions:**

- ***Better Gender-Disaggregated Data***

In general, every opportunity should be taken to encourage the Central Bureau of Statistics to collect and publish data in a gender-disaggregated format. Two specific examples of the need for greater gender-disaggregation of data are noted below.

The composition of male and female workers in critical sub-sectors of manufacturing (the so-called two-digit and in some cases three-digit ISIC), including age distribution and education level is needed to shed light on the concentration of female labor in these manufacturing industries. The BPS should be encouraged to tabulate this information, if available in SAKERNAS or Census data tapes. If it is not easily available, sample surveys of firms in the most important manufacturing sub-sectors, including the rapidly-growing export manufacturing industries -- textiles, garments, footwear, electronics, toys, furniture, plywood, household appliances.

Obtain data on the wages of male and female workers in these labor-intensive manufacturing sub-sectors. Again, this data may exist in SAKERNAS or Census tapes, and if so, BPS should be encouraged to compile and publish it. This data is necessary for the policy study on the causes of wage differentials.

The BPS will be conducting an Industrial Census soon (the last one was conducted in 1986) that generates data for an extensive sub-sectoral breakdown. The BPS should be encouraged to disaggregate all employment and wage data collected as part of the Industrial Census. This is a data source with wide usage in economic analysis and the gender-disaggregation will induce analysts to test a wide variety of gender-based hypotheses.

- *Studies on the Gender Impact of Economic Policy Reform*

Study to determine which forms of deregulation or other recent policy reforms have had the greatest impact on generating employment opportunities for women in the most labor-intensive and rapidly-growing manufacturing industries. The *Indonesian Family Life Survey* may have data to help answer this question.

Study to determine the trends in and causes of male/female wage differentials in those sub-sectors with the largest numbers of female workers (e.g. garments, footwear, electronics, banking).

The analysis of causes should investigate the relative importance of male/female educational differences and age as well as other possible explanatory factors identified in the text as affecting the wage differential.

The analysis of the relationship between education level and wage differential should attempt to explain why the differential is lowest for men and women senior secondary school graduates but increases slightly for university graduates and increases more rapidly as one goes down the education scale, reaching a maximum wage differential for men and women with no education.

Study of the response of firms in selected manufacturing sub-sectors to the April 1995 increase in the minimum wage in terms of compliance, prevalence of strikes, production levels, labor/output ratios. The study should emphasize but not be limited to those sub-sectors that employ large numbers of women. This will require a baseline study of the situation prior to the April implementation date as well as a follow-up study several months later (a panel survey?).

Study to determine whether the labor-intensity of production varies by scale-of-enterprise, and if so, which size categories of firms are generating the most new employment opportunities, especially for women. If scale-of-enterprise is shown to have

an impact, follow-up studies (i) to determine which policies have been responsible for the growth of each scale of enterprise, and the gender-specific employment structure of the fastest growing and most labor-intensive size-categories, and (ii) to determine which forms of infrastructure investment are most critical to growth at each scale, especially those generating the largest number of new jobs

**Entry Point #2: Improve the impact of infrastructure investment on women.**

The provision of economic infrastructure investment -- roads, ports, power and telecommunications -- is critical to rapid economic growth, and an increasing role exists for the private sector in constructing and/or operating infrastructure facilities. Infrastructure investment will also play an important role in promoting GOI regional development objectives

**Intervention.**

- **Studies of Infrastructure's Gender Impact**

Study to determine what forms of infrastructure are most important to the growth of the labor-intensive manufacturing sub-sectors

Study to determine which INPRES regional investment programs are most beneficial to the creation of female employment opportunities in the Outer Islands. INPRES programs consist of general grants where the local authority has wide discretion in determining how the funds are used as well as specific grants which must be used by the local governments for the specified type of investment. This study should make a special effort to determine the relative merits of the new IDT poverty alleviation program (a new element of the INPRES program) in helping women as employees and/or as entrepreneurs than the older programs

**Entry Point #3: Improve women's ability to access quality jobs.**

Women's dual (and even triple) role in society limits women's participation in the remunerative economy because her other roles -- that of reproduction/child care and community service provider -- compete with economic work. Because of the multiple roles, women spend less time in remunerative work than men, especially in their twenties when they are caring for children. This is particularly true in a society like Indonesia that places priority importance on woman's role in the family and looks askance at child care facilities. The result is that women in their thirties, on average, have gained less work experience than have men of the same age

Important features of the Indonesian education system include the following: near universal primary education for boys and girls under 25, reduced but still significant education differentials at the secondary level for young men and women between 25 and 45, very marked education differentials at all levels between men over the age of 45, and an apparent mismatch, especially for women graduates, between the skills learned in secondary and tertiary education and the

skills required by modern sector jobs

**The most effective way to improve upward mobility of female workers is to close the education gap between men and women** This will involve a multi-pronged effort over the long term (Indonesia's second 25-year indicative planning period) first, complete the plan to achieve universal graduation from primary school, where girls still lag behind boys (and poor children lag behind the rest), second, aggressively pursue the objective of universal secondary education, with the medium-term objective of reaching universal junior secondary education within fifteen years, third, direct more female students into technical areas of study, at the secondary and tertiary levels, that lead to higher-paying jobs, and fourth, improve the quality of teachers and curriculum at all levels **Two tradeoffs** will constitute the major strategic issue over the planning periods, both the 5 and 25 year planning periods One tradeoff is **between the pace of expansion of secondary and tertiary education and the pace of improvement in the quality of education at all levels**, especially as both expansion and quality improvement relate to the education of girls The other tradeoff is **between the use of public funds for education or other investments**

The importance of girls' education is based on evidence from a variety of sources showing that returns to women of a primary and general secondary education are higher than for men One study (Pernia and Wilson, 1989) cites Indonesian evidence to show that male/female wage differentials are less for men and women with higher education levels than they are for men and women with lower education levels Some evidence indicates a reversal of wage differentials between men and women with the same type of university education This implies that a higher payoff exists for educating women to the secondary and tertiary level Another study (Behrman and Deolalikar, 1994) also show that education has higher returns to women, these differential returns are greater the higher the level of education (through secondary), and the differentials are higher still when the methodology controls for common family and community effects And a third, older study (Corner, 1987) on wage differentials in urban manufacturing argues that they are due to four factors female workers have less education, they work shorter hours, they are younger, they are perceived to have less commitment to work because women usually withdraw (at least temporarily) from the labor force to have and care for children, and because of having temporarily withdrawn from the labor force, even older female workers usually have less experience than male workers of the same age The higher average education levels of those employed in the service sector reflect the higher status and wage levels associated with employment in the modern services -- commerce, hotels, government, banking and other business services These occupations seem to be primary targets for women with a secondary education

### Intervention

- Studies on Gender-Related Education Policy

Use the database generated by the *Indonesian Family Life Survey* to investigate how economic and social policies affect women as workers and as family decision-makers viz-

a-viz investments in the human capital of their children?

Study of the costs and benefits of alternative educational development strategies that emphasize different balances between rapid expansion of secondary and tertiary education and an emphasis on across-the-board improvement in educational quality. Place particular importance on the expansion of educational opportunity to all girls, the intensity of teacher training and teacher trainers, the pace of transforming the curriculum of girls' education toward more technical courses, and the role of women as teachers, given that women comprise about half of the public sector teacher corps. One approach would be to assume a given expansion path toward universal junior secondary and increased (say 60%) senior secondary education by 2010, then estimate the costs of foregoing improvement in quality (in terms of high youth unemployment, a growing belief that more education may not be very useful, etc.)

Conduct a benefit-cost study of increased investment in (a) attaining universal junior secondary education within 15 versus 25 years, compared to (b) spending the extra money it would take to do it in 15 years in some alternative investment, such as roads or potable water.

Use the results of the *Indonesia Family Life Survey* to analyze the causes of high unemployment rates among well educated young persons under 25 years of age. Indeed, unemployment rates are higher for female senior secondary graduates than any other male/female educational grouping. Arrive at suggested explanations. Hopefully, once the causes of unemployment among young educated women (and to a lesser extent men) are more clearly understood, policy recommendations can be developed to attenuate the problem.

- *Develop specially designed training programs*

Either improved Diploma programs or develop training programs provided by private sector training firms, with a focus on women, to remedy the shortage of highly-skilled personnel reflected in the continuing inflow of foreign workers. Donor agencies may have a role here.

#### Entry Point #4: Promote peaceful labor relations

The GOI continues to increase the minimum wage throughout Indonesia, to the point where, since 1991, real wage rates in labor-intensive manufacturing industries have begun to move up in spite of the continued existence of considerable surplus labor in the informal sector in both urban and rural areas. Since 1991, each time the minimum wage has been increased, a spate of strikes have ensued shortly after the minimum wage has gone into effect. Growth in the textile and garment industries has declined since 1993, with anecdotal evidence from an interview with a Bandung garment firm owner indicating that one-quarter of Bandung garment firms have left Indonesia over the past two years. **The cause of this worrisome trend in the**

garment industry is partly due to a loss of competitiveness resulting higher (minimum) wages and the introduction of health/pension benefit packages. The increasing labor unrest may be a related cause. As noted above, the first order of business is to moderate further increases in the minimum wage, so that wage rates are determined by market clearing processes that depend on supply and demand for labor. The second priority is to reduce the confrontational, disruptive nature of labor relations in the labor-intensive, low-wage export manufacturing sector.

**Intervention:**

- Provide technical assistance to business and labor groups in methods to improve labor relations, especially those associated with the labor-intensive, low-wage export manufacturing industries

Such TA should include proselytizing the importance to each of minimizing confrontation in the conduct of labor relations, explaining the areas of mutual interest and teaching cooperative negotiation skills. Continuation confrontation has the potential to abort further growth of existing industries -- garments, textiles, footwear -- and the appearance of new ones -- electronics, furniture, toys, household appliances, among others. Stagnation in the garment industry is not in the interests of female garment workers, nor is slower growth in other labor-intensive manufacturing exports.

**Entry Point #5: Build on the success of the Bali experience.**

Growth of the export manufacturing sector in Bali has followed a pattern that may be replicable in other parts of Indonesia, if certain conditions are met. The Bali model was characterized by extensive infrastructure development, in the first instance fortuitously associated with the tourist and convention industry, not manufacturing, and access to 'information capital' made available by the influx, as *de facto* residents, of a large number of foreigners from rich countries, and a high female labor force participation rate (second only to Yogyakarta among Indonesian provinces). Bali's economic growth is particularly relevant to women because of the high female labor force participation -- along with Yogyakarta, the highest in Indonesia. Important questions for POWER include the degree to which

**Intervention.**

- Develop a strategy to test whether the successful elements of the economic boom on Bali can be replicated on a carefully selected Eastern Island

The first step is to determine what have been the principal 'lessons learned' from the Bali growth experience over the past 25 years. Little basic research is necessary. Synthesize existing research on lessons learned from the Bali experience, especially the four reports prepared by USAID/Jakarta's Development Studies Project on the Bali Model. Conduct one additional field trip, if deemed

necessary, to update the most relevant information to determine whether any of the reports' conclusions need to be revised. The study should identify what are the major industrial activities (textiles, garments, tourism, etc ) and the sectors where women concentrate

The second step would be to identify an island in the Eastern Islands that best meets the conditions that made Bali so successful, the 'natural' conditions existing prior to introduction of the man-made conditions of large-scale infrastructure and broadening appeal to foreigners. In one sense, the task is to identify Indonesia's next tourist 'hot spots', with emphasis on the Eastern Islands, as Bali becomes saturated

The third step would be develop the plan for a pilot project in the selected location to determine if the Bali model is replicable. Since USAID is considering concentrating more of its resources in the Eastern Islands, this may be a way to focus those resources. This plan should assure that women's roles in the pilot are carefully taken into account

## II THE LABOR FORCE FROM A GENDER PERSPECTIVE<sup>4</sup>

In Indonesia, men and women allocate their time differently. Another way to put it is that society places different demands on the time allocation of men and women. Men allocate their time primarily to religious activities, leisure, and economic work, **women allocate their time primarily to reproductive tasks, community support and economic work**. Economic work consists of paid work and unpaid work, where the latter primarily consists of family labor. Unpaid family labor is especially important for females. In this scheme, economic work, especially unpaid family labor, is assumed to be the residual.

Thus, less time spent on religious activities (for males), or **less time spent on reproductive or community support activities (for females)**, means **more time available for economic work**. Women spend more time on reproductive and community support tasks than men do on religious activities, therefore, **women have less time available for economic work than do men**. This is consistent with data on hours devoted to economic work by men and women, which show that 16% of male workers in 1990 worked less than 25 hours while 35% of female workers did, although the difference declined slightly from the 1980 Census (Ministry of Manpower, 1993, p. 92).

### 1 Gender-Based Differences in the Labor Force

Based on Census data for 1980 and 1990, some **2.2 to 2.5 million persons were added to the labor force in 1990**,<sup>5</sup> yielding a total 1990 labor force of 74.4 million. Over 1 million of

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<sup>4</sup> A Census of Population and Housing (the Census) was conducted in 1961, 1971, 1980 and 1990. However, only the 1980 and 1990 can be rigorously compared because of some methodological differences. These Censuses, especially the last two, provide most of the data for the analysis of labor force data. The Labor Force Survey (SAKERNAS), conducted on a quarterly basis, provides wage as well as employment data. Both provide considerable gender-disaggregation. Both the Census and the quarterly Labor Force Survey are conducted by the *Biro Pusat Statistik (BPS)*, which in English translation is the Central Bureau of Statistics. No actual analysis of Census or SAKERNAS data has been carried out for this study of gender-differentiated employment trends. Instead, the Census and SAKERNAS data used in this study have been obtained from two main secondary sources, the Ministry of Manpower's 1993 report titled *Manpower and Employment Situation in Indonesia* and the ILO's 1993 report titled *A Comprehensive Women's Employment Strategy*, compiled and organized to meet the needs of each report's sponsoring organizations.

<sup>5</sup> The estimate depends on the method used to interpolate annual labor force figures for the years between 1980 and 1990, based on the census-determined figures for 1980 and 1990. Approach #1 divides the difference in labor force figures for 1980 and 1990 by ten, the number of intervening years, to arrive at an 'arithmetic' estimate of average annual growth in the nominal value of the labor force, then assumes that this number of new labor force participants is the number added during 1989-90. Using the first, or 'arithmetic' approach, one arrives at a 2.2 million addition to the labor force in 1990.

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*Table A 1*  
 Indonesia's Working Age Population and Labour Force  
 1971 - 1990  
 (in millions)

	1971	1980	1990
<b>Working Age Population</b>			
Male	39 207	51 304	66 818
Female	41 299	53 051	68 461
Total	80 506	104 355	135 280
<b>Annual Growth Rate</b>			
Male	2 99	3 02	
Female	2 78	2 90	
Total	2 88	2 96	
<b>Labour Force</b>			
Male	26 184	35 099	47 549
Female	13 026	17 322	26 845
Total	39 210	52 421	74 395
<b>Annual Growth Rate</b>			
Male	3 03	3 55	
Female	2 96	5 50	
Total	3 01	4 19	
<b>Labour Force Participation Rate</b>			
Male	66 8	68 4	71 2
Female	31 5	32 7	39 2
Total	48 7	50 2	55 0

Source 1971 1980 and 1990 Censuses

From ILO, 1993, Table 3 1

**these new labor force participants were women, yielding a total 1990 female labor force of 26.8 million, or 36% of the total. From a more historical perspective, Table A 1 presents Census data indicating that the overall female labor force participation rate increased only slightly during the 1970s, but increased more dramatically during the 1980s<sup>6</sup>, exceeding 39% in 1990. This compared to a male labor force participation rate of 71%. Table A 1 also shows that the total working age population grew by 29.6% over the intercensal period, significantly faster than the 21.5% increase in total population over the same ten year period. Even though population growth has slowed, the momentum of faster population growth during the 1960s and 1970s is still being carried over into the working age population. In addition, Table A 1 shows that the total labor force grew by 41.9% over the intercensal period, significantly faster than the working age population and almost twice as fast as the total population. This even faster growth of the labor force was due to the increase in labor force participation rates of both men and women, but especially women.**

Combined with data from the National Labor Survey (SAKERNAS), which indicate a slight decline in the female labor force participation rate between 1987-91, the implication is that **the entire increase in female labor force participation during 1980-90 occurred prior to 1987**, that is, during the recession of the mid-1980s. How to interpret these two data sources? First, the SAKERNAS data is more internally consistent because SAKERNAS uses professional enumerators. Second, the 'real' increase in female labor force participation during the 1980s, after taking into account the broader coverage of female family workers in 1990, may have reflected a 'coping mechanism' in response to economic hardship caused by the mid-1980s recession. **What seems clear is that this 1980s increase in female participation was not a response to increased demand for jobs created by rapid economic growth, since growth did not accelerate until the end of the decade, in response to the acceleration of deregulatory policy reforms in 1989.**

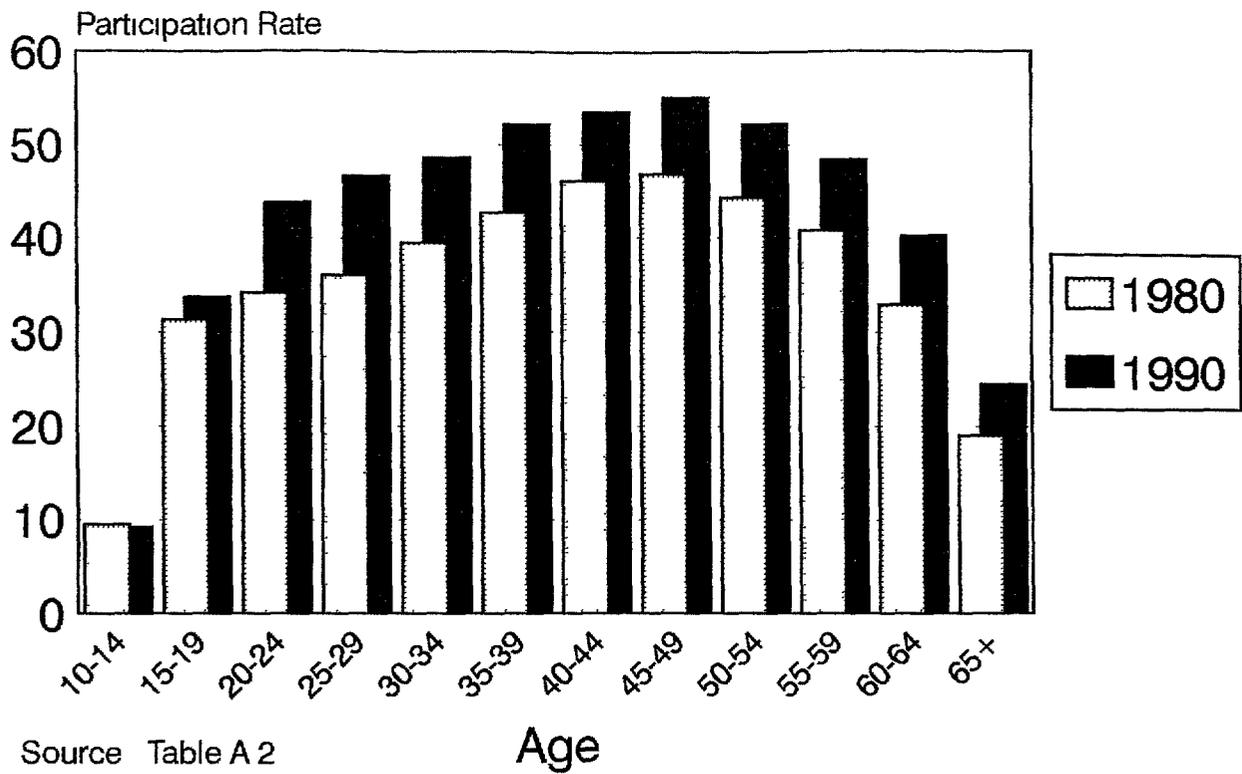
**With respect to age, female labor force participation follows an inverted U shape, with participation rates low for younger and older women and high for middle-aged women, reaching a maximum of 55% for those aged 45-59, as shown in Table A 2 and illustrated in Figure A 1. Comparing 1980 to 1990, age-specific female labor force participation rates were slightly lower only for 10-14 year old girls, reflecting the fact that more girls in this age group**

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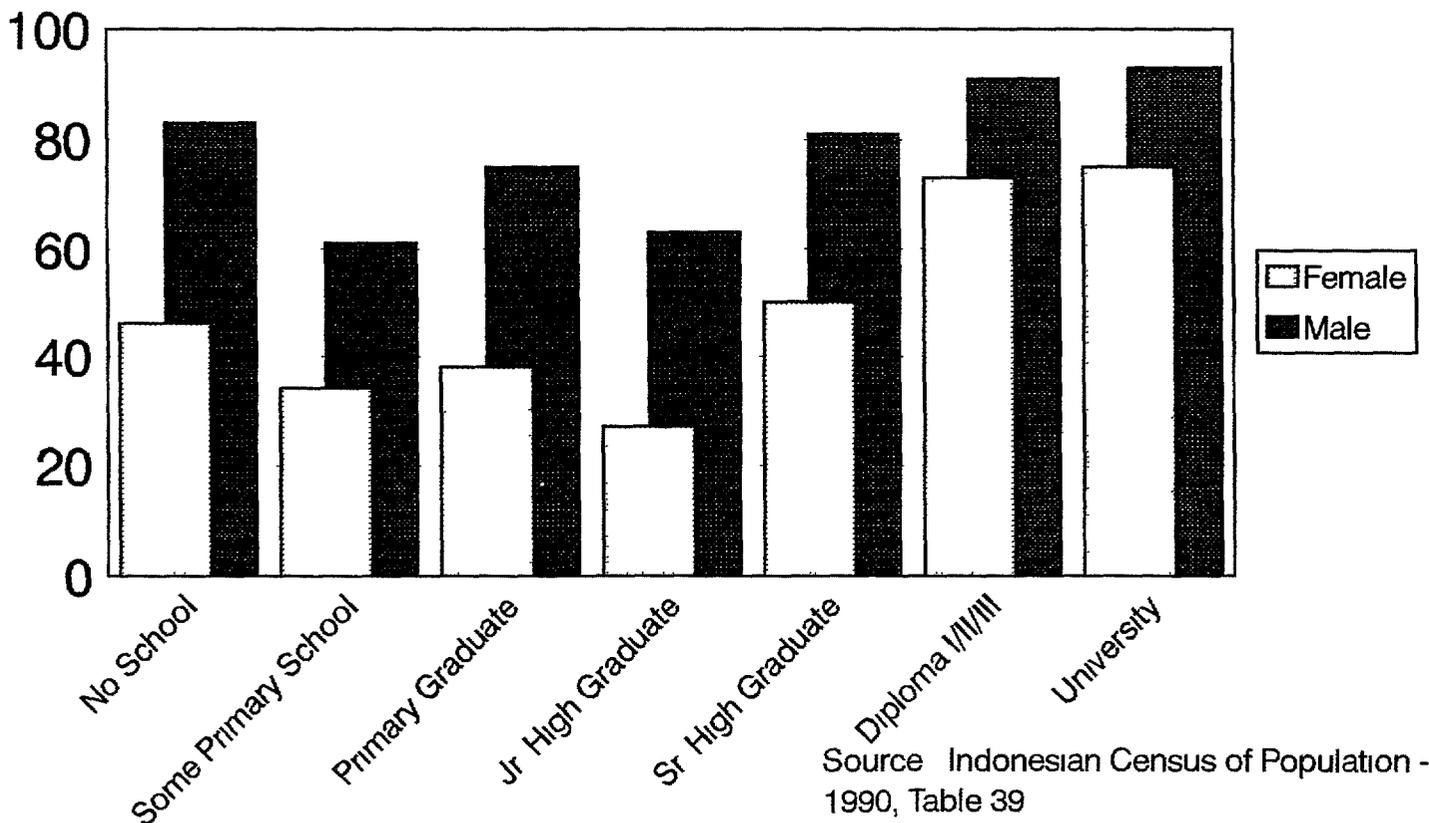
Approach #2 estimates the average annual compounded (or geometric) growth rate of the labor force during the ten-year period, uses that estimated average growth rate to project what the 1989 nominal value of the labor force would have been, then takes the difference between the census-determined labor force figure for 1990 and the projected figure for 1989. Using the second, or 'geometric' approach, one arrives at 2.5 million. The same two approaches can be used to estimate the addition to the female labor force in 1990. The truth probably lies somewhere in between, but perhaps closer to the latter.

