

# Indonesia Jobs Report

## Towards Better Jobs and Security for All



Kingdom of the Netherlands



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# **Indonesia Jobs Report**

Towards Better Jobs and Security for All

# Foreword

Indonesia has enjoyed a demographic dividend over the last forty years. The working population has been growing faster than the population of non-working dependents. This presents a major opportunity for economic growth and poverty reduction, provided that more jobs – and better jobs – are created to employ a workforce, which will grow by an estimated 20 million workers over the next ten years. But this demographic window of opportunity will close over the next decade. Growth in the population of elderly dependents is outpacing the growth of the workforce, placing greater strains on workers' income security. The upcoming years will be critical for Indonesia to boost job creation and make the most of this opportunity.

Today's policy makers in Indonesia face a strategic challenge in identifying which policies and programs will spur the creation of good jobs while, at the same time, ensuring that workers are better protected from risks threatening their income security. Decisions about labor policies are particularly difficult because they can directly affect the well-being of workers, both inside and outside the formal jobs market, and the firms that are the main engines of job growth. Differences between these competing interests have contributed to the current stalemate position that leaves both workers and firms in a "lose-lose" situation.

Sound empirical data will help guide the debate around labor reform. The Indonesia Jobs Report, prepared by the World Bank in cooperation with the Government of Indonesia and local research partners, is the most comprehensive assessment of the country's labor market that has been carried out in the last decade. The report uses the most up-to-date data available to examine the performance of the labor market, changes in the supply of workers, and the effects of labor policies. The findings will help inform future policy directions and contribute towards evidence-based decision making.

Stimulating the growth of better jobs requires a multi-pronged approach. This report recommends much needed reforms of labor policies and programs. Equally important, however, are reforms that accelerate job creation by improving infrastructure and the investment climate, alongside reforms that aim at improving the quality of education. Success will depend on working partnerships between the government, employer associations, labor unions and other civil society groups, with the support of Indonesia's think tanks and international development partners.

We sincerely hope that this report helps reinvigorate policy dialogue about job creation and worker security. Learning from experiences and international best practices, Indonesia will be better prepared to navigate a course towards "win-win" solutions that accelerate the creation of better jobs without sacrificing adequate protection for workers.



**Joachim von Amsberg**  
Country Director, Indonesia  
The World Bank

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# Abbreviations and Acronyms

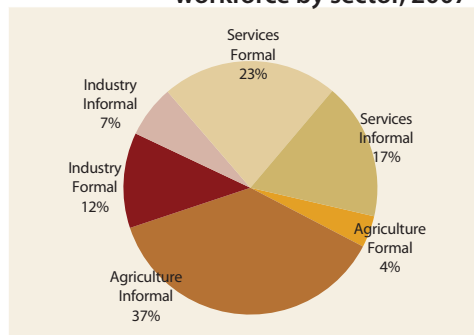
BAN-PNF	<i>Badan Akreditasi Nasional Pendidikan Non Formal</i> (National Non-Formal Education Accreditation Institute)
BAPPENAS	<i>Badan Perencanaan Dan Pembangunan Nasional</i> (National Development Planning Agency)
BLK	<i>Balai Latihan Kerja</i> (Public Vocational Training Center)
BNSP	<i>Badan Nasional Sertifikasi Profesi</i> (National Professional Certification Institute)
BPPD	<i>Balai Pengembangan Produktivitas Daerah</i> (Center of Local Productivity Empowerment)
BPS	<i>Badan Pusat Statistik</i> (Central Statistics Agency)
CDD	Community Driven Development
CLA	Collective Labor Agreement
CMRS	Crisis Monitoring and Response System
CPI	Consumer Price Index
CR	Company Regulations
Depnaker	<i>Departemen Tenaga Kerja dan Transmigrasi</i> (Ministry of Manpower and Transmigration)
Disnaker	<i>Departemen Tenaga Kerja</i> (Local Manpower Agency)
DJSN	<i>Dewan Jaminan Sosial Nasional</i> (National Social Security Agency)
EPL	Employment Protection Legislation
FTC	Fixed-Term Contract
GDP	Gross Domestic Product
GSP	General System of Preferences
IFLS	Indonesia Family Life Survey
ILO	International Labour Organization
IRC	Industrial Relations Courts
Jamsostek	<i>Jaminan Sosial Tenaga Kerja</i> (Social Security for Workers, a provident fund)
JPS	<i>Jaring Pengaman Sosial</i> (Social Safety Net)
KFM	<i>Kebutuhan Fisik Minimum</i> (Basic Physical Needs)
KHL	<i>Kebutuhan Hidup Layak</i> (Decent Living Needs)
KHM	<i>Kebutuhan Hidup Minimum</i> (Basic Living Needs)
LDS	Labour Dispute Settlement
LSP	<i>Lembaga Sertifikasi Profesi</i> (Professional Certification Institute)
MoMT	Ministry of Manpower & Transmigration
MoNE	Ministry of National Education
NGO	Non-Government Organization
NQF	National Qualification Frameworks

NSS	National Social Security
OECD	Organisation for Economic Co-operation and Development
P4D	<i>Panitia Penyelesaian Perselisihan Perburuhan Daerah</i> (Regional Committee for Labor Dispute Settlement)
P4P	<i>Panitia Penyelesaian Perselisihan Perburuhan Pusat</i> (Central Committee for Labor Dispute Settlement)
PK	<i>Padat Karya</i> (labor intensive public works program)
PKH	<i>Program Keluarga Harapan</i> (Conditional Cash Transfer Program)
PNPM-Mandiri	<i>Program Nasional Pemberdayaan Masyarakat Mandiri</i> (National Community Empowerment Program)
Podes	<i>Potensi Desa</i> (Village Characteristics Census)
PPK	<i>Pusat Peluang Karya</i> (Creativity Opportunity Centre)
PPP	Purchasing Power Parity
PT ASKES	<i>Asuransi Kesehatan</i> (National Health Insurance program)
Sakernas	<i>Survei Angkatan Kerja Nasional</i> (National Labor Force Survey)
SD	<i>Sekolah Dasar</i> (Primary level School)
SJSN	<i>Sistem Jaminan Sosial Nasional</i> (National Social Security System)
SKKNI	<i>Standar Kompetensi Kerja Nasional Indonesia</i> (National Labor Competency Standard)
SMA	<i>Sekolah Menengah Atas</i> (Senior Secondary General High School)
SME	Small and Medium Enterprise
SMK	<i>Sekolah Menengah Kejuruan</i> (Senior Secondary Vocational School)
SMP	<i>Sekolah Menengah Pertama</i> (Junior Secondary Level School)
STM	<i>Sekolah Teknik Menengah</i> (Senior Secondary Technical School)
Susenas	<i>Survei Sosial Ekonomi Nasional</i> (National Socio-Economic Survey)
UI	<i>Universitas Indonesia</i> (University of Indonesia)
VHS	Vocational High Schools



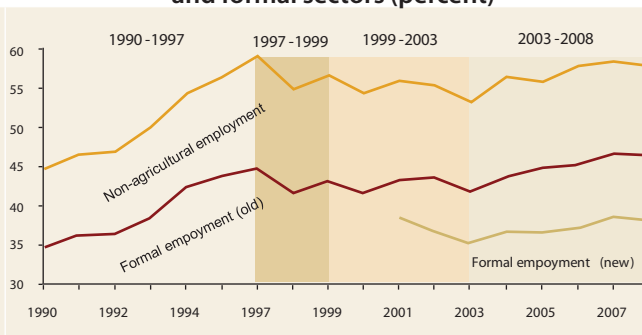
## Executive Summary

**Figure 1: Composition of active workforce by sector, 2007**



Source: Sakernas.