<sup>6</sup> The dramatic increase in female labor force participation between 1980 and 1990 is partly a real phenomenon and partly the result of an improvement in the enumeration of unpaid female family workers in 1990. If the 1980 Census had achieved the same coverage of unpaid family workers as did the 1990 Census, the 1980 female labor force participation rate would have been higher than the 32.7% officially recorded, and the measured increase in female labor force participation would have been lower than the increase implied by existing official Census data.

### Figure A 1 Female Labor Force Participation by Age Group



### Figure A 2 Male/Female Labor Force Participation by Educational Attainment - 1990



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Table A 2  
Indonesia Participation Rates and Changes in Economically Active Population  
by Age and Gender 1980 and 1990

Age Group	1980		1990		Percent
	Number	Participation Rate	Number	Participation Rate	Change 1980-1990
MALES					
10-14	1 180 921	12.9	1 362 060	12.3	15.3
15-19	3 581 193	47.7	4 581 176	48.0	27.9
20-24	4 749 416	79.4	6 090 091	79.5	28.2
25-29	5 183,654	92.4	6,958 772	94.2	34.2
30-34	3 824 921	95.1	6 430,233	97.8	68.1
35-39	4 006 347	95.6	5 706 352	98.1	42.4
40-44	3,464 800	95.1	3,871 389	97.7	11.7
45-49	2 833,576	94.1	3,624 440	97.0	27.9
50-54	2 447 283	90.0	3 104,928	94.1	26.9
55-59	1,455 706	84.6	2,096,753	89.5	44.0
60-64	1 196 700	76.7	1,819 585	80.1	52.1
65 +	1 169,529	53.4	1,902 715	59.2	62.7
Total	35 094 046	68.4	47 548 494	71.2	35.5
FEMALES					
10-14	805 596	9.5	955 244	9.2	18.6
15-19	2 430 329	31.3	3 156 093	33.7	29.9
20-24	2 398 774	34.2	3,716 232	43.8	54.9
25-29	2 068 010	36.1	3 795 643	46.6	83.5
30-34	1,636 430	39.5	3,217 839	48.6	96.6
35-39	1 861 488	42.7	2 833 942	52.1	52.2
40-44	1 735 524	46.0	2 160 719	53.5	24.5
45-49	1 468 808	46.8	2 141 307	55.1	45.8
50-54	1 193 999	44.3	1 773 762	52.2	48.6
55-59	681 884	40.8	1 242 354	48.4	82.2
60-64	549 830	32.9	933 194	40.2	69.7
65 +	490 401	19.0	919 919	24.5	87.6
Total	17 321 073	32.7	26 846 248	39.2	55.0

Source 1980 and 1990 Censuses

From ILO, 1993, Table 3.2

were attending school in 1990. In spite of the increasing school attendance of older teenage girls, their labor force participation rates increased slightly. An increasing average marriage age for young women would help explain the increase in labor force participation for the 15-19 age group, because it puts off child-bearing. This is relevant because women tend to temporarily withdraw from the labor force when they have children under the age of five<sup>7</sup>. For all women aged 20 and above, participation rates were significantly higher in 1990 than in 1980. The pattern of participation for men follows a similar inverted U shape, but whereas participation rates increased for males 25 years old and older, they did not increase for 15-24 year old males, reflecting the fact that boys were receiving more secondary and tertiary education than previously.

**With respect to educational attainment, female labor force participation follows a standard U-shape, with the lowest participation for junior secondary graduates (Pernia & Wilson, 1989, p. 32). Figure A 2 illustrates the U-shape. Possible explanations for this U shape include the following:**

women with no or little education are poor and are forced to work to supplement meager family incomes, or are, themselves, heads of poor households,

women attaining junior secondary education get just enough education to marry well, with less pressing economic needs to push them into the labor force, yet are faced with more intense social pressures to remain in the home,

women who obtain a secondary education, and even more so those who obtain a university education or advanced diploma, have access to higher-quality jobs in the service sector, which offer higher salaries and social status.

And finally, female labor force participation is higher from households with mortgages to repay. It may be that women with a secondary and tertiary education are more likely to have purchased a home, especially the increasing numbers of well-educated female professionals.

With respect to the urban/rural breakdown, **female labor force participation rates are much higher in rural than in urban areas -- 41% compared to 28% in 1985 -- with rural rates higher for all education levels except university graduates (Pernia & Wilson, 1989, p. 32).** Urban labor force participation rates are, however, more reliable than rural rates because of the greater uncertainty in determining whether rural women are in the labor force. Evidence for this relates to the problem of maintaining a consistent treatment of unpaid family workers from one Census to the next, and family workers are mostly rural (see footnote on page 2 of this section for an explanation).

Female labor participation also varies widely among the regions, as shown in Table A 3.

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<sup>7</sup> Interview with Diah Widarti, Research Department of Ministry of Manpower)

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Table A 3  
Indonesia Labour Force Participation Rates for Regions  
1980 and 1990

PROVINCE/ISLAND	MALES			FEMALES		
	1980	1990	Change	1980	1990	Change
Java	69.2	72.1	+2.9	33.2	39.2	+6.0
Jakarta	62.7	65.6	+2.9	22.6	30.6	+8.0
West Java	66.7	70.6	+3.9	24.7	30.1	+5.4
Central Java	71.1	73.5	+2.4	39.7	45.6	+5.9
Yogyakarta	67.2	70.0	+2.8	51.0	59.7	+8.7
East Java	71.7	74.6	+2.9	35.6	43.1	+7.5
Sumatra	67.7	68.6	+0.9	33.0	39.2	+6.2
Kalimantan	69.4	72.6	+3.2	37.2	41.4	+4.2
Sulawesi	65.0	68.8	+3.8	21.0	29.2	+8.2
Other Islands	65.7	71.2	+5.5	35.5	47.6	+12.1
TOTAL	68.4	71.2	+2.8	32.7	39.2	+6.5

Source 1980 and 1990 Censuses

From ILO, 1993 Table 3.3

Central Java and Other Islands (other than Java, Sumatra, Kalimantan, or Sulawesi) have the highest female participation rates, which approach 50%, Sulawesi and West Java, including Jakarta (because it is entirely urban) have the lowest female participation rates, at around 30%. At the provincial level, Bali, East Nusa Tenggara and Yogyakarta have the highest female participation rates, at around 60% (Ministry of Manpower, 1993, p 148). Not only do the Other Islands have the highest female participation rate among the regions, they also experienced the highest intercensal increase in participation rates for both men and women (Ministry of Manpower, 1993, p 146)

## 2 Gender-Based Differences in Sectors

### a Formal/Informal Sector Breakdown<sup>8</sup>

#### • Overview

It can be shown from Table A 4 that, for the economy as a whole, formal sector employment grew by 76% during the intercensal period 1980-90, compared to 29% for informal sector employment. Despite the more rapid growth of formal sector employment, the informal sector still employed over 63% of the total Indonesian labor force in 1990, with 60% of male workers and 68% of female workers defined as having informal work status. The vast majority of agricultural employment is informal in nature, with Table A 5 showing a steady 83% of agricultural workers considered informal in both 1980 and 1990. For the non-agricultural sectors, however (except for transport), formal sector employment has been growing much faster than informal sector employment. By 1990 44% of non-agricultural employment was informal.

#### • Female Formal/Informal Sector Employment

Female employment grew faster than male employment during 1980-90, in both the formal and informal sectors and among family workers. Therefore, as Figure A 3 illustrates, the female share of total, formal and informal employment rose over the intercensal period, and within the latter, the female share of family workers also grew. Female informal sector workers increased by 42% during the intercensal period, but 75% of that increase was due to an 80% increase in unpaid female family workers (from Table A 4). Analysis of employment in the formal and informal sectors sheds further light on the problem of data consistency.<sup>9</sup>

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<sup>8</sup> Formal sector employment is defined to consist of employers and employees. Informal sector employment is defined to consist of the self employed, the self employed assisted by temporary help, and (unpaid) family workers.

<sup>9</sup> Data on formal/informal sector labor does not, strictly speaking, represent labor force participation. Rather, it excludes the openly unemployed. Open unemployment is primarily an urban phenomenon, with urban unemployment rates three times rural rates (Ministry of Manpower, 1993, p 89). The distinction between a formal sector employer and an informal sector self-employed is often blurred, as is the distinction between informal

*Table A.4*  
Indonesia Change in Formal and Informal Sector Employment  
by Gender 1980 and 1990

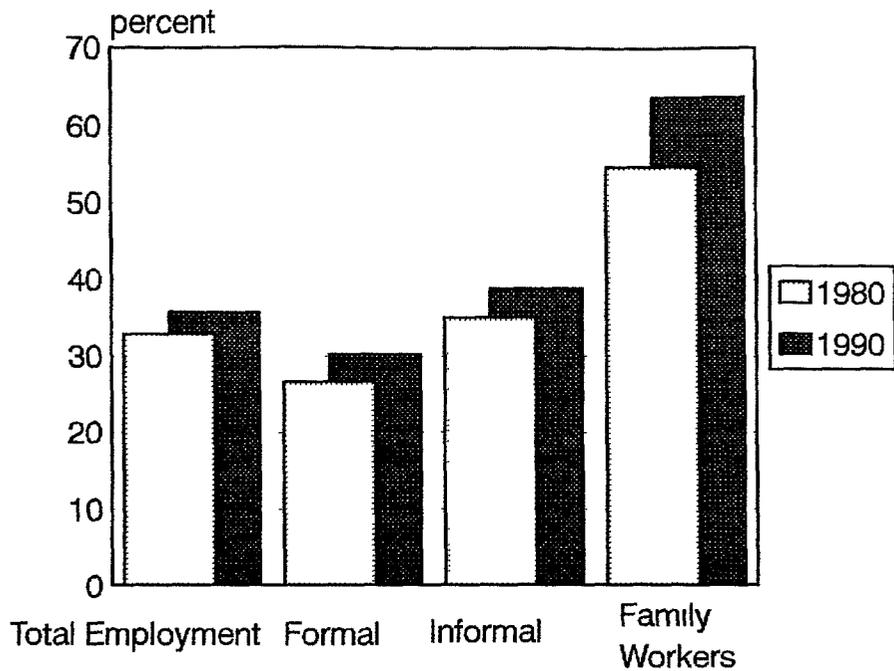
	Number				Percent Growth	
	1980		1990		1980 1990	
	Male	Female	Male	Female	Male	Female
Self Employed	9 666 373	3 617 067	9 827 313	4 318 187	1 66	19 38
Self Employed assisted by temporary help	9 222 508	3 884 370	12 915 026	4 440 680	40 04	14 32
Family Worker	4 077 154	4 909 752	5 024 951	8 835 740	23 25	79 96
TOTAL INFORMAL	22 966 035	12 411 189	27 767 290	17 594 607	20 91	41 76
Percent	66 6	74 3	60 1	68 2		
Employer	723 239	180 693	828 795	243 636	14 59	34 83
Employee	10 284 974	3 803 508	17 380 457	7 650 845	68 99	101 15
TOTAL FORMAL	11 088 213	3 984 210	18 209 252	7 894 481	65 42	98 14
Percent	33 4	25 7	39 9	31 8		
TOTAL	34 486 029	16 705 483	46 194 862	25 788 997	33 95	54 37

Source 1980 and 1990 Censuses

From ILO, 1993, Table 3.10

Figure A 3

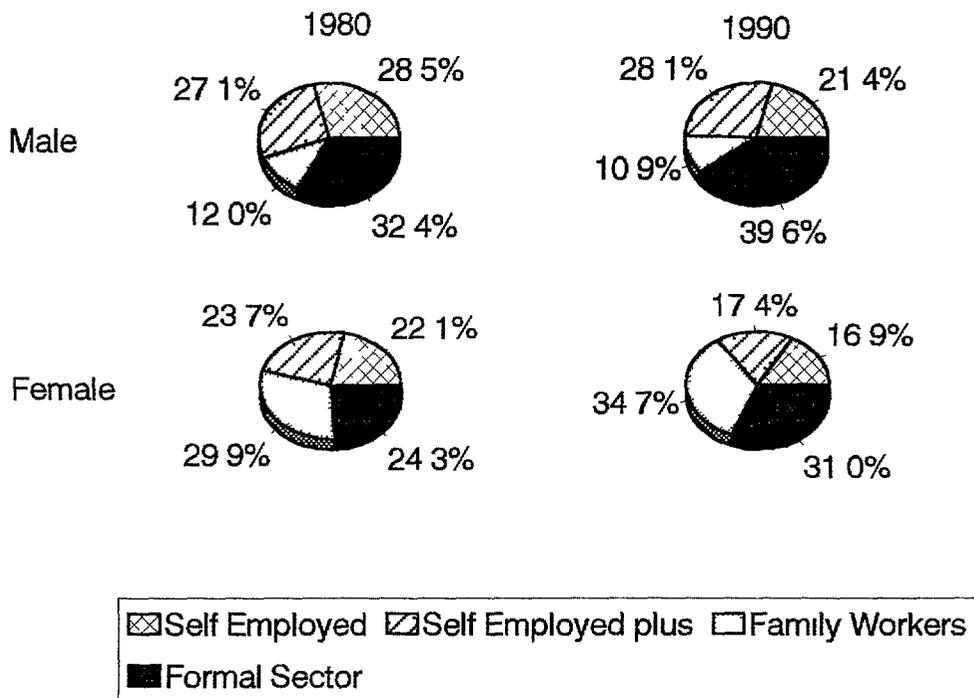
Female Share of Employment in the Formal & Informal Sectors



Source Table A 4

Figure A 4

Distribution of Male & Female Workers by Formal & Informal Employment



Source Table A 4

Calculations based on SAKERNAS data (reproduced in ILO, 1993, Table 3 12) reveal that **over 90% of unpaid female family workers live in rural areas**. Although the SAKERNAS estimate of family workers is much higher than the Census estimate, it nevertheless implies that, to the extent improved enumeration techniques are responsible for the intercensal increase in unpaid female family workers, this was mainly a rural phenomenon, mostly in agriculture and secondarily in trade. A much smaller portion of the increase is attributable to better coverage of unpaid female family workers in urban areas, mainly informal urban trade.

**The number of female formal sector employees doubled during the intercensal period 1980-90 -- from 3.8 million to 7.6 million -- yet still number considerably less than the 8.8 million female family workers.** Female participation in formal sector activities increased most rapidly in manufacturing and trade, although other services, which includes the civil service, still accounted for over one-third of formal sector female labor force participants. The share of females in formal trade nearly doubled and that in formal finance more than doubled (although the latter is still small, at 1.7% of total female formal sector workers). Although many of these female formal sector employees may earn low wages, these low wages are probably preferable to the paternalistic practice of being paid 'in kind', as is the case with family workers. Figure A 4 illustrates how the distribution of male and female employment between formal sector employment and the three types of informal sector employment changed during 1980-90.

- *Regional Differences in Formal/Informal Employment*

**Jakarta was the only region with more formal sector workers (over two-thirds) than informal**, yet Jakarta was also the only region where informal sector employment increased its share of total regional employment during 1980-90 (Ministry of Manpower, 1993, 160). West Java experienced a dramatic increase in the number of formal sector employees, as rapid formal sector job creation spilled over from Jakarta into the surrounding metropolitan area and other West Javan secondary cities. **West Java will become the second region where formal sector employment exceeds informal before the end of this decade.** Sulawesi, Sumatra and some of the other Outer Islands had the highest share of employment in the informal sectors (over 72%). Unfortunately, no gender-breakdown of formal/informal employment exists at the regional level.

- *Education and Formal/Informal Employment*

As one would expect, **better educated individuals tend to work in the formal, rather than**

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temporary help and formal employees, but the main difficulty relates to the identification of unpaid family workers, specifically, to the ability of Census enumerators to maintain a consistent methodology in performing this identification. As noted in an earlier footnote, coverage for unpaid family workers was significantly improved in the 1990 Census, whereas the professional enumerators who conduct the annual National Labor Force Survey (SAKERNAS) have maintained a more consistent approach since resuming annual surveys in 1987. Nevertheless, in spite of the methodological problems with the overall approach, it provides a good first approximation of formal and informal sector employment.

Table A 5

TABLE 53 Indonesia Proportion of Employment in Particular Sectors Which is Informal, 1980 and 1990

Sources Central Bureau of Statistics 1980 and 1990 Censuses of Indonesia

Industry Sector	Percent in Informal Sector	
	1980	1990
Agriculture	82 31	83 08
Mining	57 62	12 61
Manufacturing	45 23	28 74
Electricity	21 21	10 47
Construction	32 80	25 93
Trade	88 73	85 08
Transport	43 21	48 71
Bank and Finance	10 05	3 66
Other Services	34 17	20 54
Total	69 11	63 39

From, Ministry of Manpower, 1993, Table 53

the **informal**, sector (Ministry of Manpower, 1993, p 106) the 1990 Census showed that less than a quarter of those with no schooling were employed in the formal sector, whereas 72% of secondary school graduates were formal sector employees, as were 87% of those with tertiary education. The World Bank (1990, p 16) notes that **laborers experience a lower incidence of poverty than the self-employed**, implying that laborers (formal sector employees) are, on average, better-off than (informal sector) self-employed workers. This is based on data for both sexes taken together. But exceptions can be found, For example, curb-side 'hawkers' selling a wide variety of simple fare are estimated to earn approximately 15% more than manufacturing sector production workers.<sup>10</sup> In spite of the exceptions, a reasonable conclusion to draw is that **policies that promote the rapid growth of wage labor, those that draw workers out of self-employed status in the informal sector (and certainly out of unpaid family worker status) will reduce poverty**. It is also reasonable to assume that rapid growth of female wage labor will reduce poverty among women in the same way.

- *The Concept of 'Earning Workers'*

Pernia and Wilson (1989) pay special attention to what they call 'earning workers', defined as **employed workers less (unpaid) family workers**.<sup>11</sup> They argue that the concept of 'earning workers' presents a better picture of Indonesia's labor market conditions than does labor participation. Participation rates as 'earning workers' for males reached 60% in 1976 and have remained stable since, both during the boom period through 1981 and the 1982-86 recession (Pernia and Wilson, 1989, p 26). For females, **participation rates as 'earning workers' continued to increase slightly from 1976 to 1982, then remained stable at nearly 22% through 1986**, as increasing numbers of female labor force participants moved into unpaid work. Thus, the decline in participation rates for those aged 10-19 means that participation rates for 20-59 year olds increased more, between 1982 and 1986, than the global figures indicate. The 1990 Census updated this data, indicating that participation as 'earning workers' remained fairly stable through 1990.

**To the extent that female workers are supplementary earners, their labor market behavior is especially sensitive to economic conditions.** Rapid economic growth significantly increases the number of female wage earners, at the expense of family workers, and vice versa. The increasing numbers of female family workers during 1983-86, even as female "earning workers" remained constant, reflects the recession. The boom years from 1989 onward should have witnessed a reversal of this trend. Indeed, the number of family workers did decline between 1987 and 1990, then remained constant through 1992 (annual SAKERNAS studies, as reproduced in Ministry of Manpower, 1993, pp 57-58).

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<sup>10</sup> From an interview with staff of the USAID-funded Development Studies Program

<sup>11</sup> Family workers do not go unpaid in the strict sense -- they no doubt receive room and board -- but because of this 'in kind' form of remuneration, family workers should not be considered as fully integrated members of the labor force. Approximately 80% of family workers are employed in agriculture and a disproportionately large share of all family workers are women.

Figure A.5

# Share of Employment & Share of Employment Growth



27A

Source Table A 6 and SAKERNAS (1989-93)

276  
~~8.1~~ A.6  
 TABLE 34

Indonesia Distribution of Employed Persons  
 According to 1961 1971 1980 and 1990 Censuses

Industry	Males				Females			
	1961	1971	1980	1990	1961	1971	1980	1990
Absolute Numbers ( 000)								
Agriculture	17 649	17 391	19 671	23 311	6 331	8 429	9 081	12 690
Mining	78	86	326	596	11	6	60	147
Manufacturing	1 226	1 597	2 652	4 838	722	1 511	2 116	3 666
Construction	570	749	1 616	2 802	22	10	40	75
Trade	1 534	2 402	3 492	5 460	704	1 902	3 225	5 314
Transport	677	926	1 448	2 652	25	19	22	44
Services	2 071	3 033	5 170	6 531	1 069	1 149	2 274	3 855
TOTAL	23 805	26 184	34 375	46 296	8 884	13 026	16 818	25 791
Percentage Distribution								
Agriculture	74.2	66.4	57.2	50.5	71.2	64.7	54.0	49.2
Mining	0.3	0.3	1.0	1.3	0.1		0.4	0.6
Manufacturing	5.2	6.1	7.7	10.5	8.1	11.6	12.6	14.2
Construction	2.4	2.9	4.7	6.1	0.2	0.1	0.1	0.3
Trade	6.4	9.2	10.2	11.8	7.9	14.6	19.2	20.6
Transport	2.8	3.5	4.2	5.7	0.3	0.1	0.1	0.2
Services	8.7	11.6	15.0	14.2	12.2	8.8	13.5	14.9
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Intercensal Change Average Annual Percentage								
	Males				Females			
	1961 1971	1971 1980	1980 1990		1961 1971	1971 1980	1980 1990	
Agriculture	0.1	1.4	1.8		2.9	0.8	4.0	
Mining	1.0	16.0	8.3		-	-	14.5	
Manufacturing	2.6	5.8	8.2		7.7	3.4	7.3	
Construction	2.7	8.9	7.4		-	-	8.8	
Trade	4.5	4.2	5.6		10.4	6.0	6.5	
Transport	3.1	5.1	8.3		-	-	10.0	
Services	3.8	6.1	2.6		0.7	7.9	7.0	
TOTAL	1.0	3.1	3.5		3.9	2.9	5.3	

Source Population Censuses  
 From ILO, 1993, Table 34

b Sectoral Breakdown of Employment

Table A 6 presents Census data illustrating the historical evolution of the sectoral breakdown of male and female employment. The most pronounced long-term trend, however, is **the continuing decline in the share of agricultural employment, from almost three-quarters of total employment in 1961 to half of total employment by 1990**. This decline has been dramatic for both men and women, but slightly faster for men.

Even though agriculture's share of total employment declined markedly between the 1961 and 1990 Censuses, the absolute number of those employed in agriculture continued to increase. SAKERNAS data through 1993, however, indicate that **the absolute number of Indonesians employed in agriculture peaked in 1990-92**, at 42 million, then declined to 40 million in 1993. Figure A 5 illustrates how each major sector contributed to growth in total employment during 1989-93, compared to its share of total employment in 1990. As can be seen, agriculture is no longer absorbing additional labor. Gender-disaggregated SAKERNAS data for 1987-91, as shown in Table A 7, indicate that the absolute number of females employed in agriculture grew by less than 1% during 1987-91, compared to 6% for males. With the absolute number female agricultural workers slowing faster than the number of male agricultural workers, it is likely that female agricultural employment has also peaked.

**In contrast to the continuing decline in agriculture's share of total employment, all other sectors increased their share during 1980-90.** The period begins in 1980, at the height of the oil boom, and ends just as the non-oil export boom is taking off, after passing through an intervening period of recession. It is this combination of boom, bust and boom that transformed the structure of employment. Figure A 6 illustrates that transformation in the sectoral distribution of male and female employment. Figure A 7 illustrates the increase in female employment by sector from a slightly different angle -- the change in the female share of sectoral employment.<sup>12</sup>

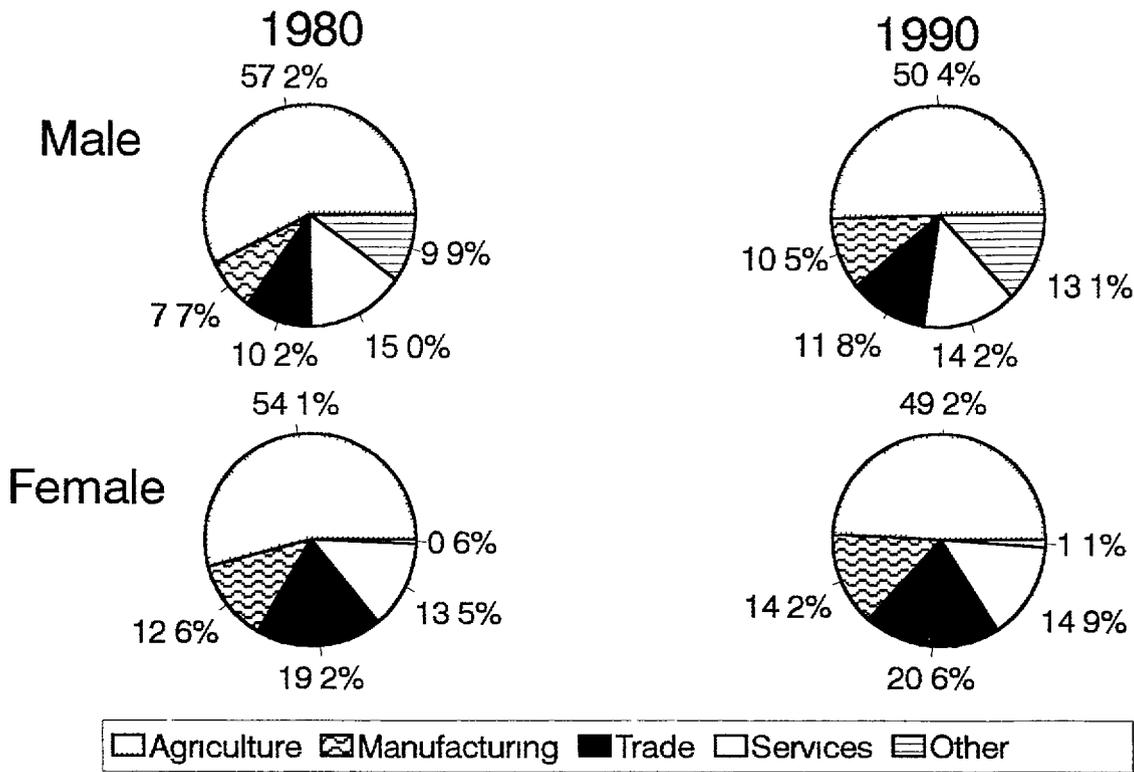
**Transport and construction.** By 1990 the share of **transport and construction** employment increased to 7.7%, but these are sectors where **insignificant numbers of women are employed**.

**Manufacturing.** Census data show that male employment in manufacturing grew faster than female employment over the intercensal period. This anomaly is explained in greater detail

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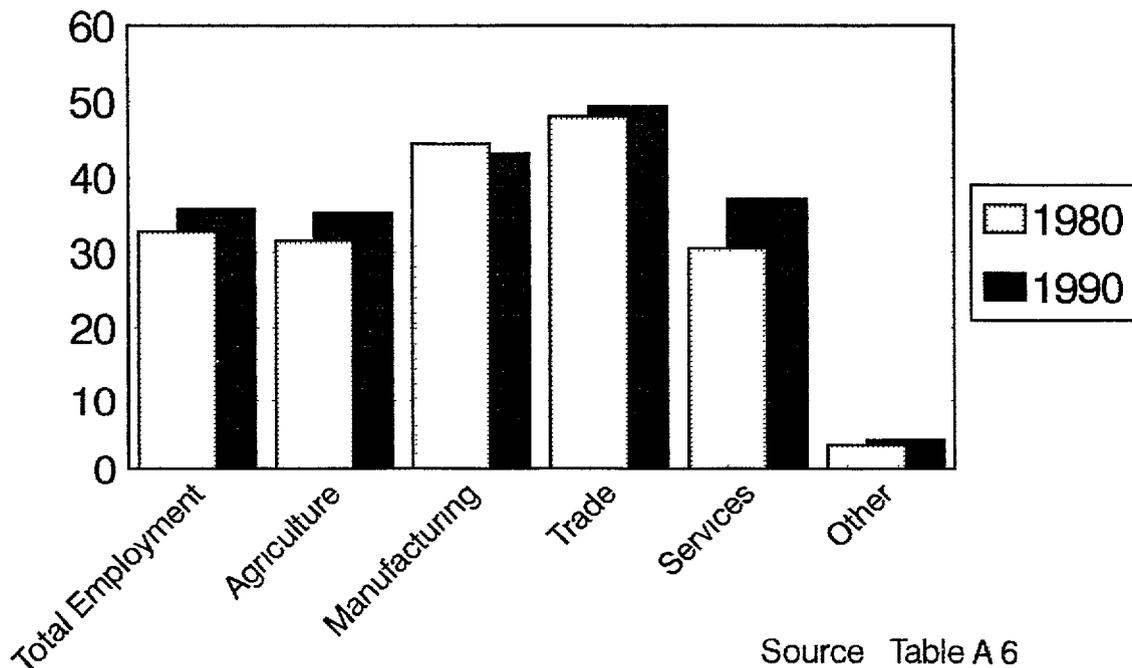
<sup>12</sup> Nine major industrial sectors are identified in the Indonesian Census data, plus an Others category. Some involve relatively homogenous activities, such as agriculture, forestry, hunting and fishing -- **agriculture** for short, mining, petroleum and quarrying -- **mining** for short, **manufacturing, construction, and transport, storage and communication** -- **transport** for short. The three remaining sectors are more complex in composition: wholesale and retail trade, restaurants and hotels -- **trade** for short, financing, insurance, real estate and business services -- **finance and business services** for short, and so-called 'public services,' which includes government, personal services and housemaids -- **public services** for short. The term **services** often groups finance and business services with public services, and on occasion may even include transport and trade.

Figure A 6  
Sectoral Distribution of Employment



Source Table A 6

Figure A 7  
Female Share of Employment in the Major Economic Sectors



Source Table A 6

below in the section devoted to manufacturing. But SAKERNAS data for 1987-91 indicate that this trend has, indeed, been reversed, **female employment in manufacturing seems to have increased faster than male manufacturing employment during the early years of the recent non-oil export boom**

**Trade** By 1990, the share of female employment in trade, including restaurants and hotels as well as petty trade, exceeded 20% nationwide, and exceeded 37% in urban areas (in 1991). Total trade sector employment was about evenly divided between urban and rural areas in 1991, with **slightly more women working in rural than urban trade** and the reverse true for men. Whether urban or rural, the trade sector is dominated by informal sector employment relations to a slightly greater degree than agriculture, with 85% of trade employment defined as informal.

**Services** The share of service sector employment (which includes such activities as government and commercial and personal services) rose to over 14% by 1990. **Female service sector workers increased faster than male service workers, increasing their share of services sector employment from 31% to 38%**. And service sector employment became increasingly formalized, with more women entering the government, possibly also commercial services, and according to the ILO's *Comprehensive Women's Employment Strategy* (1993, p. 33), "a corresponding decline in personal services housemaids" over the period.

**Other sectors** Finance and business services, a sub-sector of services, employs small numbers of people, accounting for less than 1% of total employment in 1990, but its growth has been dramatic over the intercensal period. So was the growth of mining employment, which accounted for 1% of total employment. Both sectors have witnessed extremely rapid growth of female employment. **And the degree of formalization is high in both sectors: 96% in finance and business services and 87% in mining**. Therefore, the quality of employment in these sectors may also be high.

In summary, female non-agricultural employment has been strongest in trade (along with agriculture the sectors most dominated by informal work status). Although to a smaller extent in services and manufacturing, female employment growth has also been strong in those sectors. **Most services and manufacturing, along with mining, finance and perhaps tourism, provide women with the best opportunities for improving the quality of jobs they get**. By comparison, growth of male employment has been more evenly distributed across the different sectors of the economy.

### c Manufacturing Sector Employment

**The manufacturing sector has been the driving force for Indonesia's recent non-oil export boom**. Anecdotal evidence as well as data from some micro studies indicate that **female workers constitute a large share of these (labor-intensive) export manufacturing industries in Indonesia**. This is similar to the role women played in export manufacturing in the development of NICs such as Taiwan, Korea, Malaysia and Thailand. Therefore, the manufacturing sector will be treated in greater detail.

**Manufacturing activity is heavily concentrated on Java**, with nearly 77% of manufacturing employment located there in 1990 (Ministry of Manpower, p 78) Rapid growth of (large-scale) wood-based industries in the Outer Islands during the 1980s (especially Sumatra and Kalimantan) meant that concentration of all other manufacturing sub-sectors in Java in 1980 may have been even greater than 75% Since 1990, the concentration of rapidly growing labor-intensive export manufacturing industries on Java, especially in the Greater Jakarta metro area, imply that the overall concentration of manufacturing employment on Java has increased And within Java, geographical concentration in Jakarta and surrounding areas of West Java intensified during 1980-90

As shown in Table A 7, urban manufacturing employment is growing fast Nevertheless, as of 1991 more than half of manufacturing employment was still located in rural areas<sup>13</sup> Male manufacturing workers are evenly divided between rural and urban **Although female manufacturing workers are relatively more concentrated in rural areas**, the rural bias of female manufacturing employment has narrowed markedly since 1987 **Female manufacturing employment in urban areas more than doubled during the four-year period 1987-91**, while male manufacturing employment increased by 60% This compares to relatively equal growth rates of total female and male urban employment over the same period (36% vs 32.6%) The rapid growth of female manufacturing employment in urban areas has probably continued through the early 1990s because it is assumed that the great majority of non-oil export firms have located in urban areas

**Manufacturing employment increased faster in large- and medium-sized firms during the intercensal period than in small enterprises (117% to 63%)**, especially off-Java where the wood products industry was booming (Ministry of Manpower, 1993, p 78) Whereas 86% of employment in large- and medium-size manufacturing was concentrated in Java in 1980, Java's share fell to 76% by 1990 And as one would expect, employment in **large and medium-sized manufacturing firms is concentrated in and around urban areas**, with 72% in the major cities and surrounding districts (Jones and Manning, p 392) In spite of this rapid growth in the large- and medium-size firms, smaller firms and cottage industries still employed 60% of total manufacturing employment in 1990, a result consistent with rural bias of manufacturing employment

It is important to note, however, that the rapid growth of large- and medium-sized manufacturing firms (the modern manufacturing sector) has not translated into as rapid growth in overall manufacturing employment because **the growth of modern manufacturing often displaces cottage (informal) manufacturing enterprises that compete in the same or similar products, such as textiles** Jones & Manning (1992, p. 391) hypothesize that many of the smaller manufacturing firms, and all of the cottage industries, are informal and located in rural areas, and that female unpaid family workers constitute a large share of their displaced employment, for example, the female-dominated cottage industries of Central Java and

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<sup>13</sup> Rural, as used by the Central Bureau of Statistics, includes peri-urban areas, much of what is registered as rural manufacturing employment locates in these and other rural areas where the electricity grid has been extended

Table ~~B.2~~ A.7

TABLE 41 Indonesia Growth of Employed Persons by Industry in Urban and Rural Areas, 1987-1991

Sources Central Bureau of Statistics 1987 and 1991 National Labour Force Survey

	Male				
	1987		1991		Percent Increase 1987-91
	Number	Percent	Number	Percent	
<b>Urban</b>					
Agriculture	927 370	9.4	1,559 361	11.9	68.1
Manufacturing	1 416 702	14.3	2 258 603	17.2	59.4
Trade	2 284 735	23.1	3 032 853	23.1	32.7
Services	4 002 674	40.5	4 907 615	37.4	22.6
Other	1 255 165	12.7	1 354,546	10.3	7.9
Not Stated	933		0	0.0	
<b>Total</b>	<b>9 887,579</b>	<b>100.0</b>	<b>13 112 978</b>	<b>100.0</b>	<b>32.6</b>
<b>Rural</b>					
Agriculture	22 256 080	68.3	23 732 082	69.6	6.6
Manufacturing	1 767 489	5.4	2 152 062	6.3	21.8
Trade	2 697 868	8.3	2,595 301	7.6	-3.8
Services	4 199 017	12.9	3 974 210	11.6	-5.4
Other	1 671 763	5.1	1 662 439	4.9	-0.6
Not Stated	522		0	0.0	
<b>Total</b>	<b>32 592 739</b>	<b>100.0</b>	<b>34 116 094</b>	<b>100.0</b>	<b>4.7</b>
<b>Female</b>					
	1987		1991		Percent Increase 1987-91
	Number	Percent	Number	Percent	
	<b>Urban</b>				
Agriculture	407 600	7.9	674 699	9.6	65.5
Manufacturing	675,473	13.0	1 413 093	20.1	109.2
Trade	2 147,705	41.5	2 646,885	37.6	23.2
Services	1 603 444	31.0	2 215 616	31.5	38.2
Other	343,528	6.6	90,229	1.3	-73.7
Not Stated	782		0	0.0	
<b>Total</b>	<b>5 178,532</b>	<b>100.0</b>	<b>7 040,522</b>	<b>100.0</b>	<b>36.0</b>
<b>Rural</b>					
Agriculture	15 131 039	66.5	15,239 649	68.8	0.7
Manufacturing	1 958 790	8.6	2 122 592	9.6	8.4
Trade	3 330 881	14.6	3 155 616	14.2	-5.3
Services	1 394 642	6.1	1 442 113	6.5	3.4
Other	927,627	4.1	193 615	0.9	-79.1
Not Stated	614		0	0.0	
<b>Total</b>	<b>22 743,593</b>	<b>100.0</b>	<b>22 153,585</b>	<b>100.0</b>	<b>-2.6</b>

From Ministry of Manpower, 1993 Table 41

Yogyakarta Family workers account for 40% of informal sector manufacturing employment (Ministry of Manpower, 1993, p 100), and informal sector manufacturing is probably a rural phenomenon **Extending the hypothesis one step further, if the female family labor displaced from cottage manufacturing returns to the agricultural and trade sectors, it would help explain why female employment increased so much faster than male employment in the agriculture and trade sectors during 1980-90, and why agriculture and trade absorbed the lion's share of family workers during the same period (Ministry of Manpower, 1993, p 100)**

Table A 5 shows that **manufacturing employment became much more formal over the period 1980-90** Within the formal manufacturing sector, the number of employers declined while the number of employees nearly tripled (Ministry of Manpower, 1993, p 100) Both these trends are consistent with the increasing urban nature of manufacturing employment and the increasing share of manufacturing employment in large and medium-sized firms Table A 8 shows that **female employment in the formal manufacturing sector increased faster than male employment, whereas female employment in informal sector manufacturing grew slower than male employment in informal sector manufacturing** This helps explain the apparent inconsistency between an overall decline in the female share of manufacturing employment during 1980-90 and an increase in the female share of formal sector manufacturing employment, with growth of female employment in non-oil export manufacturing firms being an example of the latter It also jibes with the displacement theory highlighted in the paragraph above, if most of those displaced workers in cottage manufacturing were females

d Employment in the Trade and Service Sectors

**Trade and services are even more important employers of Indonesian women** During the 1970s and 1980s, trade and services absorbed the lion's share of the increase in the female non-agricultural labor force Table A 6 shows that trade absorbed 40% and services 31% Although most of the trade sector employment consists of low-productivity activities, this is less so for service sector employment, and the latter is 'modernizing' faster than the former But even the trade sector shows signs of modernization, with the boom in tourism (hotels and restaurants) and urban shopping centers

**The modernizing service sector has particular importance for women in urban areas** Banking employment, although small, grew rapidly over the period, and female employment in banking grew even faster, real estate and insurance, along with other business services, also seem to be growth sectors for women, whereas maid servants are declining in importance Jones and Manning (1992, p 395) note that **in rural areas, the service sector concentrates most of the better-educated workers, most of them government workers** This reflects large GOI investments in education and rural health facilities

Government is an important segment of the modern service sector The civil service accounted for 5% of the national labor force in 1990 (nearly 4 million workers), with more than one-third women at the Central Government level, most of them teachers, but only one-sixth women at the provincial and local level (Ministry of Manpower, 1993, pp 38 & 79) This implies that

F P  
Table ~~B7~~

Indonesia Percent Distribution of Formal and Informal Sector  
Workers by Industry and Sex 1980 and 1990

INDUSTRY SECTOR	1980				1990			
	FORMAL		INFORMAL		FORMAL		INFORMAL	
	Male	Female	Male	Female	Male	Female	Male	Female
Agriculture	28 10	38 86	69 51	57 34	22 58	23 70	68 03	59 73
Mining	1 14	0 32	0 72	0 39	2 88	1 26	0 19	0 21
Manufacturing	14 15	19 37	4 05	8 40	19 58	28 84	3 88	7 27
Electricity	0 53	0 16	0 06	0 03	0 62	0 13	0 05	0 01
Construction	9 09	0 81	2 18	0 13	11 18	0 78	2 61	0 05
Trade	4 63	3 61	12 69	23 78	5 91	6 31	15 51	26 58
Transport	7 22	0 44	2 73	0 05	1 79	0 47	4 64	0 03
Bank & Finance	1 58	0 78	0 08	0 03	2 11	1 66	0 06	0 02
Other Services	32 61	34 53	7 08	8 33	26 83	35 55	4 24	4 63
TOTAL	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00

Source 1980 and 1990 Censuses

From ILO, 1993, Table 3 11

decentralization of governmental functions, responsibilities and employment may not be such a good thing for women as government employees **But fiscal restraint since the oil price declines of the early 1980s have markedly slowed growth in the civil service** This helps explain why the service sector was unable to play as dynamic role in providing employment for the better-educated during the 1980s as it did during the 1970s when government oil revenues were plentiful

### 3 Gender-Based Differences in Occupations

#### a Occupational Breakdown of Employment<sup>14</sup>

Figure A 8 illustrates the change in the occupational breakdown of male and female employment during the intercensal period 1980-90 Half of Indonesian workers, both men and women, are farmers -- no surprise given the sectoral breakdown highlighted above Turning to non-farm occupations, men are heavily concentrated in production and women in sales and services But the apparent concentration of male workers in the production occupation, masks a diversity that is not present among the smaller share of female production workers, to wit, that male production workers consist not only of manufacturing production workers large numbers of construction laborers and transportation workers Female production workers, on the other hand, consist almost entirely of manufacturing production workers Thus, **men are more broadly represented across all occupations, women tend to concentrate in sales and (manufacturing) production** The occupation with the highest quality jobs is probably the professional/administrative/clerical category Within that category, a large share of employed females (4.5%) work as professionals compared to 3% of employed males, with the great majority of professionals of both sexes being teachers Men, in contrast, predominate in clerical and related fields (6% of employed males vs 3% of employed females) Administrative and managerial personnel are small in number -- less than 0.2% of total employment

Beyond this simple occupational breakdown, it is interesting to observe how occupations cross with industrial categories Table A 9 presents the detailed cross tabulation of occupations and industrial sectors<sup>15</sup> in Indonesia The highlights include the following

The sales occupation is essentially equivalent to the trade industry (industry #6), with the intersection comprising over 95% of both categories