**Figure 2: Employment shares in non-agricultural and formal sectors (percent)**



Source: Sakernas.

**Indonesia has not generated enough good jobs to fully share the benefits of sustained economic growth with workers.** Labor is one of the few assets of the poor. If provided with a good job, they have a chance to earn their way out of poverty. Indonesia, however, experienced significant jobless growth from 1999 until 2003, which contributed to the current situation where the majority of Indonesia's working population of 104.5 million is concentrated in the agricultural and informal sectors (Figure 1).<sup>1</sup> Despite sustained economic growth, the rate of poverty reduction is slower than hoped, partly because there are not enough opportunities for poor workers to move into better jobs in the formal and non-agricultural sectors (Figure 2). Economic shocks can also dampen the pace of job creation and, if serious enough, can threaten to push Indonesia back into jobless growth.

**Rigid labor regulations have inhibited job creation and are failing to provide protection for workers, especially the most vulnerable.** Indonesia's hiring and firing regulations were tightened in 2003 with the passage of the Manpower Law (No. 13/2003), which aimed to improve workers' protection. These policies benefit neither employers nor the majority of workers, trapping both in a lose-lose situation. Rigid regulations hamper job creation, by discouraging investment and productivity, and restrain the ability of employers to downsize in order to stay viable during economic downturns. Contrary to the intention of the law, however, these regulations provide little actual protection for formal, contracted workers. The most vulnerable employees – low wage earners and female workers – are the least likely to benefit from current regulations. Of equal concern, current policies exclude the majority of "outsider" workers, consisting of employees who work without a contract and those employed in the informal sector. They are left entirely unprotected by the current regulations and face dim prospects of finding better jobs. At the same time, there are few active labor programs that are designed to promote job creation and provide opportunities for informal and unemployed workers.

**Labor reform attempts have been deadlocked, blocking Indonesia's ability to prepare for the challenges that lay ahead.** The debate around reform of the labor law has been vigorous, focusing largely on the controversial hiring and firing regulations. Previous government attempts to improve the flexibility of the labor market by reforming these regulations, once in 2006 and again in 2007, failed. As a result, Indonesia's labor regulations continue to be among the most rigid in the region. The stalemate is constraining Indonesia's ability to accelerate the pace of 'good' job creation and also the pace of poverty reduction.

**With a fresh political mandate, the new government has an opportunity to move beyond the current impasse on reforming current labor policy that is hurting both workers and employers.** Indonesia's labor policies and programs can be better designed to boost job growth while, at the same time, protect

1 National Labor Force Survey (Survei Angkatan Kerja Nasional, Sakernas), February 2009.



vulnerable workers. The new government has an opportunity to use the next five years to introduce new policies and programs that work to the benefit of both workers and employers, by focusing on the following four priorities.

**First, negotiate a grand bargain on regulatory reform.** The current stalemate on severance reform is undermining the competitiveness of Indonesia's labor market and offers scant protection for most workers. Work towards a win-win solution by simplifying and decreasing excessively high severance rates while, at the same time, offering unemployment benefits to protect formal workers more effectively. An employment benefit system is a core component of the future National Social Security (NSS) system, which is a key institution in other middle-income countries.

**Second, develop a comprehensive skills training strategy to equip workers for better jobs.** It is not enough to simply rely on labor regulations to protect workers. Regulations are largely irrelevant for informal workers who make up the majority of the workforce. The government can assist more workers by adopting both formal and informal strategies for skills development. In the formal approach, lifting the freeze on general senior secondary schools will help meet demand. Vocational senior secondary education expansion, in turn, should respond to actual labor market demand rather than quotas. Improve the quality of vocational education to meet the strong demand for educated workers. At the same time, introduce a complementary non-formal skills training strategy to target the majority of the workers in Indonesia who are unable to access formal education.

**Third, launch active labor programs that are designed to protect the most vulnerable.** Workers often face the brunt of the shocks, as they did during 1997 financial crisis. In the absence of safety nets, workers typically resort to finding work in the informal and agricultural sectors. The threat of the recent global financial crisis has highlighted the need for Indonesia to better prepare for future shocks. Take advantage of the current stable situation to prepare for future employment and wage shocks by introducing labor safety net programs to protect the most vulnerable workers. Begin with public works, which are an essential safety net that can be effectively used to target poor and low-wage workers.

**Finally, invest in research to support evidence-based policy making.** Many debates concerning labor market policies and programs are not based on empirical evidence. There is a need to improve the quality and depth of labor policy research to assist the new government in embarking on a reform agenda that is analytically sound and supported by strong evidence. Local think tanks, research facilities and the Central Statistics Agency all play key roles in generating data and carrying out quality labor research to meet the needs of policy makers.

## I. Negotiating a Grand Bargain

### Provide more unemployment benefits and agree to lower severance rates

**The Manpower Law substantially increased the rigidity of Indonesia's labor regulations.** The law increased severance rates for workers with three or more years of service and added a 15 percent gratuity payment (Figure 3). With the increase, severance pay is estimated to be equivalent to a "hiring tax" of approximately one third of a worker's annual wage.<sup>2</sup> While it made it more difficult for employers to terminate

2 Severance pay, based on the Manpower Law, is estimated to be equivalent to a "hiring tax" of about 4.1 monthly wages, up from an average 2 months in 1996 and 3.4 months in 2000. (*Laboratorium Penelitian, Pengabdian Pada Masyarakat dan Pengkajian Ekonomi*, LP3E, Faculty of Economics, Padjadjaran University. "Indonesia's Employment Protection Legislation: Swimming Against the Tide?" 2004. Prepared for GIAT, a USAID/GOI project).

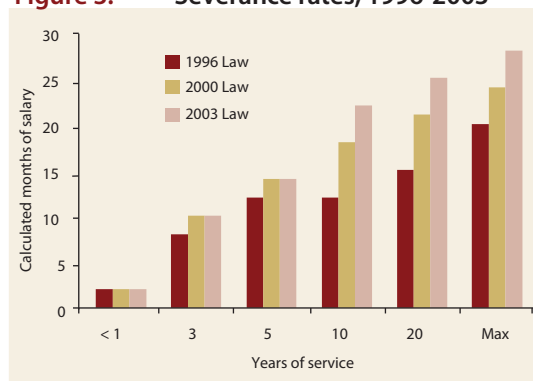


or reallocate employees, the law also restricted the ability for firms to hire temporary employees. The use of fixed-term contracts (FTCs) and outsourcing services was restricted to non-core positions and the maximum length of a temporary contract was reduced from five to three years. The law also introduced some welcome changes. The minimum wage-setting process was improved by reforming the use of price surveys and strengthening the role of local wage councils.