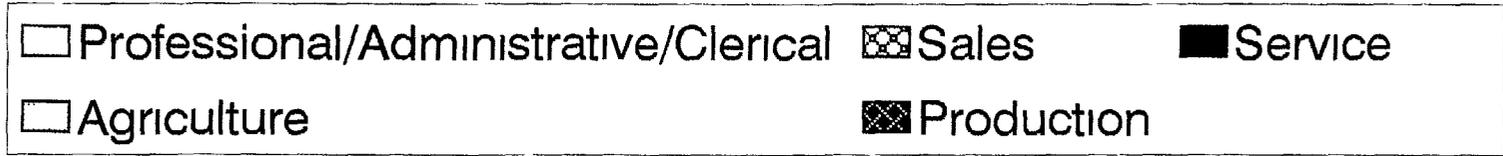
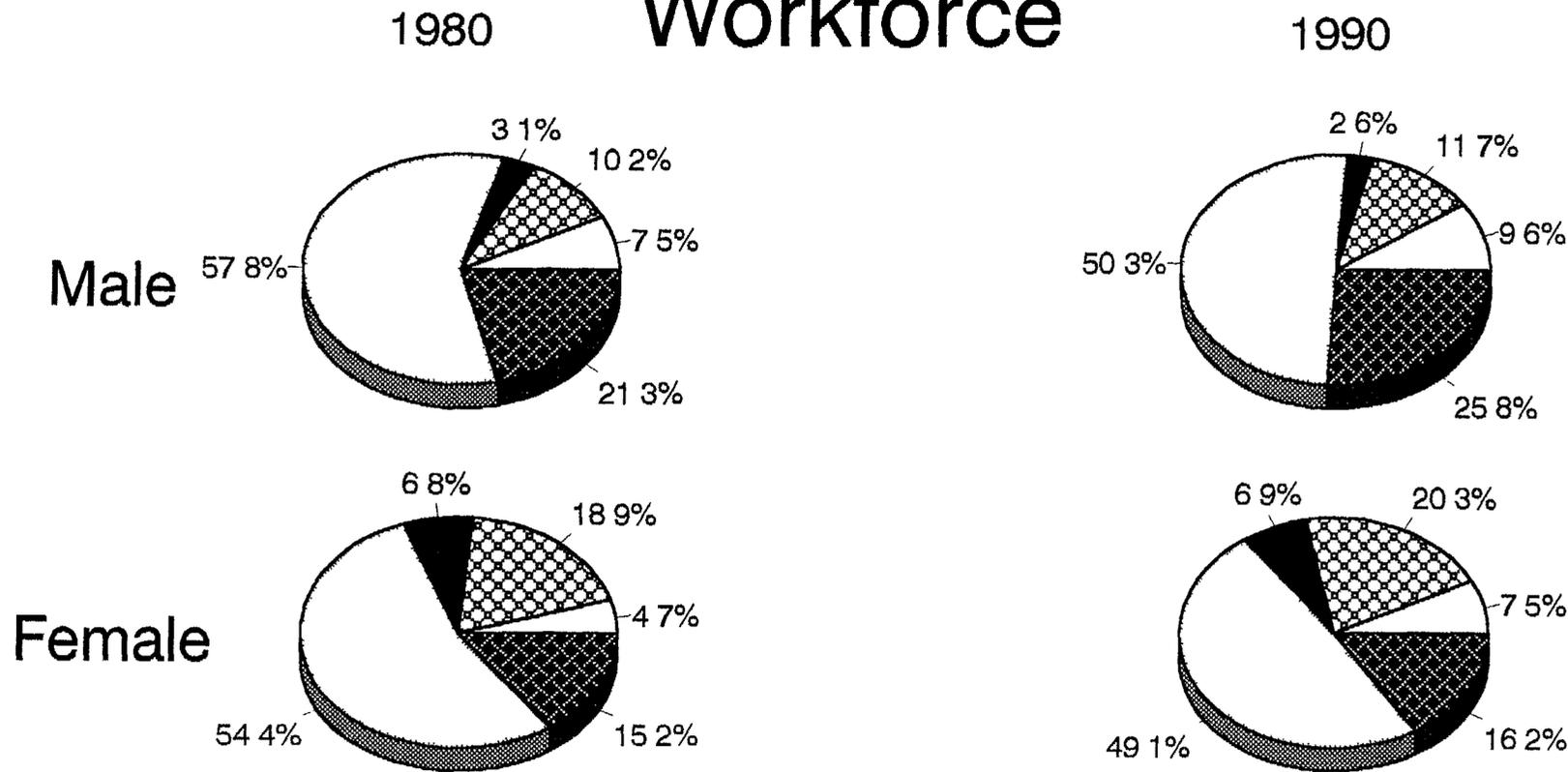
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<sup>14</sup> The Indonesian Census of Population and Housing identifies seven occupational groups, plus an Others They are defined as follows professional, technical and related workers -- **professionals** for short, administrative and managerial workers -- **administrative** for short, clerical and related workers -- **clerical** for short, sales workers, service workers (an extremely vague term), agriculture, animal husbandry and forestry workers, fishermen and hunters -- **agricultural workers** for short, and production and related workers, transport equipment operators and laborers -- **production workers** for short

<sup>15</sup> Note that the numbered industries across the top of the table are 'decoded' on the second page of Table B 8

Figure A.8

# Occupational Breakdown of the Indonesian Workforce



Source U.S. Census Bureau, 1993, Table I-H3

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Table A 9

Table I H4 Economically Active Population by Occupation, Industry and Sex, for Indonesia  
1971, 1976, 1980, 1985 and 1990 continued

Year, occupation and sex	I n d u s t r y											
	Total	1	2	3	4	5	6	7	8	9	10	11
1990												
Total												
Both sexes	71 983 859 35,450,385	733,205	8,221,155	15 511	2,841 656	10,593 313	2,663,810	535,969	9,695,920	33,446	1,069,489	
Male	46,194,862 23,039,196	588,721	4 654 527	26,139	2,768,775	5,395,770	2,621,077	400,691	6,060,003	24,359	515 704	
Female	25,788,997 12,411,189	144,484	3 566,628	19 41	72,881	5,197,543	42,733	135,278	3 635 917	9 087	553,785	
Professional, technical and related workers												
Both sexes	2 603 802	6 184	6 654	33 160	8,797	26 457	7 389	9 913	19 812	2,445 767	14,622	25,047
Male	1 465,113	5 711	5 554	28,345	7,999	23 694	4 502	9,064	14,429	1,343,314	10,004	12,497
Female	1 138,689	473	1,100	4,815	798	2,763	2,887	849	5,383	1,102 453	4,618	12,550
Administrative and managerial workers												
Both sexes	110 726	218	1,481	38,213	1 678	17 167	5 943	5,412	17,013	22,273	218	1,110
Male	95,204	218	1 481	32 398	1 215	16 828	4,913	4 540	13,880	18,403	218	1 110
Female	15 522	0	0	5 815	463	339	1 030	872	3 133	3 870	0	0
Clerical and related workers												
Both sexes	3 588 430	28,663	24 571	2 5 12	20 211	10,111	28 311	222,827	356 177	2 538 797	520	31,286
Male	2,841 219	22 575	20,908	152,692	6 18	31 361	9 11	201 121	255 675	2,066 411	302	24,376
Female	747 211	6 088	3 663	82 820	4 23	9,150	39 224	21 706	100,502	472,386	218	6,910
Sales workers												
Both sexes	10 521,625	27,657	2 988	70 063	225	3,071	10,190,338	6,306	63,474	90,987	450	65,766
Male	5,355,357	13 841	2,321	52 673	225	2 183	5,137 275	4,768	45,165	64,997	450	31,449
Female	5 166,268	13,816	667	17,390	1	888	5,053,063	1,538	18,309	25 990	0	34,317
Service workers												
Both sexes	2 951,891	10,550	6 596	64,675	1 19	3,7 7	132,419	13 888	29,051	2,610,853	482	28,363
Male	1,208 425	7,053	4,82	50 924	1 19	2 771	115,308	11,463	24,767	978,553	482	10,684
Female	1,743,466	3 497	1,773	13 751	1	946	16 111	2 425	4,284	1,632 300	0	17,679
Farmers												
Both sexes	35 603,625 35,235,478	19,316	70 318	678	2 658	25 534	4,001	795	70,222	0	164,625	
Male	23,125,612 22,879,881	20,334	44,765	239	2,234	17 131	4,001	561	55,759	0	101,207	
Female	12 478,013 12 355,597	8 982	26,053	439	424	8, 03	0	234	14,463	0	63,418	
Production and related workers, transport equipment operators												
Both sexes	15 971 658	141,635	661 594	7 708,512	11 698	2 748 067	92 201	2 401 234	49,370	1 912 936	4 024	140,382
Male	11 851,724	109,917	533,294	292 528	28,384	2 689 702	66 831	2 385 891	45 937	1 529 292	3 432	96 516
Female	4 119 934	31 718	1 8 305	3 415 984	13,314	58 365	25 370	15 343	3 433	383 644	592	43 866
Others												
Both sexes	19 428	0	0	111	220	0	549	229	277	4 085	13 130	236
Male	14 343	0	0	702	0	0	390	229	277	3 274	9,471	0
Female	5 085	0	0	0	220	0	159	0	0	811	3 659	236

Table A 9 (cont)

Table I H4 Economically Active Population by Occupation, Industry and Sex, for Indonesia  
1971, 1976 1980, 1985 and 1990 continued

Year, occupation and sex	Total	I n d u s t r y											
		1	2	3	4	5	6	7	8	9	10	11	
1990													
Not stated													
Both sexes	612,674	0	0	0	0	0	0	0	0	0	0	0	612,674
Male	237,865	0	0	0	0	0	0	0	0	0	0	0	237,865
Female	374,809	0	0	0	0	0	0	0	0	0	0	0	374,809

Notes

- 1 Agriculture, Forestry Hunting, Fishing
- 2 Mining and Quarrying
- 3 Manufacturing, Industry
- 4 Electricity, Gas, Water
- 5 Construction
- 6 Trade, Restaurants, Hotels
- 7 Transportation, Storage, Communication
- 8 Finance Insurance Real Estate, Business Services
- 9 Public Services
- 10 Others (not adequately defined)
- 11 Not stated

Source Indonesia Central Bureau of Statistics 1975, 1971 Population Census Jakarta, table 48, 1977, 1976 Intercensal Population Survey, Indonesian Labor Force Tabulation Series Number 2, Jakarta table 2  
1983 Results of the 1980 Population Census, Jakarta, tables 47 7, 4, 8 and 4, 9 1987, Results of the  
1985 Intercensal Population Survey, Jakarta, tables 47 7 47 8 and 47 9 and 1991 1990 Population  
Census Jakarta, tables 33 9

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The large number of men employed as production workers are spread broadly among the manufacturing (industry #3), transportation (industry #7), construction (industry #5) and public service (industry #9) industries. In contrast, most of the women categorized in the same occupation work as production workers in manufacturing.

More than 90% of all the female service workers are employed in so-called public services, but probably mostly personal services which includes housemaids.

Almost all professionals and three-quarters of clerical workers of both sexes work in the public service industry. These are mainly government employees, since the 4 million civil servants constitute about half of the public service industry, and within government, over 1.6 million civil servants were teachers in 1992 (BPS, 1992, p. 38). Most of the remaining female clerical workers are employed in manufacturing and finance, with a smattering in sales. Most of the remaining male clerical workers are employed in transportation (8%), manufacturing (6%) and finance (5%).

b Educational Attainment by Occupation

Educational attainment varies widely among occupations, just as it does among sectors. The U.S. Census Bureau (1993, Table I-H6) provides the source for the numerical conclusions cited below. **Farmers have the lowest education level of all occupations**—almost one-quarter of all farmers, and over one-third of female farmers, have no education at all, only 3% of all farmers and 1.5% of female farmers have received a senior secondary degree, and less than 0.1% of farmers have a university degree. **The most highly educated workers gravitate toward three occupational categories: professionals, administrative and clerical workers.** And the higher proportion of female administrative workers with university education and the higher proportion of female clerical workers with senior secondary degrees suggest that women must be better educated to compete for such jobs.

Although the number of administrative workers is small, approximately 80% have graduated from senior secondary school. Furthermore, 30% of the male administrative workers and **44% of the (much smaller number of) female administrative workers have university degrees.**

Over 70% of all clerical workers -- **87% of female clerical workers** -- have graduated from senior secondary school, while 16% of the female and 13% of the male clerical workers have received Academy III or university degrees.

Over 90% of male as well as female professionals have completed senior secondary school, 26% of the male and 16% of the female professionals have received Academy III or university degrees, and **over 60% of the female professionals have received senior secondary vocational degrees, representing**

**the large number of female primary school teachers in this occupation** This compares to 48% of male professionals with senior secondary vocational degrees

The other three occupational categories -- **sales, services and production** -- have education levels in between farmers and white collar workers, but **men in these three occupations have higher average educational attainment than the women**

Less than 0.5% of all workers in each of these three occupations have university degrees

For those who work in sales or as production workers, approximately 16% of the men but only 8% of the women have graduated from secondary school<sup>16</sup>

Among service workers, 24% of the men, but again only 8% of the women, have degrees from senior secondary school

Some 20% of the female production workers have no education at all

Figure A 9 looks at the relationship between occupation and educational level from the other side (a) shows the occupational breakdown for male and female graduates of primary and general junior and senior secondary school, (b) shows the occupational breakdown for junior and senior vocational and diploma graduates. For tertiary-level education, no illustration is necessary. 83% of female university degree holders and 75% of male university degree holders work as professionals or clerical workers. The great majority of Diploma I, II and III holders also gravitate to these two occupations, most of them as secondary school teachers. The great majority of rural elementary school graduates work as farmers, but many of them also work in production, sales and services. Female primary school graduates concentrate more in sales and services than do males, whereas a higher proportion of males work in production (29%) than females. **Junior vocational graduates are widely dispersed among the occupations, whereas and so are male senior vocational graduates, but female senior vocational graduates are concentrated in the professional occupation as primary school teachers**

#### 4 Gender-Based Differences in Management Positions

Data on occupation breakdown from Table A 9 show that **administrative personnel numbered only 110,000 in 1990 and are predominantly male -- 86%**. Of those women who do occupy such positions, more than one-third work in manufacturing, 20% in finance and banking and 25% in public services (government and business and personal services). From another angle, Table A 4 shows that of the over 1 million formal sector workers categorized as employers in 1990, 240,000 were women. More importantly, the number of female employers increased by

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<sup>16</sup> Recall, however, that male production workers include a wider variety of industrial sectors -- construction, transportation and public services as well as manufacturing -- than do women production workers who only work in manufacturing

35% over the intercensal period 1980-90, while the number of male employers increased by 15%

## 5 Gender-Based Differences in Job Quality and Remuneration

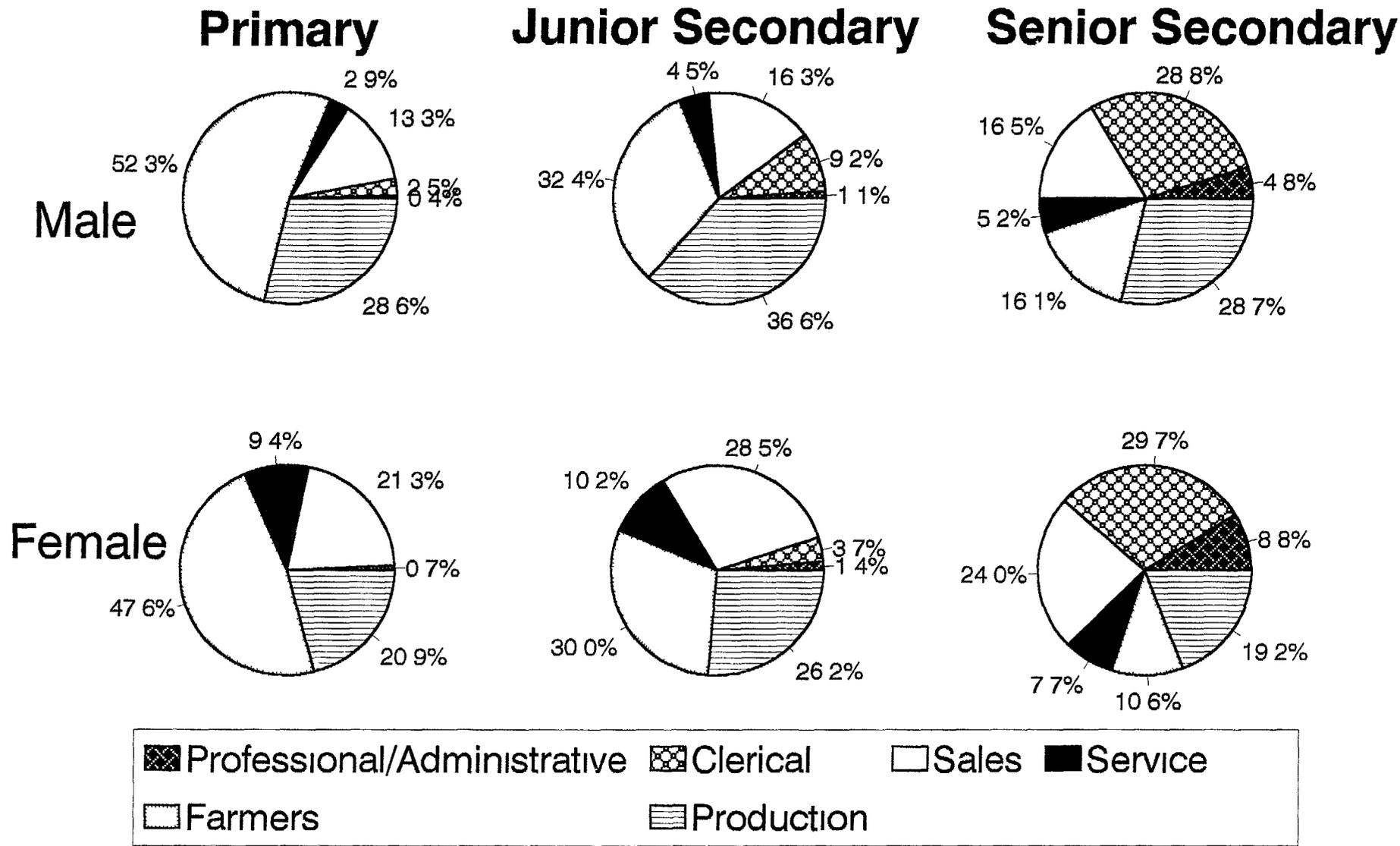
### a Job Quality

Job quality cannot be defined in terms of a single factor, it has a wide variety of dimensions -- job security, benefits, health and safety, stress of piecework, opportunities for upward mobility and training, cost-of-living. But earnings are arguably the main factor in determining job quality. At the low end of the job quality totem pole is unpaid family work in agriculture and trade. For females, this form of employment is large and growing. Of course, unpaid family labor plays a more or less important during different periods in a woman's life-cycle, and is particularly useful to women when they must care for small children and in their older years. Trade is largely an informal sector phenomenon, especially for women, who opt to work in informal trade only because other more desirable jobs are not available, for example, during economic downturns. **Compared to unpaid family work in informal trade and agriculture, increasing numbers of poor women are finding higher quality jobs in the labor-intensive, low-wage export manufacturing sector.** Although the number of male manufacturing workers increased faster than female manufacturing workers during 1980-90 (as well as during 1971-80), growth of female workers predominates in the labor-intensive export sub-sectors of garments, textiles and footwear, whose rapid growth has been the result of Indonesia's deregulation efforts over the past 7 or so years.

Employment opportunities in the service sector (as distinct from the ill-defined service occupation) vary widely but this sector includes most of the highest-quality jobs available to women. As noted above, housemaids at the low-quality end of service sector jobs for women are declining in importance. In contrast, **women are moving into higher-quality jobs in 'modern' sub-sectors of services (such as the civil service, business and financial services, personal services, including real estate).** To this should be added the modern sub-sectors of trade, including the rapidly growing tourism activities. This is where many of the secondary and higher educated women seek and find work -- salaries tend to be higher in these modern services, and other dimensions of job quality also tend to be better. Among the highest quality jobs are those in banking and financial services, although still small in number, opportunities for women are growing rapidly.

Educational levels of men and women employed in the different sectors reflect differences in the quality of jobs provided by these sectors. Pernia and Wilson (1989, p. 39) cite evidence from 1985 to show that **the service sector has the highest mean years of schooling, with urban manufacturing second.** That men still predominate in the service sector is at least partially explained by higher average male educational attainment -- mean years of schooling for females was 79% that of males in urban areas in 1985. In rural areas, the differential was even greater, with mean years of schooling for rural females 70% that of their rural male counterparts. However, these schooling differentials have probably narrowed slightly since over

Figure A.9 (a)  
**Graduates of "General" Schooling by Occupation - 1990**



Source: U.S. Census Bureau, 1993, Table I-H6

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Figure A.9 (b)

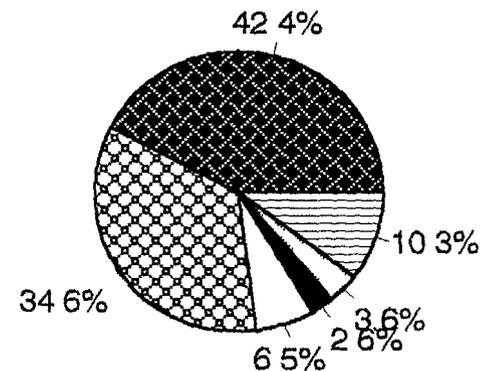
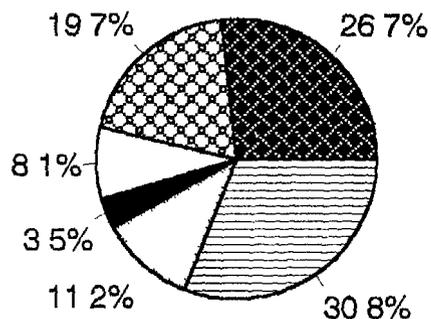
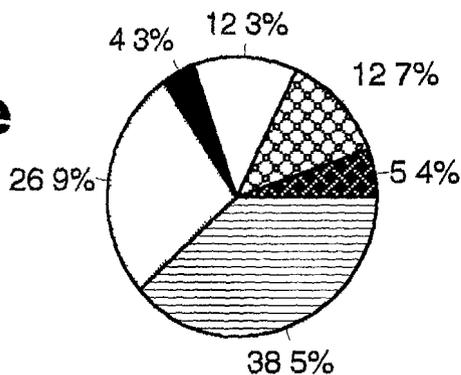
Vocational & Diploma Graduates by Occupation - 1990

Junior Vocational

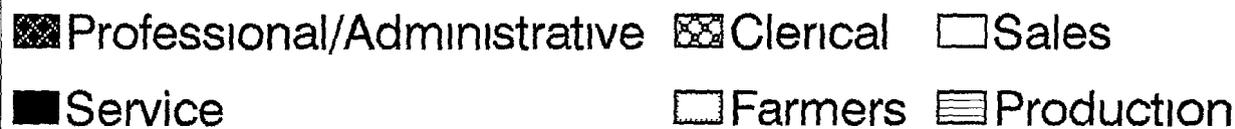
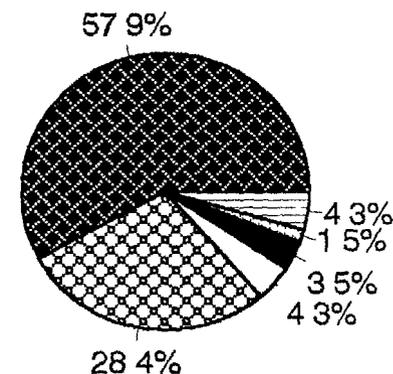
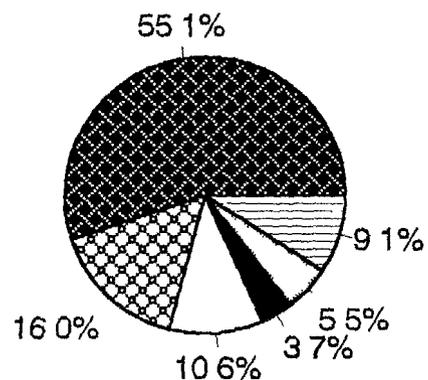
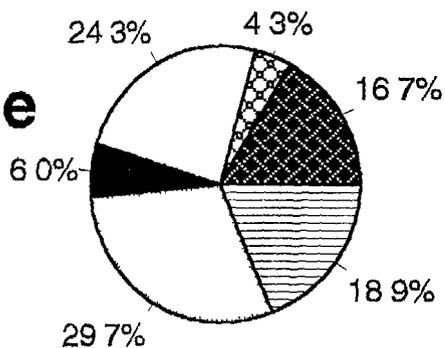
Senior Vocational

Diploma

Male



Female



Source U.S. Census Bureau, 1993, Table I-H6

35B

the past ten years

It is now possible to propose a working definition of 'modern occupations' and 'modern industrial sectors' for the purpose of identifying higher-quality jobs for women. Following Corner's (1987, p. 141) lead, 'modern occupations' for women include professional, technical, administrative, managerial and clerical as well as production workers (employees) in the manufacturing sector, while 'modern industrial sectors' include the civil service, commercial and financial services, some personal services and tourism, and non-cottage manufacturing. The term 'employee' as it applies to production workers is critical here, because it distinguishes between jobs in the modern vs. the cottage sector of manufacturing. The conclusion of all this is that **non-cottage manufacturing (especially export manufacturing for entry-level women) and modern services are high quality 'female work' in the good sense of the term.** These sectors constitute women's quickest and most effective route, as employees, into the modern part of the Indonesian economy. For example, entry-level production manufacturing jobs teach women some basic skills and work habits required of modern sector employees.

b Wages and Earnings

Turning to recent trends in real wages, two conflicting views dominate the discussion. One view asserts that real wages have not grown much, if at all, since 1965, due to **wage repression** associated with a lack of trade union freedoms. In contrast, the World Bank (1993b, p. 263) asserts that average earnings have grown as fast or faster than other newly industrializing countries like Singapore and Malaysia over the period 1970-90, because of the **power of rapid economic growth** to transform labor markets. Which view is true has an important bearing on the judgement whether Indonesian men and women are improving their economic well-being.

• Wage Trends for Unskilled Labor<sup>17</sup>

The truth is somewhere in between -- **real wages rise during periods of rapid economic growth and stagnate or fall during periods of slow growth or decline.** As Manning (p. 75) tells it, the story runs something like this: real wages declined during the slow-growth years prior to 1965, recovered in the early years of the New Order, sustained real growth during the oil boom period, stagnated during the recession years of the 1980s, and began to rise again in the 1990s. There is every reason to believe that this applies to women as well as men, indeed, possibly even more so to women because more women are new entrants to the labor force -- the last hired and first fired.

**Manning analyzed five sets of wage data for unskilled workers. Java rice wages, estate wages; unskilled construction labor; wages in Bandung textile manufacturing; and lower echelons of the civil service.** Table A 10 provides details on the growth of wages in each sector. Real wages grew between 2% and 6% per year over the period since 1971, with textile

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<sup>17</sup> The discussion of real wages is primarily derived from Manning (1994), unless otherwise noted.

TABLE 2 *Daily Real Wages and Wage Growth in Selected Activities*  
1971-72 to 1992-93<sup>a</sup>

Activity	Early Oil Boom 1971- 72	Late Oil Boom 1976- 77	Slower Growth 1980- 81	Non-oil Export Boom 1986- 87	1992- 93
Real wages (Rp 1983 prices)					
Rice	-	618	625	675	885
Estates	923	914	1,312	1,359	-
Textiles	410	734	1 051	1 049	1,424
Construction	896 <sup>b</sup>	1 064	1 889	2 184	2,194 <sup>c</sup>
Civil service	695	1 401	2 022	1,880	1,961
Growth (% p a )					
Rice	-	0.3	1.6	4.6	
Estates	-0.2	7.5	0.7	-	
Textiles	12.3	12.6	0	5.2	
Construction	3.5	15.4	2.9	0.1	
Civil service	15.1	9.5	-1.4	0.7	

<sup>a</sup>All data are two year averages<sup>b</sup>1972 only<sup>c</sup>1992 only*Sources*

Rice	BPS unpublished data various years average of monthly data unweighted mean of daily wage rates in hoeing (males) West Central and East Java (1976-October 1993)
Estates	BPS <i>Average Wages on Estates</i> various years average of half yearly data for permanent production workers (both sexes) Indonesia (1971-92)
Construction	Department of Public Works unpublished data average of monthly data for unskilled workers Jakarta (1972-November 1992)
Textiles	Perteksi (association of textile producers) annual agreements between Perteksi and the labour unions (SPSI), minimum wage for unskilled labour Bandung (1971-93)
Civil Service	Department of Finance unpublished data basic salary only Grade Ib Level 9 covering primary and lower secondary graduates Indonesia generally included in the budget and effective from April (1971-93)

From Manning, 1994, p 84

and public sector wages increasing the fastest (5% per year), wages in the two agricultural sectors increasing the slowest (1-2% per year), and wages of construction laborers increasing at 3% per year. The Java rice wage series is the only one of the five that does not coincide with the 'wage story' recounted above, rising during the slower growth period of the 1980s but not during the oil boom. Manning argues that **large rural labor surpluses during the 1970s kept rice wages down**. The other four wage series generally track the 'story'. Unfortunately, these data are not gender-disaggregated, nonetheless, the story they tell probably applies to women as well as to men, except for construction wages because few women work in construction.

It is noteworthy that the renewed upturn in real wages since 1991 is due to three main factors: a decline in fertility since the late 1960s, that began to reduce the supply of new entrants into the labor force by the mid 1980s, renewed growth of the Indonesian economy in 1989, based on the export-led boom in labor-intensive manufactures, and increased Government attention to minimum wages, especially in manufacturing. Recall that SAKERNAS data indicate that the manufacturing sector generated 25% of all new jobs created over the period 1989-93, even though it employed only 11% of the total labor force.

In summary, the conclusion to draw from these wage data is that real wages have risen during the New Order, and that they increased fastest in periods of rapid economic growth. **The lesson for Indonesian economic policy-makers is the following: creating and maintaining rapid economic growth is the most effective way to increase real wages.** To quote Manning (p 109),

"These issues are important to the current policy debate between 'economic rationalists' [the 'technocrats'] and 'technologists'. Fundamental to the former's argument is the premise that Indonesia is still a labour surplus economy, rapid labour absorption is of central significance to raising economic welfare, and labour-intensive export growth is the major vehicle for achieving this end. Critics of Indonesia's development record point to low and stagnant wages as an argument for greater government intervention in labour markets and areas of social policy. Our analysis suggests that given low and fluctuating trends in real wages, absorption of unskilled and semi-skilled labour in new job opportunities is still the most important employment challenge in the 1990s."

- *Regional and Skill-level Wage Differentials*

Wages vary across regions and by skill level. Regionally, wages in Java are the lowest of all provinces, but wage rates in Java grew faster during the 1980s (with the exception of Yogyakarta) than in other regions (Ministry of Manpower, 1993, p 166). In the 1970s, wage differentials of 3:1 for blue-collar skilled to unskilled workers existed, for supervisory staff the differential was around 4:1, and for professionals it ranged from 5-10:1 (Manning, p 104). Skill-based wage differentials have declined since 1977, probably due to the growing supply of secondary school graduates during the 1970s and 1980s. **The decline in skill-based**

differentials was most pronounced for male workers, implying that higher skilled female workers maintained a greater wage premium over their unskilled cousins. Nevertheless, some categories of employees in the modern private sector -- especially secretaries, accountants, financial analysts, engineers and managers -- receive very high wages, suggesting that a shortage of highly-qualified personnel is a major problem in this segment of the economy. These skill shortages are reflected in the inward migration of highly-skilled foreign workers and illustrate the continuing failure of the Indonesian educational system to provide sufficient qualified graduates, both men and women, in these technical areas

- Gender-based Wage Differentials

Manning's data (p. 102) on gender-based differentials in real wages for unskilled labor in the estate and Java rice sectors show that female wages are lower than male wages in both sectors. But the patterns of rise and decline for male and female wages over time are strikingly similar, leaving the size of the differential essentially constant, with the result that the overall rise in real wages during 1976-90 is roughly the same for men and women within each sector. Based on these comparisons, it is reasonable to conclude that a male/female wage differential exists in the other three urban wage series. It also may be reasonable to conclude that, like the wage differential in the two rural activities, the wage differential in the three urban trades has remained similar in magnitude since the mid-1970s, in which the overall rise in female wages would be about the same as that in the average wages for both men and women.

An ILO (1993, Tables 4.1 & 4.2) report presented data on gender-based wage differentials which show that female wages in manufacturing rose slightly faster than male wages over the period 1982-90, but still were only about 50% of the male manufacturing wage. The report also indicates that real agricultural wages on Java for female work (planting) increased by 1-2% over the period 1985-91, but remained approximately constant, on average, for male work (hoeing). Table A.11 shows gender-based wage differentials for production workers in eight different manufacturing sub-sectors. Wage differentials, defined in terms of the female wage as a percent of the male wage, are greatest for the food, drinks and tobacco industry (42%), the classic protected industry catering to domestic consumers. But no differential exists in the mining industry (99%), where very few women work. Wage differentials are moderate for two of Indonesia's most important export industries -- textiles, clothing and footwear (82%) and timber and furniture (76%). The average male/female wage differential for all manufacturing is 64%.

SAKERNAS data was used to obtain a gender-differentiated time series on hourly wages and weekly wage earnings over the period 1987-92, for men and women working throughout the Indonesian economy, without controlling for the sector in which they worked. The data appear in the right-hand column of Table A.12. The average ratio of female to male hourly wage over the five-year period was 67%, with the ratio increasing over the period to 69% in 1992. Since women worked on average 4-5 hours per week less than men, women's average weekly earnings over the five-year period was 58% that of men, but the earnings ratio also increased over the period and stood at 61% in 1992.

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4 11

Table ~~B-10~~

## Wages of Unskilled Production Workers 1990

Type of Manufacturing Industry	Daily Wages (November 1990)		Percent Monthly Increase 1989 1990		Female Wage as percent of Male Wage
	Male	Female	Male	Female	
Food Drinks Tobacco	4 441	1 874	0 71	0 24	42 2
Textiles Clothing Leather	2 842	2 319	1 18	0 52	81 6
Timber and Furniture	3 476	2 648	0 45	0 41	76 2
Paper Publishing and Printing	4 328	2 848	0 52	0 53	65 8
Chemicals Rubber and Plastics	4 173	3 054	0 65	0 38	73 2
Mining and quarrying non metals	3 876	3 853	0 41	0 29	99 4
Iron and steel basic industry	5 256	-	1 8	-	
Metal products machinery etc	4 876	2 944	0 88	0 34	60 4
Other industry	4 130	4 022	0 42	0 63	97 4
TOTAL	3 850	2 455	0 65	0 47	63 8

Source Biro Pusat Statistik 1991

From ILO, 1993, Table 4 4

Table Three A 12 Weighted Female to Male Wages and Earnings										
Hourly Wages										
per Hour year	No Educatio	Some SD	SD Grad	SMP Grad	SMA Grad	Higher Education	Total			
	Female/ male	Female/ male	Female/ male	Female/ male	Female/ male	Female/ male	Female/ male	Female/ male		
87	63 33	61 41	53 11	69 58	87 84	83 93	65 38			
88	63 48	58 94	55 61	66 09	79 92	77 28	63 43			
89	67 66	60 56	52 80	68 11	81 72	76 36	64 64			
90	54 76	59 76	60 68	65 38	83 57	71 43	66 43			
91	79 72	67 20	59 95	72 12	87 14	75 14	71 12			
92	63 85	63 58	59 23	69 12	85 75	73 82	68 83			
Average	65 47	61 91	56 89	68 40	84 32	76 33	66 64			
Weekly Earnings										
per Week year	No Educatio	Some SD	SD Grad	SMP Grad	SMA Grad	Higher Education	Total			
	Female/ male	Female/ male	Female/ male	Female/ male	Female/ male	Female/ male	Female/ male	Female/ male		
87	51 63	50 26	50 32	65 92	78 34	75 45	57 37			
88	49 95	50 87	51 52	62 73	74 36	72 09	56 54			
89	53 49	50 56	51 07	60 98	73 82	71 74	57 29			
90	49 71	49 08	51 67	61 80	72 93	66 33	57 17			
91	50 43	52 86	54 73	64 55	78 44	69 93	61 21			
92	50 52	51 67	53 16	64 04	76 89	69 53	60 56			
Average	50 95	50 88	52 08	63 34	75 80	70 84	58 36			

From USAID/Jakarta estimates based on SAKERNAS  
published reports (1987-92)

Proponents of wage repression explain gender-based wage differentials by noting (ILO, 1993, p 43) that female workers hired by the export manufacturing firms are more likely to be young women hired on a temporary or casual basis as pieceworkers or homeworkers, are discriminated against in training opportunities, and have less opportunities for promotion. Others who follow a more market-oriented explanation, like Corner (1987, pp 154 & 158), argue that factors besides discrimination explain most of the male/female wage differentials. She points out that women have less education than men, they are younger and tend to work shorter hours, middle-aged women have less work experience and seniority (because they have taken time out to have and care for children), and in general, women are perceived to have less commitment to their job because of their multiple roles in society. All these factors make women more expensive to hire, or make women perceived to be less productive, therefore, they lead employers, on average, to offer female workers lower wages. Employers may also perceive women as supplementary workers, rather than the family's main bread-winner, making it unnecessary in their minds to offer them the same wage they offer men.

- Minimum Wage Legislation

Minimum wages are designed to increase earnings of low-income wage earners. However, enforcement is only feasible for relatively large, formal sector enterprises. **GOI enforcement of minimum wage legislation is made even more difficult by a system of minimum wages in Indonesia that is complicated and anything but transparent, with different minimums set for every province and even for sub-regions within provinces.** Table A 13 presents a highly simplified description of the recent history of this regionally-differentiated minimum wage at the provincial (but not the sub-provincial) level. As of April 1995, the minimum daily wage in the Jakarta metropolitan region (*DKI Jakarta*) and the surrounding region of West Java (*Jawa Barat*) is the same (4600 rupiah or a little over \$2). Whereas the Jakarta minimum wage will be nearly three times what it was in 1989, the West Java minimum wage will be nearly six times its 1989 level. Since accumulated inflation since 1989 is less than 70%, **this minimum wage has undoubtedly begun to bite for employers, when enforced.** Although government enforcement efforts have apparently been intensified, the higher minimums create much greater incentives to evade enforcement and are likely to slow down the process of formalization of the manufacturing sector.

A five-year time series (1987-92) of average wages for unskilled (defined as graduates of primary school) male and female manufacturing workers, disaggregated for West, Central and East Java, can be obtained from the SAKERNAS survey data cited in the previous section. Figure A 10 graphs the results for East (Timur) Java. Three points jump off the page.

The bottom graph shows that female wages are lower than male wages but both move pretty much in unison, and that **the minimum wage is at or near the average wage for female workers but well below the average male wage.**

The top graph shows that as the minimum wage has increased over time, **an increasing share of both male and female workers, but especially females, find**

39A

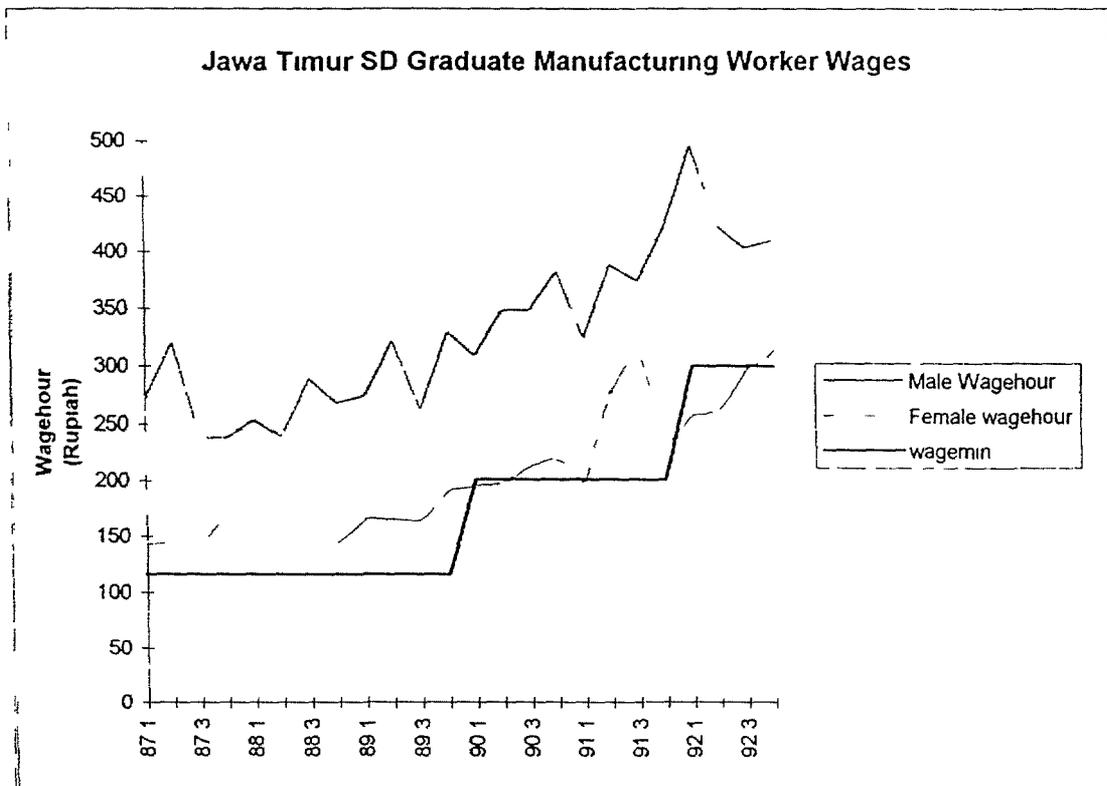
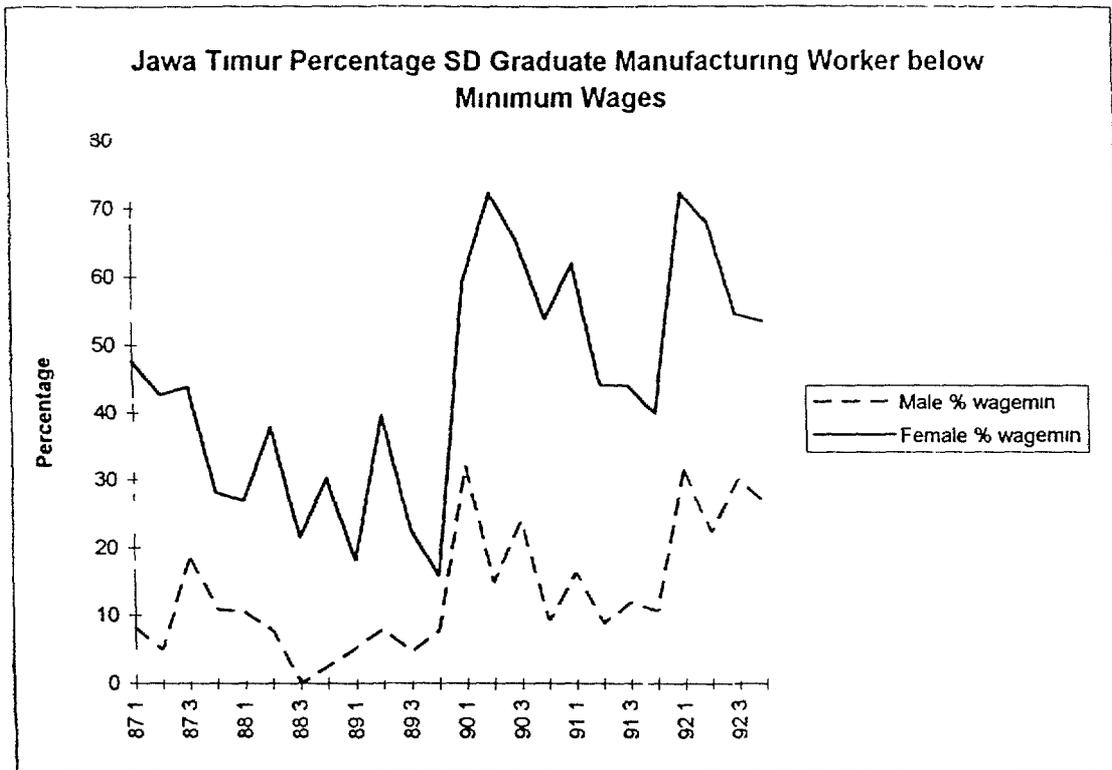
A.13  
Table ~~B.10~~