**Indonesia's hiring and firing regulations are now among the most rigid in East Asia and the world.** In a 2009 cross-country survey comparing labor regulation rigidity, Indonesia ranked 157 out of 181 countries in the world. In comparison with neighboring competitors in the East Asia and Pacific region, Indonesia ranked 23 out of 24 countries.<sup>3</sup> No other country in the region has firing costs that are as high as those in Indonesia (Figure 4). While most Asian economies limit the use of FTC work to certain activities and stipulate both the duration of the contract and the conditions for renewal, Indonesia falls into the group of countries with more restrictive regulations governing FTC work, alongside Cambodia, the Philippines, and Vietnam.<sup>4</sup>

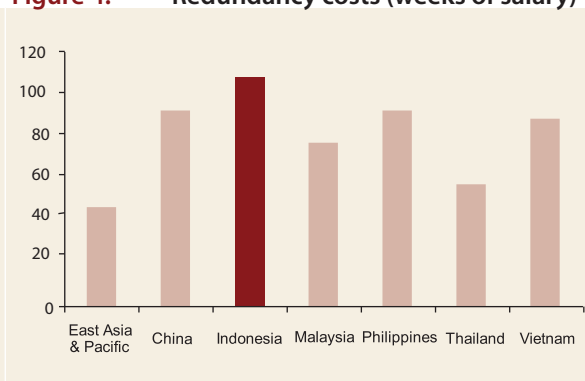
**Developing countries with rigid labor regulations face more difficulties in generating jobs, worsening labor market outcomes for workers.** Empirical evidence of the impact of increased rigidity of job creation is not available for Indonesia because data on severance payment and contract status has not been consistently collected. International research, however, consistently finds that developing countries with onerous labor regulations also experience lower rates of investment, productivity and investment in manufacturing.<sup>5</sup> Rigid labor regulations hamper job growth by limiting the benefits of trade openness and discouraging entrepreneurs from starting new businesses. This has a direct, negative impact on workers. Developing countries with rigid labor regulations are more likely to experience lower (male) participation in the labor force, lower employment rates, and high unemployment rates – especially among women and young people.<sup>6</sup> A study of 74 countries concluded that if Indonesia maximized the flexibility of its labor regulations, the unemployment rate would decrease by 2.1 percentage points and the youth unemployment rate by 5.8 percentage points.<sup>7</sup>

**Figure 3: Severance rates, 1996-2003**



Source: UNPAD, 2004.

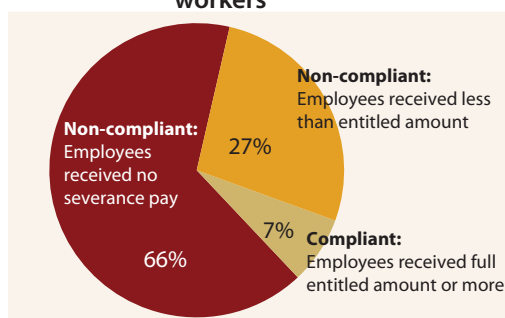
**Figure 4: Redundancy costs (weeks of salary)**



Source: Doing Business, 2009.

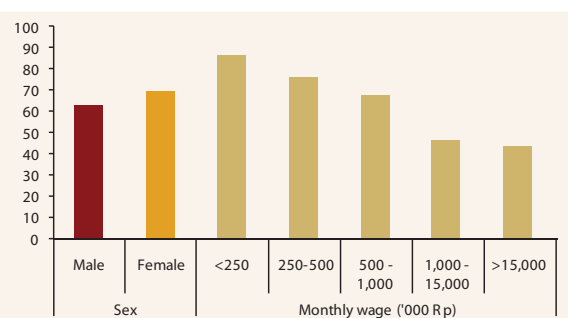
- 3 World Bank 2009a. Doing Business. Note: The report is based on survey findings that quantitatively measure regulations for employing workers across 181 economies. For details see [www.doingbusiness.org](http://www.doingbusiness.org).
- 4 Based on country-specific regulations in Asian economies from the ILO (LABORSTA on-line database, 2008) on the duration of temporary contracts and the conditions under which they are permitted.
- 5 Djankov, Simeon and Rita Ramalho. 2008.
- 6 Ibid.
- 7 Feldmann, 2008.

**Figure 5: Receipt of severance pay, as reported by terminated workers**



Source: Sakernas 2008.

**Figure 6: Eligible workers who report not receiving severance pay (percent)**



Source: Sakernas 2008.

**The current stalemate traps workers and employers in a lose-lose situation that constrains job creation and leaves employees inadequately protected.** Indonesia's high de jure severance rates deter foreign investment and discourages entrepreneurs from creating new businesses. Complicated rules about severance calculations and the current "post-pay" system introduce additional problems by making it difficult for firms to predict their labor costs. High severance rates not only hurt employers, but employees too. The regulations have not been effective in protecting employees who are terminated and face unemployment. Only 34.4 percent of all eligible employees who separated from a job in the last two years actually received severance pay (Figure 5). Of those employees who actually received severance pay, 78.4 percent collected less than amount to which they were legally entitled. The burden of non-compliance falls disproportionately on the workers who, arguably, need more income protection: women, temporary staff and low-wage employees (Figure 6). Small firms are more likely to avoid compliance because they are too small to form unions and fall under the radar of labor inspectors.

**By negotiating a grand bargain – lowering severance rates in exchange for introducing unemployment benefits – the government can improve labor market flexibility while increasing protection for employees.** There is scope to find a win-win solution that works both for employers and employees. First, simplifying severance calculations and adjusting rates downward will bring Indonesia in-line with regional standards, improving labor market flexibility and global competitiveness. At the same time, introducing a complementary unemployment benefit system can improve the level of protection for terminated employees. Shifting towards a monthly contributory approach – where firms make monthly contributions to an account that is managed centrally with government oversight – will improve the predictability of firms' labor costs without influencing their hiring and firing decisions. It will also likely increase the level of compliance by employers, which will help reduce reliance on the Industrial Relations Courts that are backlogged with disputes concerning employment termination.<sup>8</sup> This will be a relief to both employees and employers who find the dispute resolution process costly and time-consuming.

**There are a range of unemployment benefit systems that should be considered and assessed for inclusion in the future National Social Security system.** Indonesia is ready to begin following the lead of other middle-income countries that have adopted unemployment benefit systems. There is a range of reform options that can improve the predictability of labor costs and compensate workers for lowered severance rates. The options include a pooled fund from which terminated employees can draw, an individual account severance system, or a flat-benefit unemployment assistance program (Box 1). Each option has its respective advantages and disadvantages, and varies in terms of the level of institutional complexity to manage the program.