PROVINCI (region)	MINIMUM WAGI (Rupiah per day)						
	1989	1992	1993	Sep 1994	Apr 1995	Percentage increase 1994 1995	Percentage increase 1989 1995
DI ACEH	1 400	2 133	2 600	3 150	3 500	11%	150%
SUMUT	1 200	2 550	3 100	3 750	4 200	12%	250%
SUMBAR	1 000	1 750	1 900	2 500	3 250	30%	225%
RIAU	1 865	2 700	2 700	3 100	4 150	34%	123%
JAMBI	1 100	2 100	2 400	3 000	3 300	10%	200%
SUMSEL	1 100	1 600	2 300	3 000	3 500	17%	218%
BENGKULU	1 300	2 000	2 000	3 000	3 500	17%	169%
LAMPUNG	1 050	1 750	2 450	3 000	3 500	17%	233%
DKI JAKARTA	1 600	2 500	3 000	3 800	4 600	21%	188%
JAWA BARAT	750	1 800	2 200	3 800	4 600	21%	513%
JAWA TENGAH	780	1 600	2 000	2 700	2 800	11%	259%
YOGYAKARTA	700	1 250	1 600	2 200	2 850	30%	307%
JAWA TIMUR	813	2 100	2 100	3 000	3 700	23%	355%
KALIMANTAN BARAT	1 400	1 800	2 250	3 000	3 500	17%	150%
KALIMANTAN SELATAN	1 150	2 275	2 275	3 000	3 500	17%	204%
KALIMANTAN TENGAH	1 000	1 600	2 350	2 750	3 750	36%	275%
KALIMANTAN TIMUR	1 000	1 600	2 400	3 250	4 200	29%	320%
SULAWESI UTARA	850	2 000	2 000	2 700	3 250	20%	282%
SULAWESI TENGAH	700	1 100	1 750	2 300	2 800	22%	300%
SULAWESI TENGGARA	750	2 125	2 125	2 800	3 350	20%	347%
SULAWESI SELATAN	1 000	1 750	1 750	2 300	3 100	35%	210%
BALI	1 200	2 000	2 500	3 300	3 900	18%	225%
NTB	650	1 500	1 800	2 350	2 950	26%	354%
NTT	1 000	1 600	2 100	2 500	2 900	16%	190%
MALUKU	1 000	1 800	2 300	3 100	3 800	23%	280%
IRIAN JAYA	1 800	2 400	3 500	4 500	4 750	6%	364%
TIMOR TIMUR		2 000	2 000	3 000	3 800	27%	
PULAU BATAM	2 450	5 550	5 550	6 750			

Source: Departemen Tenaga Kerja Jakarta Post and Kompas

For SES-5/11/2000

Figure A 10



From USAID/Jakarta estimates based on SAKERNAS published reports, 1987-92

**themselves earning less than the minimum wage**

Although some firms tend to increase wages over time, reducing the share of workers earning less than the minimum, the wage corrections are becoming more and more incomplete. That is, **more and more firms in East Java are breaking the minimum wage law**

What can one conclude from this data? First, since women are more likely to find themselves earning less than the minimum wage, especially in the months right after a new increase in the minimum wage, this helps explain why women have led the demonstrations against firms that do not comply with the minimum wage. Second, it also helps explain why strikes occur with the greatest frequency in the months right after an increase in the minimum wage. Of course, the complexity of the minimum wage system is also a factor, making it difficult for an employer to know whether he/she is complying with the law. And third, women are likely to feel the principal impact of the minimum wage law, for good or ill. **But economics teaches us that minimum wage laws that succeed in raising wages above the market-clearing wage rate are likely to reduce the rate of new job creation.** Thus, in the case of Indonesia's minimum wage, the unintended result will likely be fewer employment opportunities for women in the affected firms (formal sector manufacturing). **The affected firms will either cut back their operations or eliminate some marginally productive female workers made redundant at the new higher wage.** Either of these outcomes will force a larger share of the surplus female labor to find lower-paying, more precarious jobs in the informal sector.

c Education and Wage Differentials

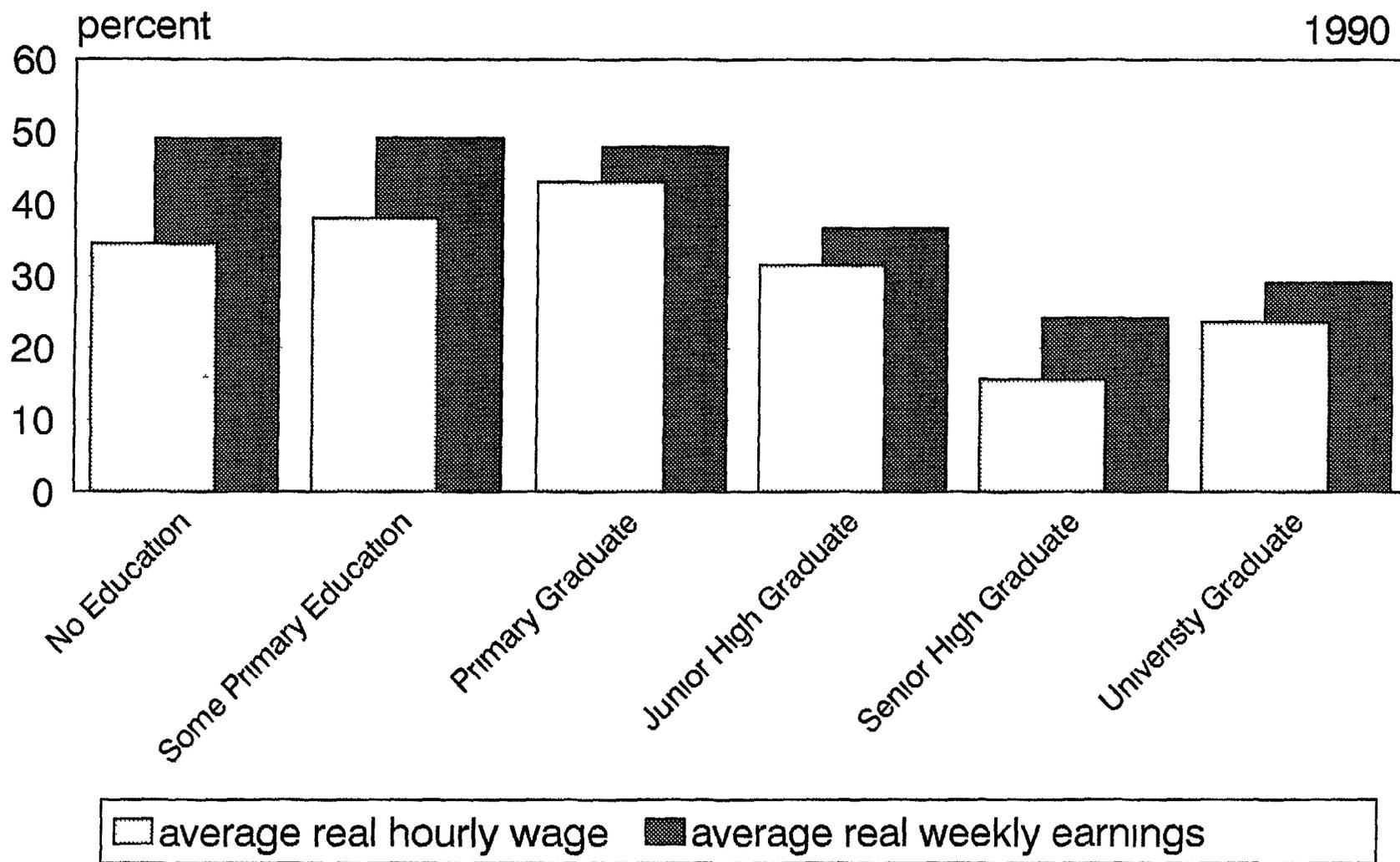
The SAKERNAS wage data contained in Table A 12 is not only coded by gender but also by education level. **Male-female wage differentials, averaged over the six-year period, follow an inverted U-shape as a function of education level through secondary school, as portrayed in Figure A 11 with education level on the X-axis and wage differential on the Y-axis**

**Wage differentials are largest for primary school graduates.** Female laborers who have graduated from primary school earn an hourly wage only 57% that of males with the same education level. Wage differentials decline for those with some primary school, and for those with no education at all the differential is even less. This implies that **the returns to girls of a primary education are less than the returns to boys**

Moving to higher levels of education -- junior and senior secondary -- the gender-based wage differential decreases even faster. Indeed, the wage differential is really quite small between men and women with a secondary education. But more importantly, this means that, **for those boys and girls who have graduated from primary school, the economic return to the girls of going on to graduate from junior or senior secondary school is higher than it is for the boys**

Figure A.11

# Male/Female Wage & Earnings Differentials



Source Table A 12

**University education is the anomaly with regard to the inverted U-shape, because the hourly wage differential is higher for men and women university graduates than it is for senior secondary graduates. Thus, the return to women of a university education is less than the return to men, but this lower return could reflect the fact that men are more likely to get degrees in technical fields with higher earnings potential.**

As for earnings, **the weekly earnings differential is approximately the same for those with no education, some primary school and primary school graduates, with females earning half what males with a comparable education earn.** Why is the earnings differential constant for these three educational levels? One hypothesis is that primary school graduates are more likely to have a stable, full-time, formal sector job than those with less or no education, while the latter may also find themselves more frequently subject to casual employment in the informal sector. **The male-female earnings differential for junior secondary graduates is less than for primary school graduates, and the earnings differential declines further for senior secondary graduates.** Finally, the earnings differential is greater than the hourly wage differential at each level of education, implying that, on average within each educational group, men work more hours than women. But since the earnings differential exceeds the wage differential by a greater amount for those with no education than for the other educational groups, the difference in hours worked by men and women with no education would appear to be more than the 4-5 hour average over all educational groups.

**Behrman & Deolalikar (1993) conducted a study of the relationship between wage benefits received by Indonesian men and women for each additional year of schooling, up through senior secondary school. What makes their study unique is that it controlled for common household and community effects such as schooling quality, ability and motivation of students, role models of classmates, and repetition and dropout rates. They arrived at several important conclusions:**

first, studies that do not control for household and community effects overestimate the overall returns to schooling,

second, these studies also overestimate the returns to lower levels of schooling (e.g. primary school), and

third, they overestimate the returns to schooling for males relative to females

This means that, **although men and women do not benefit as much from schooling as previous studies have shown,** the returns to women of additional education are greater than the returns to men for the same amount of additional education. And this also means that, although the returns to higher levels of education (e.g. junior and senior secondary school compared to primary school) are greater for both men and women than previous studies have shown, the added returns for higher levels of education are relatively more pronounced for women than for men. In summary, **the return to girls' education is higher than to boys' education, and the**

advantage increases the more education they both receive

## 6 Gender-Based Differences in Unemployment and Underemployment

### a Unemployment

**Overall unemployment is still low in Indonesia by international standards**, but as Table A 14 shows, the rate of unemployment nearly doubled (from 1.7% to 3.2%) during 1980-90. This is probably explained by the economic downturn of 1982-86 which generated fewer jobs. Table A 15 shows that **unemployment rates are three times higher in urban than in rural areas** (over 6% compared to 2%). However, SAKERNAS data (Ministry of Manpower, 1993, p. 88) indicate that urban unemployment declined over the period 1987-91, a reasonable conclusion in light of the rapid economic growth since the late 1980s.

The rate of unemployment for all educational attainment categories rose during 1980-90, save for those members of the labor force with no education, as shown in Table A 16. **Those with the highest education levels experienced the largest increases in unemployment**. This is probably explained by Indonesia's rapid urbanization, combined with higher unemployment rates in urban areas and the relative concentration of senior secondary graduates in these urban areas. In 1990, unemployment rates were highest among senior secondary school graduates followed by university, diploma III and junior high graduates. A startling conclusion arising from all this is that, **of all those unemployed in 1990, 42% were senior high or tertiary school graduates (compared to only 15% in 1980), even though only 15% of the 1990 labor force had a secondary education or beyond** (Ministry of Manpower, 1993, p. 86).

From a gender perspective, Table A 14 shows that **the national unemployment rate is higher for women than for men** (3.9% compared to 2.8% in 1990). Unemployment rates are higher for females than for males in both urban and rural areas. Regionally, female urban unemployment rates are higher in the Outer Islands (ILO, 1993, p. 39). **Unemployment is concentrated among the young school-leavers** (aged 10-24), especially young women, with still high rates among those aged 25-29.

Turning to unemployment as it relates to gender and education, for those with a primary education or less, female and male unemployment rates were equally low. But Table A 15 shows that **at higher levels of education, unemployment rates were systematically higher for females than for males** (with the minor exceptions of urban junior high vocational graduates and rural diploma I/II graduates). **Unemployment rates were almost twice as high for females with a secondary education or beyond as for their male counterparts**, making the problem of unemployment twice as pressing for well-educated, young adult women.

The strong relationship between unemployment and education level can be explained in a variety of ways

men and women with no education are usually among the poorest, and therefore

42A

A.14

Table ~~B.13~~

## Indonesia Unemployment Rates by Age and Sex

Data Source and Date	MALES			FEMALES		
	Urban	Rural	Total	Urban	Rural	Total
All ages	Percentages					
1971 Census Series C	5.0	1.9	2.4	4.5	1.4	1.8
1971 Census Series D	10.8	6.8	7.5	17.1	10.7	11.5
1976 Supas	5.4	1.2	1.9	5.9	1.5	2.0
1976 Sakernas (Sept-Dec)	6.9	1.9	2.7	5.1	1.1	1.6
1978 Sakernas	7.0	2.1	2.9	3.8	1.4	1.8
1980 Census	2.7	1.0	1.4	3.0	2.2	2.3
1990 Census	5.6	1.7	2.8	7.6	2.6	3.9

	MALES			FEMALES		
	Urban	Rural	Total	Urban	Rural	Total
Age Groups	1980 Percentages					
10-14 yrs	6.0	2.4	2.6	4.7	3.8	3.9
15-19	8.3	2.7	3.5	5.7	3.8	4.1
20-24	6.8	1.9	3.1	6.5	3.0	3.8
25-29	2.3	0.9	1.3	2.6	2.1	2.2
30-34	1.0	0.6	0.7	1.5	1.7	1.7
35-44	0.8	0.5	0.6	0.9	1.5	1.4
45+ yrs	1.0	0.5	0.6	0.8	1.3	1.2
	1990 Percentages					
10-14	25.7	7.0	9.0	17.7	7.9	9.5
15-19	18.7	5.6	8.2	15.1	7.7	9.9
20-24	16.1	4.0	8.0	17.5	5.9	10.0
25-29	5.6	1.2	2.7	7.8	2.0	3.7
30-34	1.6	0.6	0.9	2.2	1.0	1.3
35-44	1.1	0.3	0.6	1.1	0.8	0.9
45+ yrs	1.1	0.4	0.6	1.0	0.8	0.8

Source: Hugo et al. 1987:287; Biro Pusat Statistik 1991

From ILO, 1993, Table 3.13

42B

A.15

Table ~~B.14~~

Unemployment Rate and Educational Level  
1990

EDUCATION LEVEL	URBAN		RURAL	
	Male	Female	Male	Female
No school	0 72	0 77	0 23	0 29
Some primary school	1 35	1 64	0 43	0 56
Primary school	2 60	2 51	0 91	1 12
Junior High Gen	5 27	7 55	2 48	4 04
Junior High Voc	6 59	4 58	2 42	5 10
Senior High Gen	12 86	21 05	8 98	20 17
Senior High Voc	8 87	12 20	4 15	10 99
Diploma I/II	4 14	7 51	3 13	2 55
Academy/Dip III	5 94	12 91	5 86	12 14
University	6 63	14 49	13 72	17 88
Average Unemployment Rate	5 66	6 52	1 27	1 49

Source Biro Pusat Statistik 1991

From ILO, 1993, Table 3.14



42d

Table A, 17

TABLE 48 Indonesia: Distribution of Working Population by Hours Worked, According to Industry and Sex, 1980 and 1990

Source Central Bureau of Statistics 1980 and 1990 Censuses of Indonesia

Sex and Hours Worked	Percentage Distribution <sup>a</sup> of Working Population by Industry													
	Agriculture		Manufacturing		Construction		Trade		Transport		Services		All Industries <sup>b</sup>	
	1980	1990	1980	1990	1980	1990	1980	1990	1980	1990	1980	1990	1980	1990
<i>Males</i>														
< 25	22.4	22.9	10.1	8.3	7.0	6.9	14.0	12.1	7.5	7.8	10.2	9.1	17.4	15.8
25-34	16.6	20.0	7.5	7.5	5.5	5.9	9.1	10.2	5.3	7.2	10.8	14.2	13.0	14.9
35-39	54.5	53.7	65.8	70.4	68.8	72.9	50.8	53.2	49.8	52.9	64.8	66.0	57.3	58.3
60+	6.5	3.4	16.6	13.8	18.7	14.3	26.1	24.5	37.4	32.1	14.2	10.7	12.3	11.0
All hours worked	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<i>Females</i>														
< 25	42.6	46.5	27.4	25.1	14.2	19.6	24.0	22.1	9.0	9.9	20.3	18.3	34.0	34.5
25-34	19.6	22.1	13.6	14.4	9.7	9.3	13.3	14.2	6.1	5.0	13.0	16.6	16.6	18.3
35-39	35.5	30.3	49.3	52.0	61.5	62.8	41.6	42.7	67.8	73.8	44.1	45.2	39.8	38.2
60+	2.3	1.1	9.7	8.5	14.6	18.3	21.1	21.0	17.1	11.3	22.6	19.9	9.6	9.0
All hours worked	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<i>Both Sexes</i>														
< 25	28.7	30.6	17.7	15.6	7.0	7.2	18.7	17.0	7.5	7.9	13.3	12.6	22.7	22.5
25-34	17.5	20.7	10.1	10.5	5.6	6.0	11.1	12.2	5.4	7.2	11.4	15.1	14.2	16.1
35-39	48.7	45.5	58.6	62.4	68.7	72.6	46.4	48.0	50.0	53.2	58.4	58.2	51.7	51.1
60+	5.1	3.2	13.6	11.5	18.7	14.2	23.8	22.8	37.1	31.7	16.9	14.1	11.4	10.3
All hours worked	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>a</sup> The small group with hours not stated were distributed pro rata.

<sup>b</sup> Includes mining, electricity, finance and others', which are not shown in individual columns because they employ relatively few people.

From Ministry of Manpower 2000

must work to survive,

secondary schools may not be producing graduates with the right skills for the job market, especially female graduates who take less mathematics and science classes,

the same could be said for higher education, where women tend to avoid engineering and other technical fields in high demand,

secondary school graduates may have unrealistically high job expectations, given the poor quality of education provided, or alternatively,

many secondary graduates may come from well-to-do families and can afford to stay unemployed longer in order to wait for jobs that can maximize lifetime earnings

b            Underemployment

A cursory analysis of underemployment figures contained in Table A 17 seem to indicate a severe problem. As a first approximation, people can be defined as underemployment if they work less than 25 hours per week. According to this definition (gross underemployment), almost one-quarter of all those employed in 1990 were underemployed. **The gross underemployment rate for women was over twice the rate for men (35% compared to 16%)** in 1990, although the difference declined slightly from the 1980 Census. Gross underemployment is concentrated among younger and older working ages. It is especially concentrated in the agricultural sector (almost half of agricultural workers work fewer than 25 hours per week) and the trade and manufacturing sectors (where around one-quarter of those employed in trade and manufacturing work less than 25 hours per week). Thus, **gross underemployment is predominantly a rural phenomenon**, the rural underemployment rate is twice the urban rate for both men and women.

But things change dramatically if one considers the extent to which underemployment is involuntary, with **involuntary underemployment defined as working less than 25 hours per week and seeking more work**. So defined, the problem of involuntary underemployment appears much less severe than the gross figures indicate. **In 1990, involuntary underemployment stood at around 7-8%, compared to the 23% gross figure, and involuntary underemployment rates were lower for women than for men -- by around 40%** (Ministry of Manpower, 1993, p 95). Therefore, although more women work less than 25 hours per week, most are not looking for additional work. They are satisfied with this situation probably because it allows them to fulfill their multiple roles.