8 Nugroho, 2008.

## Box 1: Severance Reform Options

**Option One: Severance Fund:** Firms make regular severance payments to a pooled fund that is administered by a central government agency or private firm(s). Terminated employees receive severance according to years of service. Individual pooled funds may be created for each firm, or shared among all contributing firms.

**Option Two: Individual accounts:** Employers and employees regularly deposit contributions into individual accounts managed and disbursed by a central agency. Unemployed contributors draw from their own accounts upon confirmation of unemployment status.

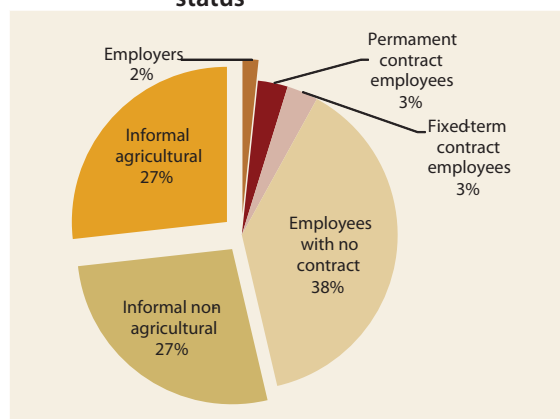
**Option Three: Flat-benefit unemployment assistance:** Create a fund that eligible workers can draw from when unemployed. Funds are managed and disbursed by an appointed agency, not the employer. Unemployed workers receive a low benefit from a common fund for a specified period of time. Eligibility based on active job search and availability of suitable work. Possibility to make benefits contingent on means-tested family income.

Source: Revenga and Rigolini, 2007, and Vroman, 2007.

The reform process can be kick-started by initiating the necessary analytical homework to identify which option best fits Indonesia. Simulation studies are needed to assess the anticipated impact of the alternative systems and the institutional implications and demands associated with each reform option. Based on the best-suited model, a reform roadmap is needed to lay the foundations for the future system, which should be linked to the future national social security (NSS) system mandated by the Social Security Law (No. 41/2004).

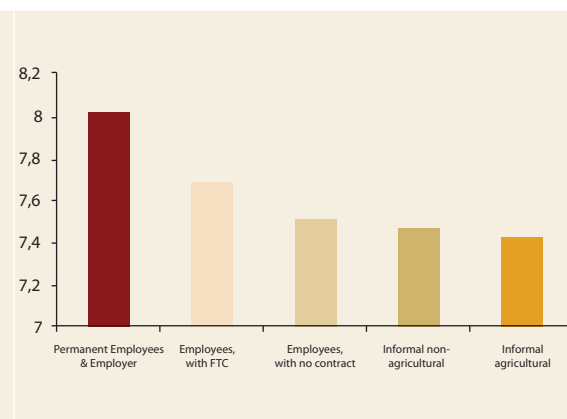
**Contract-less and informal workers lose the most in the current stalemate; reforms are needed to increase opportunities for them to find better jobs.** It is not possible to reach the majority of Indonesia's highly informal workforce by regulatory reform alone. Indonesia's labor market is highly segmented by sector and contract status. Labor regulations mostly benefit employees with a permanent contract (less than 3 percent of the workforce) and unionized employees (11.2 percent of wage employees). Regulations, however, are largely irrelevant for the 92.1 percent of all workers who are either employed without a contract or work in the informal sector (Figure 7).

**Figure 7: Segmentation – Distribution of active workforce by employment status**



Source: Sakernas 2008.

**Figure 8: Comparative monthly wages (log mean), by employment status**



Source: IFLS 2007.

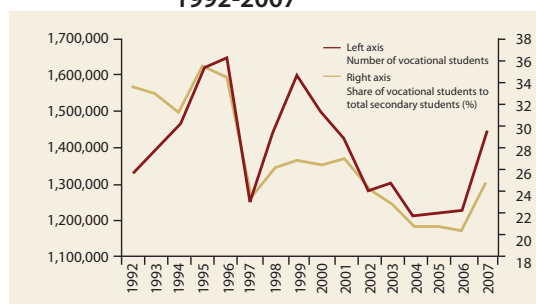
**Easing the rigidity of current regulations will benefit these “outsider” workers by creating more work opportunities in the formal sector.** By finding better jobs in the formal sector, they could expect to earn 20 percent more and are more likely to receive non-wage benefits such as medical coverage (Figure 8). That said, many workers will still remain trapped in the informal sector for the foreseeable future with limited chances of upgrading their employment status. For this reason, regulatory reform alone is not sufficient to improve the prospects for most Indonesian workers. Additional strategies are therefore needed to empower and protect Indonesia’s excluded and vulnerable workers.

## II. Developing a Comprehensive Skills Training Strategy

### Equip vulnerable workers with the skills they need to succeed in the labor market

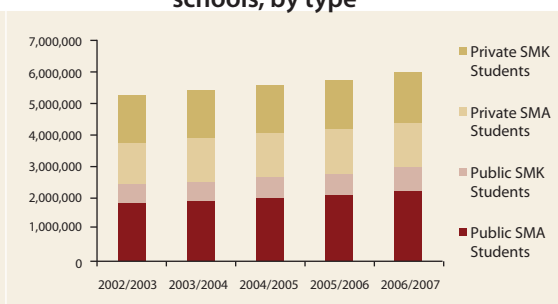
**The main government strategy to improve workforce skills is through broad expansion of vocational senior secondary schools, both public and private.** In 2005, the Ministry of National Education (MoNE) launched its controversial “70:30” policy that aims to have 70 percent of all senior secondary students enrolled in public and private vocational (SMK) schools by 2015.<sup>9</sup> This is a major increase from the current rate of 46 percent of students enrolled in vocational schools in the 2008-09 school year (Figure 9). The government has three general strategies to achieve their target ratio: freeze construction of new general secondary school (SMA), accelerate the construction of new SMK schools, and convert existing general schools into vocational facilities. The change process has already begun. From 2006-07 until 2008-09, 1,211 additional vocational schools were created while 375 general schools were closed.<sup>10</sup> As a result of the expansion almost 1.2 million more students are now attending SMK schools than there were in 2002-03 (Figures 10). The policy is motivated by the aim to lower youth unemployment rates by providing senior secondary students with job-specific skills.

**Figure 9: Vocational school enrollment, 1992-2007**



Source: Newhouse and Suryadarma, 2009 (based on Susenas).