At the opposite end of the working hour scale, Table A 17 shows that, in 1990, **about the same portion of male workers as female workers work long hours (11% compared to 9%)**, defined as more than 60 hours per week. The incidence of long working hours declined slightly from

43a

Table A.17

TABLE 48 Indonesia Distribution of Working Population by Hours Worked, According to Industry and Sex, 1980 and 1990

Source Central Bureau of Statistics 1980 and 1990 Censuses of Indonesia

Sex and Hours Worked	Percentage Distribution <sup>a</sup> of Working Population by Industry													
	Agriculture		Manufacturing		Construction		Trade		Transport		Services		All Industries <sup>b</sup>	
	1980	1990	1980	1990	1980	1990	1980	1990	1980	1990	1980	1990	1980	1990
<i>Males</i>														
< 25	22.4	22.9	10.1	8.3	7.0	6.9	14.0	12.1	7.5	7.8	10.2	9.1	17.4	15.8
25-34	16.6	20.0	7.5	7.5	5.5	5.9	9.1	10.2	5.3	7.2	10.8	14.2	13.0	14.9
35-39	54.5	53.7	65.8	70.4	68.8	72.9	50.8	53.2	49.8	52.9	64.8	66.0	57.3	58.3
60+	6.5	3.4	16.6	13.8	18.7	14.3	26.1	24.5	37.4	32.1	14.2	10.7	12.3	11.0
All hours worked	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<i>Females</i>														
< 25	42.6	46.5	27.4	25.1	14.2	19.6	24.0	22.1	9.0	9.9	20.3	18.3	34.0	34.5
25-34	19.6	22.1	13.6	14.4	9.7	9.3	13.3	14.2	6.1	5.0	13.0	16.6	16.6	18.3
35-39	35.5	30.3	49.3	52.0	61.5	62.8	41.6	42.7	67.8	73.8	44.1	45.2	39.8	38.2
60+	2.3	1.1	9.7	8.5	14.6	18.3	21.1	21.0	17.1	11.3	22.6	19.9	9.6	9.0
All hours worked	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<i>Both Sexes</i>														
< 25	28.7	30.6	17.7	15.6	7.0	7.2	18.7	17.0	7.5	7.9	13.3	12.6	22.7	22.5
25-34	17.5	20.7	10.1	10.5	5.6	6.0	11.1	12.2	5.4	7.2	11.4	15.1	14.2	16.1
35-39	48.7	45.5	58.6	62.4	68.7	72.6	46.4	48.0	50.0	53.2	58.4	58.2	51.7	51.1
60+	5.1	3.2	13.6	11.5	18.7	14.2	23.8	22.8	37.1	31.7	16.9	14.1	11.4	10.3
All hours worked	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>a</sup> The small group with hours not stated were distributed pro rata

<sup>b</sup> Includes mining, electricity, finance and others, which are not shown in individual columns because they employ relatively few people

From: Ministry of Manpower, 1993, p 92

the 1980 Census Long working hours are especially prevalent for the poorly educated, among employers and for workers in the transport and trade sectors Women in the trade sector are almost as likely as men to work long hours, but are less likely than men to work long hours in the manufacturing sector

## 7 Opportunities and Constraints to Women in the Labor Force

The Indonesian economy presents several **important opportunities for women** to improve their participation in the labor force

**The rapidly growing economy generates large numbers of jobs** low-paying, labor-intensive manufacturing jobs for young women with little experience and higher-quality jobs in the service sector for better-educated women

**Expansion of the educational system** toward universal junior, then universal senior secondary education **will benefit more young girls than young boys**

**Improving the quality of education**, which is primarily a matter of better teacher training, **could benefit existing teachers, and women constitute a large share of the teacher corps** and a majority of public sector primary school teacher corps

Implementation of the recently-authorized **IDT anti-poverty grants** (under the INPRES program) directly to village-level grassroots organizations **presents opportunity for village women's organizations**

### **Constraints that still limit women's full participation in the Indonesian economy**

**Some policies limit the growth of job opportunities** for women, such as protective legislation and minimum wage

**Educational inequalities** with respect to men at the secondary level

**Traditional attitudes** toward what are acceptable jobs for women which limit the occupations and sectors in which women easily find jobs and their ability to move laterally within firms, and their ability to be promoted

**Multiple roles that women must fulfill**, and the priority Indonesian society places on the non-economic roles, impede the pace and depth of work experience women can accumulate in the work place

A plethora of institutional constraints to growth of output exist, which are especially onerous for smaller enterprises Slower growth negatively affects the demand for female labor more than it does the demand male labor Although the deregulations since 1983 have eased many of

them, licensing requirements remain tortuous and labor regulations on the laying off of workers continue to be a hindrance to profitability, with a consequent negative impact on output and employment growth

## 8 Current Initiatives in Support of Women

**Government policies are the most important factors affecting women's participation in the labor force** Traditional attitudes may well constrain women's participation as much as poor policies, but it is easier to correct policies over a shorter time frame than it is to change attitudes, although participation in the economy is can play a very important role in changing those attitudes, often more effective than frontal attack on negative attitudes or support to NGOs involved in advocacy programs

**Policies can affect labor markets from the supply side and the demand side** Supply-side policies are those having to do with fertility and population growth, labor force participation, overseas labor migration, spatial distribution of population (and labor force), and education and training Demand-side policies comprise a somewhat longer list macroeconomic demand management, factor pricing, internal terms of trade (between agriculture and industry), taxes and subsidies, measures to remove institutional constraints on demand expansion at national, sectoral and regional levels, and special employment programs In addition, measures to remove institutional constraints, both formal and customary, on job stereotyping are especially important demand-side policies for female employment

### a Supply-Side Policies

Sustaining Indonesia's effort to reduce fertility is important, but its impact on reducing growth in the labor force is felt with a 10-20 year lag Fortunately, **past success in fertility reduction has already begun to have an impact on reducing the rate of growth of the working age population** Migration is another way to reduce the labor supply The officially recorded 150,000 unskilled migrants per year account for a not-insignificant 10% of recorded unemployment and 7% of the annual addition to the working age population And of course, the assumed large numbers of unofficial outward migration would imply a much greater impact on the rate of growth of the labor supply Both reduced fertility and increased outward migration will hasten the end of labor surpluses in Indonesia, which will also hasten the day when real wage rates can begin to rise consistently Policies that permit the inward migration of skilled technicians and managers helps reduce the shortage of skilled workers This shortage of technically-skilled personnel grows in importance as the modern sectors of the economy grow rapidly

Measures to reduce primary school dropout, increase transition rates to junior and senior secondary, and expand non-formal programs to absorb school dropouts, all reduce the labor force participation of individuals under the age of 20 But **measures to reduce the drop-out rate also increase the quality of the labor force** When education and training programs enhance quality, adaptability and productivity of the labor force, they **increase the incentive to**

**invest, thus expanding the economy's capacity to absorb labor**

Since teacher achievement is a strong determinant of student achievement, and since the massive expansion of primary education over the past 15 years may have reduced teacher quality, this same result can be expected for the upcoming expansion of junior secondary schooling. This will have a negative effect on the quality of junior secondary education, because a large cadre of poorly-trained but tenured secondary teachers will set back the quality of secondary education for several generations of school-goers. This implies that a balance be struck between expanding secondary education and improving the quality of teacher training. Higher, performance-based pay for teachers is another good idea. Quality education for girls also means revising the curriculum. **Correcting the mismatch between skills taught girls in school and the skills required by modern sector jobs** -- little emphasis on mathematics, science, engineering and management -- could reduce female unemployment and improve remuneration of female workers.

With regard to technical/vocational training programs as a way to resolve the mismatch, this is often money wasted because firms prefer to hire educated persons and train them. government programs fail to match skills taught with skills demanded by private sector firms and private training programs are still inadequate in number. **Government can save money by transferring the training function to industry**

**The keys to regional redistribution of population are direct government investment and incentives to private investment outside Java.** In contrast, the early success of direct government efforts to reduce the rural population on Java through colonization programs directed at the Outer Islands is now being questioned. Increasing numbers of migrants from the Outer Islands are moving to urban areas on Java, including large numbers of women, which has begun to counterbalance the number of outward migrants from rural Java.

b Demand-side Policies

**Economic downturns** related to fiscal austerity, such as 1982-86, and instances of tight monetary policy, such as in 1991, reduce the demand for employment, and **likely reduce demand for female workers more than for male workers.** The 1983 financial deregulation resulted in sharply higher interest rates. Although it served as a disincentive to capital-intensive investment, it may also have dampened overall investment. But starting in the late 1980s, **Government deregulation of trade and investment, as well as additional deregulation of the financial sector, jacked up incentives to invest in labor-intensive, non-oil export manufacturing.** This created many new jobs, especially for women.

Because of its strong backward linkages to input suppliers, the large pent up demand for residential construction (spurred on by financial deregulation) also has the potential to generate significant employment. The fact that the domestic input supply industries are still relatively heavily protected will, however, limit the efficacy of this approach and increase the costs. Labor-intensive public works programs stand out as one of the few special programs designed

to expand employment with possibly worthwhile outcomes, although its budgetary implications require careful attention

Further deregulation is necessary to sustain rapid job creation in non-oil manufactured exports and to spur additional job creation in domestic consumer industries. Indeed, if the current growth momentum is to extend to those sectors of the economy that produce goods and services for the domestic market, deregulation policies must begin to work their way into the relatively undisturbed world of protection enjoyed by businesses serving that domestic market. This should include domestic producers of intermediate goods and services. Not until domestic producers can (are forced to) compete with imported inputs in terms of price and quality, will non-oil export industries begin to source inputs domestically. **A rapidly growing domestic-market business sector will generate that many more jobs to absorb the surplus labor, especially the unpaid female family workers**

Real wage rates were largely constant through 1982, may have declined slightly up to 1988 as a result of much slower economic growth during 1982-88, but have begun to rise during the 1990s as a consequence of rapid growth since 1988. This latter might indicate a slight tightening of the labor market. But more likely, it represents a lag in the response of Indonesia's still largely rural surplus labor, through stepped up rural-urban migration, to meet the rapidly growing demand for labor in urban areas. Policy-induced terms of trade favorable to agriculture -- rice price supports and fertilizer subsidies -- have been reduced as a result of fiscal stringency. This should actually have speeded up the migration response to labor demand in urban areas. **The government is now embarking on a policy to raise the minimum wage to levels which will affect wages of the lower paid workers, especially women. The likely result will be a lower demand for such workers -- a result definitely to the detriment of poor female workers**

Landmark tax reform begun in 1983 has dismantled a whole range of special incentives and discretionary exemptions, resulting in a reversal of the source of tax revenues between oil and non-oil revenues and a net reduction in the bias against labor use. Whereas 30% of revenues were derived from non-oil sources in 1982, now over 70% of revenues come from non-oil sources. But the accelerated depreciation allowances on capital equipment still maintain a degree of bias against labor use

### III HISTORY OF INDONESIAN ECONOMIC POLICY SINCE INDEPENDENCE<sup>18</sup>

Indonesia's economic history since Independence has two parts -- the "Old Order" (1948-65) under President Sukarno and the "New Order" (since 1967) under President Suharto. The "New Order" can, in turn, be further divided into three sub-periods for purposes of economic history: the initial years of the New Order (1967-73), the oil boom years (1973-82), and the adjustment period (1982-present).

#### 1 Old Order Period

Although rich in natural resources, Indonesia emerged from its struggle for independence in 1949 with one of the world's poorest economies. Centuries of colonial rule had left Indonesia with a very poorly developed infrastructure. The nation's literacy rate was an abysmal 10%, and the majority of the workforce was uneducated, unskilled, and largely dependent on subsistence agriculture. In short, fifty years ago, Indonesia's growth prospects looked bleak.

The post-Independence period under President Sukarno witnessed some progress in advancing the nation's development, notably in the field of education. Despite the political turmoil that characterized this era, some economic growth occurred during the early years. Over the period 1950-57, growth averaged 5.4% per annum. However, a combination of factors -- rebellions on the islands of Sumatra and Sulawesi, anti-colonialism and anti-Chinese sentiment that manifested itself in the nationalization of foreign-owned firms, and a highly distorted trade and exchange regime -- caused output to plunge in 1958. Over the next several years, budget deficits grew, inflation soared, and the government assumed an increasingly *dirigist* role.

Government control of the financial sector became extensive, spearheaded by a series of bank nationalizations which enabled state commercial, savings and development banks to dominate the sector.

A pervasive system of import and investment licenses provided a new group of Indonesian importers and traders with access to considerable rents, which became a powerful lobbying group for continued protection.

Businesses owned by ex-colonial interests were nationalized.

State enterprises were set up to lead the national development effort.

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<sup>18</sup> The discussion of the history Indonesian economic policy draws heavily on several sources: Bhattacharya and Pangestu (1993) and USAID/Indonesia (1994) for the period up to 1991, International Monetary Fund (1994) for the period since the mid-1980s, Pangestu and Azis (1994) for the early 1990s, and UNDP (1994) for a look into the future at what policy reforms are still needed.

Showcase projects were initiated that would soon become "white elephants"

And in an act of international defiance (and probably also of international impotence), Indonesia withdrew from the IMF and World Bank

In retrospect, with 20-20 hindsight vision, these actions were clear cases of policy error. Why? because they established rules for the "economic game" that made winners out of those who could successfully lobby the government for additional advantages instead of those who could increase productivity, and because they isolated the winners from the need to be flexible in responding to changing world markets instead of rewarding those who quickly and effectively responded to such changes in world markets

The result was chaotic: triple-digit inflation rates, dwindling foreign exchange reserves and debt service requirements that exceeded foreign exchange earnings, which made it increasingly difficult to manage the uneasy balance of power between Communists on the left and the right-wing military. An abortive coup in 1965, widely believed to have been instigated by the Communists, plunged the nation into violent political upheaval. Massive purges of Communists and their sympathizers were carried out, with estimates of those killed ranging from 100,000 to one million.

## 2 Initial Years of the New Order

It was against this chaotic backdrop that Suharto's "New Order" regime came into power. The initial years of the New Order (1967-73) witnessed aggressive measures to restore macroeconomic stability and introduce market-oriented reforms. Critical macroeconomic reforms dating from this period were designed to restrain the government's ability to repeat such disastrous macroeconomic mismanagement, and helped Indonesia respond effectively to the external shocks of the 1980s. The intellectual foundation for Indonesian economic policy under the New Order fell to a group of Western-trained economists who became known as the "technocrats". In mid-1966, shortly after the Army put down the Communist insurgency, several of these young "technocrats" began to teach economics to senior officers at the Army Command School in mid-1966. One of those senior army officers was then-General Suharto. He liked what he heard. And ever since he became President, prominent "technocrats" have filled important positions in his Cabinets, providing a degree of continuity and good sense to GOI economic policy.

First, drastic expenditure cuts to eliminate the fiscal deficit were followed by the New Order Government's attempt to ensure future fiscal responsibility through passage of the "balanced budget" law in 1967, a law that prohibited domestic financing of budget deficits. As Bhattacharya and Pangestu (1993, p. 14) note, "external borrowing and the drawdown/build up of Government deposits have allowed fiscal policy to deviate from a strict balanced budget rule, [but] the absence of domestic borrowing and money creation have ensured that Indonesia avoided the fiscal excesses common to many other developing countries."

Second, a series of exchange rate reforms and large devaluations enabled the GOT to a fully liberalized capital account in 1971. This open capital account has put an effective check on any GOI inclination to use expansionary monetary policy to stimulate the economy because any attempt to increase the money supply also lowers interest rates, which immediately translates into an international outflow of capital and a corresponding decline in the money supply. Thus, from the very beginning, the New Order Government has purposefully "tied its hands" from a macroeconomic policy perspective, with unquestionably positive results so far.

Sweeping reforms to the trade regime and to the incentive structure were introduced with extraordinary speed, unlike the more recent experience of the 1980s. The reforms abolished the import licensing regime (although the protective tariff structure remained little changed), eliminated most price controls, eliminated direct allocations of foreign exchange, opened the economy to foreign investment, and returned some nationalized enterprises to their previous owners. Indonesia also rejoined the IMF and World Bank. Although these structural adjustments would be largely reversed during the ensuing oil boom, as the country turned inward again, they served to demonstrate for future reformers the speed with which trade liberalization and other market-friendly reforms could produce positive results.

The state banks were also reorganized. Important changes included transformation of one into Bank Indonesia and constituted as a formal central bank, restriction of each of the five remaining commercial banks to a few specific areas of specialized lending, and assignment of the task of long-term lending to the development bank. But the most important fact was that state banks maintained their privileged position within the Indonesian financial system: state enterprises were required to deposit government funds with them while Bank Indonesia extended credits to non-financial institutions and managed the still large fertilizer subsidies. In 1968, state banks held 75% of total bank assets and accounted for 93% of total commercial bank credit. Although credit flowed into the Indonesian economy, no significant financial deepening resulted.

Alongside these liberal policy reforms, important restrictions were imposed on foreign investment, identifying those sectors eligible for foreign investment and specifying minimum investment and divestiture requirements. These restrictions were imposed by a GOI that felt it had to do something to reduce the political heat, after it had put down hostile student demonstrations protesting foreign (especially Japanese) investment and dominance of the economy by ethnic Chinese and had squelched an apparent *coup d'etat* attempt. In addition, several strategic state enterprises date from this period. The state oil company (Pertamina) and the national food-trading agency (BULOG) were among the most important, lasting up to the present. In addition to the overt role of these public enterprises, as promoters of national development, according to Crouch (1978), they were viewed by the new military rulers as a source of "extra-budgetary" resources, thereby requiring only moderate levels of officially budgeted funds so as not to call attention of the public to the real funding needs of the military. In the ensuing years, the military has diversified its sources of "extra-budgetary" financing, but was usually careful to avoid "excesses".

With the resulting economic recovery -- inflation below 20% and external accounts in balance by 1969 and strong GDP growth across all sectors -- the government turned its attention to long-term development in the form of the first of a series of five-year plans, with emphasis on agriculture, infrastructure, social sectors and on industry to support agriculture

### 3 The Oil Boom

During the oil boom years (1973-81), Indonesia benefitted from an upswing in the price of oil, and to a much lesser extent in the parallel upswing in other basic commodities important to Indonesia, such as rubber, tin and palm oil [check which commodity prices actually did rise] By 1981, oil and gas accounted for 75% of export earnings and 70% of budget revenues. In retrospect, the GOI used this oil windfall effectively to promote economic development and poverty reduction -- certainly better than other oil-rich countries of the day. The GOI spent heavily on agriculture and rural infrastructure during the 1970s, in a major effort to achieve rice self-sufficiency, a goal it did achieve by the early 1980s. The GOI's impressive efforts to expand education and health services also date from this period, efforts that had essentially achieved universal primary education by 1990, although dropout rates remained worrisome in rural areas and among the lower income groups. The GOI's also strengthened its generally conservative policy of external debt management, although it took the shock of the state-owned petroleum company defaulting on some short term debts in the mid-1970s to forcefully impress the need for conservative debt management on the national psyche. Conservative external debt management thus became the third pillar of the GOI's stable macroeconomic policy framework.

Despite these achievements, and even though overall GDP growth ran at 8% per year, with non-oil sectors (those serving the domestic market) growing apace, Indonesia was unable to maintain international competitiveness of the non-oil economy. This was largely due to the well-known "Dutch disease" -- large oil revenues led to an overvaluation of the real exchange rate, making non-oil export industries less competitive in world markets and creating pressures for protection. These pressures combined with lush oil revenues and within several years, extensive government controls had replaced the liberalism of the late 1960s, greatly compounding the problems of the non-oil sector. Three examples of this policy reversal stand out in importance. First, trade policy became progressively inward oriented and complex, creating a substantial bias against exports and in favor of rent-seeking. Second, the distortions in the trade regime were reinforced by investment (especially foreign) regulations, and by credit allocation at subsidized interest rates. Third, the public sector expanded substantially, with a rapid expansion of the Civil Service and the scope of bureaucratic interventions and with public enterprises assuming a dominant role in many sectors, including heavy industries, petrochemicals and mining.

By 1980, a disparate web of tariffs and wide range of non-tariff barriers (NTBs) had been created. The latter included importer licensing, import bans and quotas, and "informal NTBs", the most notorious being the complex port and customs clearance procedures. By 1982, import licensing was expanded further to promote import substitution in strategic industries such as cement, chemicals, synthetic fibers, iron and steel.

The main competition-stifling investment regulations included a restrictive investment licensing system, extensive controls on foreign investment, a proliferation of provincial and local regulations, cumbersome land and labor laws and an increasingly outmoded framework of corporate law. Investment licensing was implemented via the investment priority list, a positive list regulating entry into specific industries for foreign and domestic investors. Although the plethora of other required licenses, permits and approvals often served legitimate regulatory concerns, they represented a significant barrier to entry because they were inevitably complex and subject to corruption. And a useful "rule of thumb" is that such barriers to entry are always more effective against entry by smaller firms than they are against larger firms. And foreign prospective investors were subject to much tougher rules than domestic investors, especially the initial requirements for local ownership and the timetable for transfer of full local ownership and the limited access to domestic bank borrowing.

The large inflow of revenue from oil sales risked increasing the money supply and setting off excessive inflation, so Bank Indonesia (BI) imposed tight credit controls. BI allocated oil revenues to each state bank, in the form of "liquidity credits", although private banks also received a small fraction (around 5%) of these "liquidity credits", and imposed credit and interest rate ceilings specific to each state bank. But credit controls were also used to subsidize selected activities: strategic industries, food stocks, rice production and small scale credit. And the prohibition against new entry of foreign banks was used to protect the state and private domestic banks from foreign competition. This set of financial sector policies had five negative outcomes: first, it assured the growing state participation in the economy, second, subsidized credit increased in coverage and the generosity of terms, in response to interest groups like the sugar estates and construction industry, third, the emergence of an efficient banking system was postponed, since state banks had no need to mobilize savings nor to decide for themselves how to channel loans and credit ceilings also limited private banks' ability to intermeditate, fourth, real interest rates on bank deposits were negative throughout the oil boom years, which continued to limit financial deepening, and fifth, the credit ceilings failed to sterilize the inflow of oil revenues, because of the leakages from foreign borrowing due to the open capital account.

#### 4 Major Shocks of the 1980s

Then, in the 1980s, Indonesia suffered a series of major external shocks. In essence, these shocks can be boiled down to three: a dramatic decline in the dollar price of oil, reducing the dollar value of foreign exchange earnings and a run-up in interest rates worldwide, combined with an equally dramatic increase in the dollar value of Indonesia's foreign debt as the dollar depreciated during 1985-88 (much of Indonesia's debt having is denominated in yen), thus increasing the dollar cost of debt repayments. The period of economic adjustment in response to these external shocks occurred in three sub-periods: first adjustment (1982-85), second adjustment (1985-88), and non-oil export-led recovery (1989-present). The intensity of the combined effect of both external shocks during the second period was much greater (perhaps by a factor of five) than during the first period.

## 5 First Adjustment Period

During the first adjustment phase, declining oil prices meant ballooning external and fiscal deficits. To close the fiscal deficit, expenditures were cut by rephasing large public projects and reducing subsidies, such as that on fertilizer, tax reform was initiated, with follow-up reforms to strengthen tax administration, and efficiency improvements were made to customs (by turning over valuation responsibility to a Swiss firm). But even though aggregate expenditures were cut, the GOI managed to boost the share of expenditures going to infrastructure and human capital development. To restrain imports and improve the competitiveness of non-oil exports, the GOI devalued the exchange rate by 28% in early 1983 and began to manage it more flexibly thereafter. With the adoption of flexible exchange rate management, the GOI added the fourth pillar, and the final touch, to what has become a very successful, stabilizing GOI macroeconomic policy apparatus (recall that the other three were the "balanced budget" law and the open capital account established at the beginning of the New Order Government and an increasingly prudent policy of external debt management). These reforms were combined with the introduction of new instruments of monetary control. However, the GOI also resorted to increased commercial borrowing, largely denominated in yen, which would come back to haunt the GOI in 1986-88 when the yen appreciated.

In addition to these macro reforms, and in order to increase domestic saving, reform of the state banking sector was initiated. The credit and interest rate ceilings introduced during the oil boom were eliminated, as were the remaining subsidies on deposit rates (although Bank Indonesia maintained significant directed and subsidized refinancing schemes), and Bank Indonesia switched to a more indirect form of monetary control by introducing government certificates (SBIs) and deemphasizing the direct refinancing of bank loans. The impact on the financial sector was largely positive: real interest rates turned positive, increasing savings and financial deepening, interest rate spreads for both state and private banks declined, and credit increased rapidly, especially that provided by private banks.