**Figure 10: Enrollment in senior secondary schools, by type**

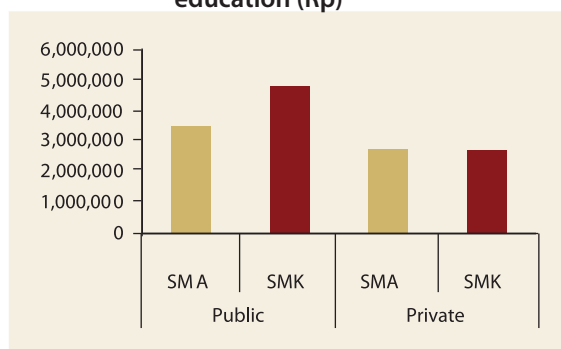


Source: Sakernas and World Bank calculations.

9 MoNE, 2006a. Note: vocational schools at the senior secondary level are called Sekolah Menengah Kejuruan (SMK). General senior secondary schools are called Sekolah Menengah Atas (SMA). A third school type at the senior secondary level, the Islamic schools (Madrasah Aaliyah), is not included in the analysis for this chapter. However, the number of senior secondary students enrolled in Islamic schools is very small compared to SMK or SMA.

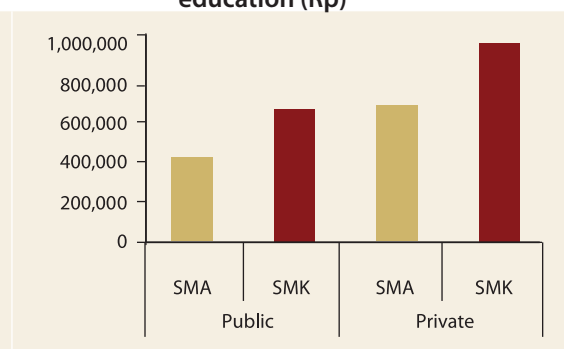
10 MoNE, [www.depdiknas.go.id](http://www.depdiknas.go.id).

**Figure 11: Public costs of vocational education (Rp)**



Source: Ghozali and World Bank.

**Figure 12: "Out-of-pocket" costs for education (Rp)**



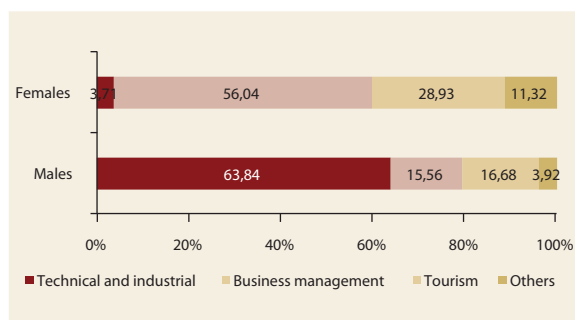
Source: Susenas, 2006.

**Vocational senior secondary education, however, does not provide clear advantages for graduates in the workforce.** Despite the intention of the "70:30" policy, public vocational education does not lower the chances of graduates being unemployed any more than if they graduated from public general schools. It has improved the men's prospects of finding formal employment, but this advantage has disappeared for the most recent group of graduates. Although female public SMK graduates enjoy a wage premium, this has eroded over time. This development is grimmer for recent male graduates from public SMK who face an increasingly large wage penalty that reached 30 percent in 2000 and 43 percent in 2007.<sup>11</sup> Men who are top-scorers in school face steep wage penalties without a public general diploma, and stand to lose the most from the government's expansion policy. Vocational schools, especially private vocational, play a valuable role in serving low scoring students who can expect wage outcomes similar to those who graduate from SMA.

**Without clearly improving labor outcomes, the current broad expansion of vocational schools is not cost effective for either the government or parents.** Vocational schools are more costly to run and more expensive to attend than general schools. Given that estimated public SMK costs per student are 37 percent higher than for public SMA, the 70:30 policy will require an additional budgetary input of approximately Rp 5 trillion per year once the target is reached (Figure 11). Vocational school is also expensive for parents. "Out-of-pocket" costs for parents are 36.9 percent higher for public SMK than public SMA. Private SMK is 31.4 percent more expensive than private SMA (Figure 12).

**Senior secondary education should expand to meet strong demand for educated workers, taking cues from the labor market to determine the "right mix" of school type.** The demand for educated workers remains high even though there are now more educated Indonesian workers than ever before. Access to senior secondary schools needs to be expanded to meet the demands of the workforce and allow more graduates to benefit from high wage premiums for educated workers. Lifting the freeze on public general schools is not only a cost effective way to expand access but it also ensures that academically strong students are in the best position to find well-paying jobs. Although vocational education plays an important role in expanding the pool of educated workers, especially for academically weak students, quotas should not be set to increase enrollment levels. Instead, the supply of SMKs should be flexible so that it can better respond to the needs of employers. Currently, the shift is more towards service-oriented skills than technical and industrial skills, which is benefiting female graduate students who tend to choose majors that are more aligned with the expanding service sector (Figures 13 and 14). Finding the "right mix" in the future requires monitoring the changes in the types of skills that employers demand, and responding with the appropriate educational policies.

11 Newhouse, David and Daniel Suryadarma, 2009.

**Figure 13: Choice of SMK majors, by sex**

Source: Susenas 2006.

**Figure 14: Workers with SMA or higher, by sector (millions)**

Source: Sakernas.

**Improving the quality of both general and vocational schools can help satisfy the demand for better educated workers.** Successes in expanding the pool of more-educated adults have not been matched by a deepening in the quality of education. Indonesia's educational performance continues to lag behind regional countries. This may be contributing to growing disparities in the wage outcomes between academically stronger and weaker students. To improve the quality of vocational education it will be necessary to create and enforce minimum standards for SMKs, most of which currently fall below national standards. Fostering stronger linkages with employers, ensuring adequate financial resources, and improving teacher quality are also key ingredients in improving vocational education outcomes.<sup>12</sup> Mismatch, although decreasing, continues to be a problem; almost one-quarter of tertiary graduates are employed in jobs outside of their area of expertise. Innovative matching programs, such as those used in model vocational schools and universities, can help graduates successfully transition from school to the workforce.

**Complementary skills training are needed as a second-chance for workers who cannot access senior secondary education.** Given that only one-quarter of the workforce has completed a senior secondary level of education – low even by regional standards – a skills strategy focusing only on formal education is inadequate. A complementary strategy is needed to build the skills of uneducated workers through non-formal training. Public training centers – *Balai Latihan Kerja* (BLK) – however, are unprepared to meet demand. There are only approximately 162 centers located across the country training a small number of workers (42,500 people in 2003-04).<sup>13</sup> Although intended to target job seekers and self-employed workers in small business and agriculture, BLKs largely contract out their services to train workers already employed by client firms. The Ministry of Manpower and Transmigration (Depnaker) assessed BLK conditions in both 2004 and 2006 and found that approximately 60 percent of all the centers are in poor condition, in terms of their facilities, equipment and human resources.<sup>14</sup>

**There is a need to introduce a well-designed comprehensive national skills training program to improve the labor outcomes of vulnerable workers.** There is a gap in providing skills for the unemployed or new entrants to the labor market. International experience shows that training interventions, such as the *Jóvenes* programs in Latin America (Box 2), have been successful in improving labor market outcomes for participants.<sup>15</sup> Rather than simply providing classroom-based learning, these programs offer a broader array of services that include: internships, job search assistance or on-the-job training, and wage subsidies. The curriculum does not only include training in technical skills, but also soft "life" skills that are increasingly in demand from prospective employers in Indonesia.

<sup>12</sup> Wicaksono, 2008.

<sup>13</sup> Alisjahbana et al., 2008.

<sup>14</sup> Ibid.

<sup>15</sup> Puerto and Fares, 2008.

## Box 2: The Jóvenes Programs: Best practice in skills training

Jóvenes programs offer poor, young people training in both professional and life skills followed by workplace internships. Based on a pilot in Chile in the early 1990s, this comprehensive approach to training has spread throughout the Latin American region, with each country tailoring the program to their needs. Disadvantaged young people are identified using, for example, out-of-work statistics, socioeconomic data, and poverty mapping. Qualified private firms, NGOs, public institutions and non-formal training agencies provide training on a competitive basis. Providers are required to arrange internships for their trainees and to ascertain what kind of skills local employers need before they can receive any funds for training. In this way, internships provide information on the skills for which there is demand. Intensive life skills training focuses mainly on problem-solving skills, correct workplace behavior, conflict management, job search techniques, and building self-esteem.

**Programa Jóvenes en Acción.** The pilot of Colombia's version of this program began in May 2001, offering job-training courses for 100,000 unemployed men and women in the two lowest levels of income. The program was implemented in seven cities with a total investment of US\$ 17.6 million. This training program is part of the Social Support Network (Red de Apoyo Social) that also includes emergency public works for income generation and family education and health allowances for poor rural families. Youth between the ages of 18 and 25 receive training allowances and vouchers, which they can use to enroll in a training course of their choice from a list of competitively selected providers. Job training lasts about three months and is followed by a three-month internship in a company or organization. Beneficiaries also receive a food and transportation allowance. The program is administered by a group of government agencies, nonprofit organizations and private companies.

An evaluation of the *Jóvenes en Acción* program has shown impressive results:

- **Higher employment rates:** For women, training increased the probability of employment, days and hours worked, and the probability of having a job with a written contract. The impact was similar but more limited for men.
- **Wage increases:** The most significant impact of the program was the substantial increases in salaries: women's salaries increased by 35 percent, while men's salaries increased by 18 percent.
- **Cost-effective:** The program generated a large net gain, especially for women. Even the most conservative of the cost-benefit calculations suggest that the net benefits of the program more than justify its existence and possibly its expansion. The lower bound internal rate of return is 13.5% for women and 4.5% for men.

Source: Attanasio, Orazio, Adriana Kugler and Costas Meghir. 2007.

**Indonesia needs a new skills training program that is sufficient in scope to reach out to those who do not have access to formal education or public training facilities.** A new comprehensive training program can form the second component of a national strategy to equip workers with job relevant skills. This future program, unlike current BLKs, should support vulnerable and disadvantaged workers, especially targeting young, poor and informal workers who would benefit the most from a second-chance. Contracted service providers (private sector and NGO providers) can be used to pilot the program. Depnaker should take the lead in strategic planning and monitoring the performance of the implementing agencies. Supporting private-public partnerships will help to build links with prospective employers and ensure that training providers survey local employers to ascertain the needs of the local labor market. Training alone, however, cannot protect vulnerable workers from the risks that they face. Additional measures are needed to protect them in the event of employment and wage shocks.

## III. Expanding Labor Safety Nets

### Protect vulnerable workers from employment and wage shocks

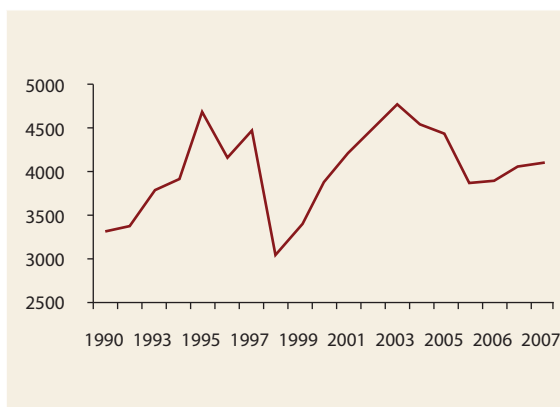
**In the absence of social protection systems for workers, informal and agricultural job markets have served as default safety nets during employment and wage shocks.** The 1997 East Asia financial crisis



hit Indonesian workers hard. Median real wages fell by 31 percent in one year and many formal sector workers lost their jobs (Figure 15). Stable employment rates masked a massive re-allocation of workers into the informal and agricultural sectors, which acted as safety nets in the absence of government protection systems. This reverse structural transformation was a setback for many workers as well as for Indonesia's development.

**The government policy response – rapid minimum wage increases – failed to protect low-wage workers after the crisis and led to increased exclusion of informal workers.** Following the 1997 financial crisis and the ensuing democratic transformation, minimum wages in Indonesia rapidly increased to help employees recover from the wage crisis. "Maxi" minimum wages were used as the wage-setting mechanism for unskilled workers and contributed to rising average wages.<sup>16</sup> Minimum wage increases had the unintended consequence of shrinking the availability of formal and non-agricultural jobs (Figure 17). This particularly affected the expanding service sector that became less labor-intensive as wages rapidly increased during the 1999-2003 crisis recovery period. Indonesia was the only country in the region that suffered from jobless growth during this period and failed to expand work opportunities in the formal and non-agricultural sectors (Figure 16).

**Figure 15: Median real wages (Rp)**



Source: Sakernas.

**Figure 16: Jobless growth - share of non-agricultural jobs (percent)**



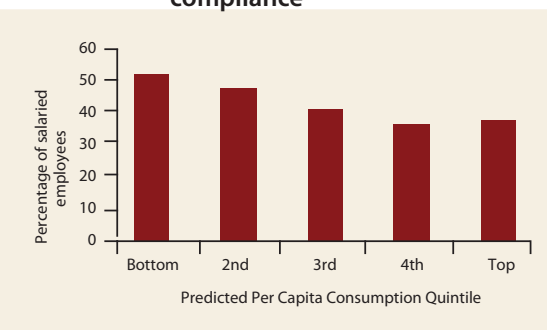
Source: Sakernas.

**Figure 17: Minimum wages and formal employment**



Source: Sakernas 2006 and World Bank.

**Figure 18: Minimum wages and non-compliance**



Source: Sakernas 2006 and World Bank.

16 Saget, 2006.

Policies to increase minimum wages, moreover, failed to provide an effective safety net for low-wage workers. Poor employees benefit the least from minimum wage hikes because they are more likely to work for non-compliant employers, who tend to be small and medium enterprises that fall below the surveillance of labor inspectorates (Figure 18).