However, trade and industrial policies became even more biased against exports and more subject to government intervention. The GOI increased the number of goods requiring an approved importer license, and worse, to restrict the number of approved importers (often to only a few) and increase the number of goods with import quotas. And export bans, taxes, quotas and licensing requirements were increased, especially as they related to agricultural products. This produced massive rents for the privileged license holders. By 1985, more than 1,700 import items were subject to licensing requirements, accounting for over 40% of total import value, 68% of manufacturing production and 54% of agricultural production (IMF, 1994, p. 23). Further, the import of more than 20 products were banned entirely, including automobiles, motorcycles, TVs and radios. The level of nominal protection varied widely from one product to another, making the real effective protection even more variable and difficult to determine. Overall, the regime favored "upstream" over "final product" industries, thus drawing resources into capital-intensive activities supplying the domestic market and penalizing the relatively more efficient, labor-intensive "downstream" producers. And although investment licensing requirements may not have worsened during this period, neither were they loosened.

Finally, public enterprises remained dominant in 1985, with 214 owned by the Central Government and many others owned at the provincial and local public levels

The resulting improvement in the fiscal deficit, current account balance and inflation came at the cost of slower growth. Combined with higher interest rates as a result of financial reform, the slower growth led to financial difficulties for industrial enterprises whose domestic market had dried up and were operating at well below capacity

## 6 Second Adjustment Period

During the second adjustment phase, the GOI again acted rapidly to restore macroeconomic stability (this time in response to a 50% drop in the world price of petroleum) with a 31% devaluation of the exchange rate in late 1986 and a cut of 25% in the real value of the public investment budget. The GOI also began to rely on concessional official financing instead of commercial borrowing. But this time the GOI combined macro reforms with trade and other regulatory reforms that broke with the inward-oriented policy established during the oil boom years. Government officials began to talk openly of Indonesia as a "high cost" economy, recognizing that structural reforms would be necessary to remedy that situation. For example, the GOI hesitantly began to liberalize the investment licensing system in 1985, initially by streamlining procedures. Early on, the World Bank began financing Harvard Institute for International Development (HIID) advisors in the Ministry of Finance, the HIID advisors remain, but are now financed with GOI funds. USAID also began providing various GOI ministries with technical assistance in economic policy analysis. USAID policy analysis resources have been used to aid the GOI in assessing the likely impact of many of the reforms highlighted below

Trade reform began in earnest during this three-year period. Tariffs were reduced across-the-board in early 1985. The number of different tariff rates was reduced from 25 to 11, tariffs for most products were reduced to the 5-35% range, and the tariff ceiling was set at 60% (with some exceptions), down from 225%. And placing the sensitive job of import certifying in the hands of private (Swiss) surveyors considerably reduced customs clearance costs. Unfortunately, the widespread application of import licensing partially muted the benefits from tariff reform. A year later, the GOI introduced an import duty exemption and drawback system to insulate major exporters from the adverse impacts of the import regime.<sup>19</sup> The duty drawback scheme is designed to benefit exporters without "doing damage" to the basic network of protection enjoyed by industries serving the domestic market, in practice it only benefits large- and medium-sized exporters. Then, after the 31% devaluation, the GOI began to dismantle the import licensing system, eliminating licensing for some 200 items accounting for nearly 20% of import value (Bhattacharya and Pangestu, 1993). Later reforms included (i) a reduction in NTBs and tariff rates, (ii) investment delicensing and the relaxation of controls on foreign investment, (iii) reducing regulatory restriction on exporters, and (iv) major deregulation of

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<sup>19</sup> The drawback system applies to the VAT as well as tariff duties and allows exporters to bypass import licensing restrictions for products under NTBs

shipping to reduce costs and encourage private sector participation

By late 1988, the second and more thorough liberalization of the financial sector got underway. Financial deregulation built on the 1983 reforms by lowering entry barriers for private banks, increasing competitive pressures, and some deregulation of capital markets was introduced. Entry barriers were lowered by authorizing new joint venture and domestic banks, easing regulations on opening new branches, and allowing foreign banks to open branches in six major cities. The financial system was made more competitive by allowing state owned to deposit up to 50% of their funds in private banks, reserve requirements were drastically reduced (so low they had to be raised again), and legal lending limits for single or group borrowers were introduced. The ceiling on foreign borrowing by banks was replaced by a maximum net open position of 25%, allowing for more flexibility. Capital markets were deregulated by making it easier for companies to go public, eliminating limits on price fluctuations of stocks, allowing joint venture (with maximum foreign participation set at 49%) and local companies to become securities companies, and equalizing the tax treatment of interest and dividends to boost the attractiveness of shares. The result was a surge of overseas interest in the Indonesian capital market.

## 7 Non-oil Export-led Recovery

After a brief period of easy monetary policy, it turned restrictive in 1992, abrupt reversals in international capital flows buffeted monetary during 1993-94. Inflation stands at the edge of becoming a problem, hovering right at the 10% level, and the fiscal deficit has remained below 2% of GDP since 1989. Public sector debt management continued to improve in the 1990s, with public sector debt declining in relation to a rapidly growing GDP. The debt management problem of the mid-1990s relates to the rapidly growing private sector foreign debt. The sum of short-, medium- and long-term foreign debt owed by the private sector tripled over the period 1989-92.

Having begun in earnest in 1985, deregulation gathered momentum during the early years of the non-oil export-led recovery. The pattern of one or two structural reform packages per year continued. This has included shipping deregulation, which has made the Indonesian shipping industry one of the most liberal in the world.

But perhaps the greatest progress has been achieved in deregulating foreign investment. Licensing requirements were streamlined, treatment of foreign and domestic investor became more equal, ownership regulations were eased and work permits for foreign workers became easier to get. Reforms of the investment licensing system accelerated markedly in 1989. In that year, the way the government regulated foreign investment was changed -- the switch from a restrictive positive list identifying those sectors eligible for foreign investment to a short negative list delimiting where foreign investment was prohibited. With that change, foreigners were allowed to invest in most areas open to private domestic investors. Divestiture requirements were relaxed in 1989 (indeed, eliminated for export activities), foreign firms were given almost the same access to domestic financing as domestic firms, and the minimum size of foreign

investment was reduced, from \$1 million to \$250,000. The mid-1994 deregulation package took another giant step toward complete deregulation of foreign investment. It eliminated the minimum investment requirements and geographic prohibitions to foreign investment, practically eliminated the divestment requirement for foreign investors, and opened up nine important sectors to foreign investment, such as telecommunications, electricity, potable water, ports and shipping, and mass media. No more than about 20 sectors remain on the short negative list; it still contains domestic distribution and retailing, in order to protect small retailers and wholesalers, along with six sectors where it is judged that production would endanger people's health, and public opposition to opening the mass media to foreign investment led the Minister of Justice to informally place mass media back on the negative list. Investment licenses are still only valid for 30 years, but they can be renewed.

With regard to trade reform, more NTBs were eliminated and tariffs continued to be lowered throughout the early period, following the trend set in 1985. By end-1993, less than 300 import items were still subject to NTBs, a year earlier, the share of imports covered by NTBs had fallen to 13%, down from 43% in 1986, and the share of domestic production protected by NTBs fell by almost half, from 41% to 22%. Table III 1 shows the downward trend in coverage of NTBs. Nevertheless, important manufacturing sectors remained subject to NTBs, including engineering goods, paper products, food processing and a major portion of agricultural goods, and the import system as a whole remains complicated. By end-1992 the unweighted average nominal tariff stood at 20%, down by almost half since 1985 when it stood at 37%. Most tariff-cutting effort has gone into reducing the highest rates, following an explicit goal of achieving a tariff ceiling of around 35%, by 1991 over 80% of all items had tariffs at or below 35%. Table III 2 shows the improvement in the tariff schedule, although tariff dispersion still remains high. Further progress was achieved in 1993 when tariffs and surcharges were reduced on steel, glass and pharmaceutical products as well as inputs to the electronic components industry, and more flexibility was provided in the import of used machinery. And the duty drawback system was further simplified. Progress has lagged in the area of export controls: marketing restrictions and taxes remain in effect on sawn logs, plywood and a variety of agricultural products such as cloves and palm oil and exporters are required to possess trade permits, with 50% of agricultural exports regulated under this system.

In 1992, a Cabinet shuffle removed most of those Cabinet heads identified with the "economic technocrats", the cadre that had dominated economic policy since the inception of the New Order Government. This may help explain why, since 1992, trade reform has become more specific and less widespread and halting trade reform may help explain the decline in export-oriented capital equipment imports in 1992, which, combined with tightened divestment requirements in the 1993 investment reform package, are cited as two of the reasons for the 1993 decline in non-oil exports and in foreign investment approvals. As of early 1994, according to the World Bank (1994, p. xii),

"NTBs cover about 30% of manufacturing and 35% of agriculture, about the same as in 1991. The average nominal tariff has been about 20% since 1991. Average effective protection in manufacturing remains about 50%, This protection is roughly double

56a

Table III-1 Indonesia Coverage of Nontariff Barriers 1986-92

(In percent)

	After reform packages of						
	1986	1987	1988	1989	1990	1991	1992
Production coverage <u>1/</u>							
Gross production	41	38	29	28	25	22	22
Manufacturing	68	58	45	38	33	32	31
Food and beverages				63	61	60	59
Paper products				38	38	38	35
Engineering				49	36	34	34
Agriculture	54	53	41	40	39	30	30
Food crops				65	65	56	56
Estate and other crops				26	26	14	14
Import coverage							
Import value	43	25	21	17	15	13	13

Source World Bank, Indonesia Sustaining Development, May 1993, page 65

1/ Production coverage estimates for 1986 are based on 1985 production weights  
Estimates for subsequent years are based on 1987 weights

Table III-2 Indonesia Changes in the Tariff Schedule 1/

(In percent)

	Pre-1985	1985	1988	1989	1990	1991	1992
Average tariff rate							
Unweighted	37	27	24	27	22	20	20
Weighted							
By import value	22	13	15	12	11	10	9
By domestic production	29	19	18	19	17	15	13
Index of dispersion <u>2/</u>	62	108	90	93	89	83	83
Average effective tariff <u>3/</u>		4 9	5 1	5 4	6 2	4 5	4 8

Source World Bank, Indonesia Sustaining Development, (May 1993)

1/ Including surcharges

2/ Coefficient of variation (standard deviation over the mean) of unweighted average tariff plus surcharge

3/ Revenue from import duties in relation to non-oil imports (fiscal year)

that in countries such as Korea and Malaysia. Although protection has been reduced for some inputs (for example steel), it has risen in some other sub-sectors. One example is petrochemicals, where the potential misallocation of scarce capital is large and the downstream impact on exporters could be severe."

The mid-1994 trade reform package was also disappointing. NTBs remain high on major agricultural commodities, making reductions in tariffs on these commodities of little real significance, although the reduction in the domestic content requirement for soy meal will reduce slightly the price of livestock feed. Tariffs were also reduced on imported inputs and capital goods. However, these particular tariff reductions actually increased distortions by increasing effective protection on final goods, and by lowering the price of capital equipment, they served as an incentive to choose capital-intensive rather than labor-intensive techniques (Pangestu and Azis, 1994, pp 25-26). In contrast, the improved regulations to facilitate subcontracting by exporters, and expansion of the drawback on the VAT for indirect exporters (domestic industries that use imported inputs to make products sold as inputs to final exporters) are clearly positive because they should induce exporters to source more of their inputs from domestic suppliers.

Nevertheless, Indonesia's commitment to the ASEAN Free Trade Area (AFTA) -- indeed, the leadership role Indonesia played at the November 1994 meeting of AFTA -- bodes well for trade reform over the long term. The Comprehensive Preferential Tariff scheme under AFTA calls for the elimination of NTBs and reduction of all tariffs on manufactured and processed agricultural goods<sup>20</sup> to 10% by 2005. Although trade with its ASEAN partners is still relatively small (13%), such trade has surged in recent years. The prospects are good for large gains from complementarity among the rapidly growing manufacturing sectors of these trading partners.

Significant financial reform continued into the 1990s. Detailed criteria for bank soundness were established, higher professional standards were required of bank directors and by 1993 banks were required to meet the international Capital Adequacy requirement of 8%. The 1992 banking law eliminated the idea of specialized banks, a carry-over from the first days of New Order Government, foreigners were allowed to purchase bank shares, state banks were transformed into limited liability companies so that they be managed more like private companies, and capital requirements for joint venture and domestic banks were increased to improve prudential requirements (and also to limit the rapid increase in the number of private banks). According to the World Bank (1994, p 18), "Indonesia's financial system has undergone one of the most thorough-going deregulations in the world." The most recent financial reform package (mid 1994), increased the requirement that public enterprises allocate a portion of their profits to develop small scale enterprises. But however well-intentioned this program may be, public sector bureaucrats make poor venture capitalists, and the program has little to show for its two decades of operation (Pangestu and Azis, 1994).

The result has been dramatic growth of the financial system since 1988 -- the number of private

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<sup>20</sup> Unprocessed agricultural goods and services are not included in the scheme.

banks doubled and the number of foreign banks nearly tripled, the number of branches of domestic banks increased five-fold, the state banks' share in assets and credit fell below 50%, and financial deepening finally accelerated. On the down side, inflation rose to 10% and the current account deficit increased. Tighter monetary policy in 1991 was accompanied by tougher capital adequacy requirements and loan-to-deposit ratios. By mid-year, interest rates had soared to the 20-30% range. The response was a dramatic inflow of foreign capital, which the government curtailed with ceilings on foreign borrowing for public-sector projects and by banks. Monetary policy has eased since 1992, with interest rates falling below 20% by early 1995.

Indonesian public enterprises suffer from two systemic weaknesses -- poor financial performance because of overstaffing, too many objectives and management weakness and concentration in sectors that faced little domestic or import competition. With these weaknesses, prices of their output were usually well above world prices, putting a heavy burden on other sectors of the economy that used their output. In spite of these weaknesses, however, no progress was made in privatization during this period, neither during the early 1990s. But with the rapid growth of the non-oil economy in response to deregulation, and lack of dynamism of the public enterprise sector, the latter began to decline relative to the rest of the economy. And by early 1995, the GOI has given some indications that active privatization may finally be in offing.

#### 8 Necessary Further Deregulation

Further deregulation of the Indonesian economy will be necessary during the current five-year plan, Repelita IV (1994-99). By strengthening its non-oil export strategy, the Indonesian economy can continue to generate large numbers of modern-sector jobs to employ the rapidly growing labor force. To continue rapid export growth, Indonesia will need to sustain its strong export drive in machinery, metal and electrical products, become more competitive in textiles and move up the quality ladder, and increase exports in other areas where it should have a comparative advantage such as agriculture and agro-industry. And to accomplish all this, Indonesia will need further deregulation.

But keeping in mind that Indonesia's total labor force will continue to grow at around 3% per year into the next decade, while the female component of the labor force will grow at 5% annually, deregulation policies should also reach deep into those sectors of the economy that produce inputs for domestic industries and final products for domestic consumers. Only by tapping the employment generating capacity of these industries catering to the domestic market will the Indonesian economy be able to generate jobs on the massive scale necessary to absorb all future growth in the labor force.

The policies critical to reigniting and sustaining the non-oil export strategy are highlighted below.

- strengthen GOI commitment to macroeconomic stability
  - o stable growth based on labor-intensive manufacturing critical to continued

absorption of (female) labor from agriculture sector

- o competitive real exchange rate
- o non-inflationary fiscal and monetary policy
- o serious financial sector reform to intermediate savings to investment and efficiently finance growth
- further trade reform
  - o auction textile and apparel export licenses and prepare for elimination of multi-fibre agreement under GATT
  - o improve access of small firms to duty drawback system
  - o speed market-oriented agriculture sector reforms in line with Uruguay Round provisions, including agricultural commodity exports for which Indonesia is the low-cost producer (women as workers in rice paddies versus export commodity production ??)
  - o allocate GOI infrastructure, export promotion, training and information resources with a "light-handed" sectoral focus
  - o improve GOI and Indonesian firms' ability to deal with anti-dumping charges
- foreign investment policy
  - o source of improved management skills, technology and marketing linkages, especially important for export of more sophisticated product lines
  - o further reforms to reduce divestiture requirements, land rights and labor regulations, inadequate infrastructure and human resource capabilities limit investment in more sophisticated export products and in certain regions, investment bottlenecks at the local and provincial government levels
- physical infrastructure
  - o inadequate power and communications infrastructure a constraint
  - o relative lack of infrastructure outside Java limits spread of benefits from export growth
  - o calls for encouragement of private-sector participation in provision of

infrastructure, accompanied by necessary regulatory functions, and privatization of some parastatal infrastructure providers

- o use sectoral projections of export growth (see above) to guide infrastructure development

- human resource development

- o so far, foreign skilled labor (Philippines, India, Singapore) has complemented Indonesian un-skilled labor, but lack of domestic skilled labor, managers and professionals will become a problem as Indonesia upgrades exports to higher value-added products

- o Indonesia is weakest, compared to its international competitors, in its education and training programs, 15 years of significant progress in universal primary education must be complemented with secondary-level education linked to needs of businesses for industrial and export skills

- o example of financial sector where deregulation starting in 1988 resulted in the creation of high-salary jobs and a scramble to obtain training on the part of Indonesians, but such a revolution has not yet hit the production sector

- o many donors getting involved in trying to develop training programs linked to export and business needs, but future efforts must include systematic and coordinated planning among economic and educational/training ministries and encouragement for private sector providers of education and training

- technology policy

- o so far, technology policy has been focused on high-tech activities carried out by parastatals far removed from the export drive

- o with the transition to more sophisticated export production, technology policy should be more effectively integrated with the export sectors

- export promotion/international marketing

- o GOI efforts should be targeted toward promotion of a competitive environment supportive of foreign investment and to providing assistance, especially training, to smaller firms

- o Successful private exporters will take care of developing their own marketing skills on-the-job training and private training facilities

- o with the importance of export skills training (marketing, advertising, product development, etc ), and the planned activities of several donors (among them UNDP and ADB), USAID might have a role to ensure that women participate in these training programs
- international trade negotiations, market access, trade disputes
  - o USAID has a natural role, as an expression of explicit USG policy to hasten implementation of Uruguay Round and APEC agreements on the part of participating countries, to be involved in assisting the GOI to support further trade liberalization in these fora and to implement the agreements so far reached as rapidly as possible USAID currently assists Ministry of Trade in international negotiation
  - o Of special importance is knowledge of intellectual property rights, anti-dumping and firm-to-firm dispute settlement on the part of private businesses
- role of small and medium business
  - o SMEs were leaders in the export drive, with conglomerates only entering later, if at all
  - o Hypothesis SMEs (as well as micro-enterprises) in all likelihood constitute the most fertile ground for women-owned businesses They are a dynamic sector of Indonesia's export-oriented private business sector, and therefore the area with the highest potential payoffs in terms of numbers of potential women entrepreneurs
  - o Work on SMEs is closely related to domestic trade and competitiveness issues, and to building up sub-contracting and other backward linkages to larger exporting firms Although a greater understanding of the constraints to SME development, as well as more efficient domestic trade, is greatly needed, a thorough study of why Indonesia has much weaker backward linkages from exports than most other East Asian countries would be a logical "entry point" for understanding and addressing these constraints
- quality control and product standards
  - o This is not a question of requiring high-quality production, rather, it is a question of meeting different international standards of quality for different market niches Therefore, conforming Indonesia's product standards to international ISO standards will help increase the competitiveness of Indonesia's exports
  - o Use private exporting associations to implement quality control, with appropriate

### GOI oversight

- o Streamline overlapping authority of numerous ministries
- o Eliminate bans on low quality exports where markets for them exist
- the legal environment
  - o weak legal systems discourage business among diverse groups, giving the advantage to family firms or Chinese firms than can depend on a network of informal codes of behavior to reduce transactions costs
  - o The need for better legal systems to protect IPR will grow as Indonesia enters more sophisticated lines of export production (witness Taiwan's growing concern for IPR in its relations with mainland China)
  - o USAID does, and should because of its foreign policy interest in IPR, have a commercial law program via INDAG. The Asia and Ford Foundations have been active in programs to improve the commercial law system
  - o One partial solution is to develop a commercial arbitration system for foreign firms to circumvent the weak formal system
  - o Land law is an important subset of the overall formal legal system (USAID is apparently involved in this)
- labor relations
  - o The appropriate approach to labor relations is one that links increases in wages to increases in workers' skills and productivity, so as to maintain international competitiveness. Assistance to improve labor/employer negotiations must emphasize this point if it is to avoid destroying the "goose that lays the golden eggs"
  - o One approach to try is to encourage firms to train their own workforce, accompanied by higher wages and better working conditions to encourage greater attachment of workers to one firm
  - o Also important to eliminate restrictions to labor markets, where they exist, especially those on disciplining non-performing staff. Labor regulations that make the hiring of female laborers more expensive should be avoided, which means that the cost of providing day care facilities should not fall on the employer

- environmental policy and sustainable development
  - o From an export perspective, the environmental impact of forestry policies, such as restriction on wood and rattan exports, are a priority. This is particularly important since plywood exports are among Indonesia's top three export products. Possible role for "eco-labeling". How will this environmental concern affect employment of women in the industry?

Unlike other Asian NICs, the large size of the domestic economy, approaching 200 million potential consumers, also makes the Indonesia domestic economy a potential source of growth. Rapid non-oil export growth generates demand for intermediate inputs and the worker incomes generate demand for consumer goods. However, these backward and forward linkages can only be realized by domestic producers if deregulators turn their attention to the domestic economy, a sector of the Indonesian economy still relatively untouched by the deregulator's hand. Thus, although Indonesia's economic policy reforms during Repelita VI should continue to focus on the export sector, they should pay increasing attention on deregulation of the domestic economy.

- o deregulation over the past 10 years has focused on foreign trade and investment, leaving domestic production and trading highly regulated, often dominated by parastatals firms or private sector monopolies. A non-competitive domestic economy means that export activities generate few backward linkages, with employment generation limited to jobs in the export activities.
- o The highly centralized public finance system encourages provincial and local governments to raise funds in trade distorting ways. USAID is involved in a municipal finance project, which should focus on developing revenue sources that grow as business activity grows, thus instilling self interest in business growth on the part of local governments.
- o Domestic deregulation is complicated by greater vested interests in the central as well as local governments, but reform can greatly leverage the employment generated from expansion of the export sector.
- o However, the importance of liberalizing domestic trade and investment goes well beyond its role in improving the impact and efficiency of export activities.

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