**During economic downturns, workers at risk of losing their jobs have few safety nets to fall back on.** Although Indonesia has weathered the recent global economic downturn, many questions have been raised about the preparedness of the government to protect laid off workers who depend on stable income to support their families. Severance pay and pension provident funds are not providing effective safeguards for workers who lose their jobs.<sup>17</sup> Nor will increasing minimum wages for workers help workers who have lost their jobs. In fact, raising labor costs during a crisis may cause Indonesia to fall back into jobless growth. In the absence of social protection systems for workers, there is a risk that they will resort to the default safety net of jobs in small-scale agriculture and the informal sector, which pay less and offer less security.

**Increasing the frequency and improving the comprehensiveness of labor data can help to detect shocks in-time and accurately pinpoint affected workers.** Protecting workers from shocks requires collecting up-to-date information for early detection and pinpointing which regions and households are most affected. Currently, labor force surveys are only conducted semi-annually using a large sample size. The Central Statistics Agency (BPS) can increase the timeliness of data while, at the same time, reduce costs, by adopting a quarterly or continuous survey approach that can provide labor data on a quarterly or monthly basis. There is also a need to expand survey questions to better monitor the extent of vulnerability among workers. Local think tanks and research facilities, with technical support and capacity building, can use this data to track changes in the labor market and diagnose how shocks are transmitted to workers to inform the design of response mechanisms. Delays in delivering program responses can be costly to vulnerable workers and their families.

**This data can feed into a permanent monitoring system that can detect future shocks,** including wage and employment shocks. Emergency safety nets cannot be effective or timely unless there is a monitoring system and a stand-by team responsible for scanning available data (including on-the-ground reports) to detect impending crises. The crisis monitoring and response system serves as a prototype for a future monitoring and response system, which could be established on a sustainable and on-going basis so that future shocks can be monitored and addressed as they occur.

**Monitoring information can inform the design of a future emergency response system that governs when and how safety nets for workers will be delivered** in anticipation of a range of potential shocks. The system should identify triggers that justify the deployment of temporary assistance through various program channels. Developing this system will require the advance preparation of guidelines that anticipate responses for specific scenarios, including details on recipient identification, size and type (e.g., cash or in-kind transfers, public works) of assistance package, and window-closing conditions. The design of the response system should also clarify how institutions will work together to carry out design, activation, financing and delivery in order to provide assistance as quickly and efficiently as possible.

**One of the pillars of a national shock response system should be a public works framework.** The framework should govern when, where and how employment generating projects will be delivered in anticipation of a range of potential shocks. This could include the identification of triggers that will launch public works projects or increase allocations for existing labor intensive programs. For example, the National Community Empowerment Program (*Program Nasional Pemberdayaan Masyarakat Mandiri*, PNPM-Mandiri) can channel funds to support labor intensive, locally identified development projects in rural areas where it

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17 Vroman, 2007.

has been shown to reduce unemployment rates.<sup>18</sup> Additional projects or channels must also be identified to provide temporary assistance to workers when needed in urban areas. At the same time, the response system can maintain a standing-list of on-going and planned infrastructure projects that can quickly absorb workers during shocks in both urban and rural areas.

**Learning from past experiences and adhering to international “best practices” will help to ensure that the neediest workers are reached.** These best practices include: appointing one single, central institution to be responsible for overall strategic leadership and monitoring the implementation of the program; using systematic geographic targeting in determining program locations; setting wages below the market level for unskilled workers so that workers will self-select themselves into the program;<sup>19</sup> encouraging women’s participation by modifying program design elements; and selecting labor intensive projects that have been identified by communities or supporting infrastructure projects that are already included in development strategies will help to ensure that public works projects are useful and productive.

## IV. Supporting Evidence-based Policy Making

### Moving forward by filling in the knowledge gaps of the labor market

**Build an empirical basis to ground highly charged debates around labor policy.** While increasing the frequency of data collection will help policy makers to respond “in-time,” it is also necessary to pay close attention to what kind of data is collected. Sakernas should be designed to collect the data that will help answer the questions that policy makers find most pressing. Resume the severance pay module, for example, to determine the impact of severance pay regulations on labor outcomes for workers. Collecting data on contract status is essential in order to track the degree of segmentation in the labor market which will, in turn, inform which policies and programs are needed to target specific sub-groups of workers. Consider conducting tracer studies to examine the labor market outcomes associated with different education and training experiences.

**Rigorously monitor and evaluate current programs and institutions to learn what works and what does not work.** Little is known about the performance today’s labor institutions because they have not been carefully monitored or evaluated. Qualitative and quantitative assessments can identify which types of public vocational senior secondary schools and non-formal training centers deliver better results. Monitoring and assessing the performance of the dispute resolution process and the recently established Industrial Relations Courts (IRC) will generate the data necessary to find ways to improve the success rates of pre-court settlement mechanisms and remove the bottlenecks in the IRC in order to improve the speed and cost-effectiveness of coming to a settlement.

**Lay the foundation for new directions by piloting and testing new approaches.** Much work remains to be done to assess alternative systems to provide unemployment benefits, such as simulations and institutional assessments. Investing in thorough analysis and learning from the experiences of other middle-income countries to inform the design of future social security mechanisms will avoid costly mistakes. Similarly, test new programs, such as comprehensive skills training programs, by first piloting and testing the approach in select areas before scaling up nationally. For potentially large and fiscally ambitious programs, incorporate randomization into the project design in order to measure impact and cost-effectiveness more accurately. Conduct rigorous impact evaluations of future training programs and public works to determine whether these approaches improve labor market outcomes for workers and are cost-effective.

<sup>18</sup> On average in PNPM-Rural programs areas in comparison to control areas. PSF Progress Report, 2008.

<sup>19</sup> Sumarto et al., 2000.

**Strengthen the network of think tanks and research facilities in Indonesia.** Policy makers and government agencies responsible for the oversight of labor programs depend on sound analysis to make decisions. This requires the functioning of three inter-related components. First, Depnaker should ensure the public availability of recent labor market data. Second, government agencies need to understand how to ask the right questions and commission research projects that will provide them with answers. Finally, build the technical capacity of researchers, housed in think tanks and university research facilities, to carry out technically sound labor policy research.

## Indonesia Jobs Report: Policy Recommendations Summary Matrix

Policy Area	Key Issues & Constraints	Specific Actions	Timeframe & Sequencing
Regulatory Reform	Low de jure severance payments leave most employees unprotected in cases of job termination.	Introduce a complementary unemployment benefit system (pooled severance fund, individual account severance system or flat-benefit unemployment assistance) as part of the National Social Security (NSS) system.	Short-term: Start the reform process by commissioning simulation studies of alternative systems and conducting assessments to determine which system is most suitable for Indonesia's institutional context.
	"Post-pay" system creates unpredictability for employers and decreases the likelihood that terminated workers receive severance pay.	Adopt a monthly contributory approach where firms make monthly severance contributions to an account managed by a third party.	Medium-term: Facilitate multi-party negotiations to reduce severance rates in exchange for implementing the selected unemployment benefit system. Develop a road-map for reform that is linked to NSS reform.
	Complicated rules and high de jure severance rates discourage entrepreneurs from starting new businesses and deter potential foreign investors.	Simplify the rules for determining severance pay and long-service pay. Adjust severance rates downwards so that they fall in-line with regional standards.	
Skills Training	The demand for educated workers remains high, but construction of general senior secondary schools is frozen.	Remove the freeze on construction of general senior secondary schools.	Short-term: Conduct tracer studies on labor market outcomes of students from different types of schools.
	The current target for the expansion of vocational senior secondary schools does not clearly improve labor outcomes and is not cost-effective.	Replace the "70:30" policy with market-driven approach to determine the right mix of vocational and general schools. Develop a strategy to improve the quality of vocational schools and foster stronger linkages with prospective employers.	Research options for non-formal skills training programs. Conduct cross-exchange visits to the <i>Jovenes</i> program in select Latin American countries.
	Public training centers are inadequate to meet demand and primarily benefit workers who are already employed.	Introduce a national comprehensive skills training program targeting young, poor and informal workers. Implement the program through private and NGO service providers, with government oversight.	Medium-term: Support vocational schools to conduct employer surveys in their regions to identify skills in demand. Pilot and test a new non-formal, comprehensive skills training program in select areas with randomized participants.

Policy Area	Key Issues & Constraints	Specific Actions	Timeframe & Sequencing
Safety Nets for Workers	In the absence of up-to-date data, it is difficult to pinpoint regions and groups of workers affected by employment and wage shocks, necessary to inform response programs.	Convert the National Labor Force Survey (Sakernas) to continuous approach, providing quarterly or monthly data while maintaining cost-effectiveness.	Short-term: Determine optimal sample size for a quarterly Sakernas and budgetary implications.
	There are no safety nets that can be used during employment and wage shocks to effectively protect poor and low-wage workers.	Develop a national public works program targeting the poor who are willing to work, paying below market wages for unskilled workers. Use programs such as PNPM as a mechanism for registering participants and channelling funds for labour-intensive projects.	Medium-term: Commission a technical team to develop a strategic plan for the creation of a permanent public works program. Include: objectives, design features, delivery mechanisms, institutional arrangements and a step-by-step roadmap.
Labor Policy Research	Data collected in the national labor force survey (Sakernas) is insufficient to answer pressing policy questions.	Expand data collection linked to key policy questions. Resume the severance pay module in Sakernas and collect data on contract status.	Short-term: Conduct a workshop with Depnaker, BPS and Bappenas to identify labor data needs and propose additions to Sakernas. Develop tools that can be used by researchers to track and analyze labor trends.
	There is a lack of high-quality labor policy research, especially quantitative studies, to inform policy development.	Ensure timely and public availability of labor market data from the Central Statistics Agency.  Build the capacity of government agencies to formulate research questions and commission projects. Enhance the technical capacity of research institutes to conduct quantitative labor policy research.	Medium-term: Develop and support a training program for labor researchers. Provide financial support for a labor policy researchers network





# Chapter 1



## Labor Market Trends in Indonesia

From 1990 to 2008



## Chapter 1 Summary

Looking at the evolution of the Indonesian labor market helps to better understand today's labor situation. Over the last two decades, Indonesia experienced major economic shocks and adjustments, underwent a radical political transformation, and revamped its national labor policies.

**1990 – 1997: Growing Rapidly.** Prior to the financial crisis, a combination of strong economic growth, a rise in urban employment and a better-educated workforce led to strengthening the Indonesian labor market. More workers were finding better jobs and earning higher wages. Wage inequality fell as many workers – especially rural and less educated workers – moved off of the farm and found jobs in the booming industrial and service sectors. Poor workers also moved out of agricultural jobs and into the formal sector, contributing to a remarkable reduction in poverty.

**1997 – 1999: Crashing and Coping.** Despite an astonishing drop in real GDP, employment remained surprisingly stable during the crisis. Farms and the informal market absorbed laid-off workers and women entered the workforce in record numbers. Workers felt the full sting of the crisis, however, through devastating wage cuts that pushed many near-poor workers into poverty. Although no workers were spared the effects of the crisis, wage drops among rural, self-employed farmers were buffered by large increases in rice prices.

**1999 – 2003: Jobless Growth.** Alongside the transition to democracy came a legislative overhaul that included the enactment of two major pieces of legislation: the Trade Union Law (No. 21/2000) and the Manpower Law (No. 13/2003). Salaried workers – especially urban and non-poor workers – benefited from large increases in wages and legislated severance pay during this period of economic recovery, democratization, and legislative reform. The availability of formal jobs declined, both because of the rising wages and a massive downsizing of the civil service. Workers continued to be pushed back onto the farm, but at a slower pace than during the crisis. Poor, rural and less educated workers were particularly susceptible to being pushed into informal and agricultural jobs.

**2003-2008: Job Recovery.** Real wages fell sharply in 2005 and have stagnated since, except for high-wage workers. This drop in wages opened the way for the creation of more jobs. More workers found formal jobs and more workers, especially poor workers, were finding jobs off the farm. The latest labor market data shows positive signs for the 2007-08 period. Employment is picking up, buoyed by more women finding jobs. More workers are both moving out of agricultural sector and, especially for rural men, entering the formal jobs market. Wages are recovering, but more quickly for top earners and women, especially those who are more educated and living in urban areas.

## I. Introduction

### **Looking at the evolution of the Indonesian labor market helps to better understand today's situation.**

Over the last two decades, Indonesia experienced major economic shocks and adjustments, underwent a radical political transformation, and revamped its national labor policies. Each of these phenomena altered the functioning of the labor market, for better and for worse. Closely examining the history of the labor market over the last twenty years helps to pinpoint the factors that have both strengthened and weakened Indonesia's ability to generate better jobs for a growing workforce.

**Chapter 1 examines labor market trends in Indonesia since 1990.** For the purpose of examining the trends in the core labor market indicators – employment, labor structure and wages (Box 1.1) – this period of time can be divided into four distinct eras. Each era has a unique combination of economic growth, poverty reduction, and policy development that created both winners and losers. This chapter considers each of these aspects for the four eras:

- The first covers the 1990-97 period, during the later stages of the New Order regime, prior to the financial crisis.
- The second considers the effects of the Asian financial crisis on the Indonesian labor market during 1997-99.

- The third focuses on the post-crisis period of jobless growth, 1999-2003, when economic growth resumed but few jobs were created.
- The fourth looks at the 2003-2007 period, a time of resumed growth in formal employment.
- The fifth and final section provides a recent update of the labor market using the latest available data for 2007-08. While it is not yet clear if this is a continuation of the previous era or the beginning of a new one, the signs for the future are optimistic.

## II. 1990-1997: Growing Rapidly

### Growth and Poverty Reduction

Indonesia enjoyed high levels of economic growth and poverty reduction from 1990 to 1997. Real GDP grew at an impressive rate of 7 percent per year. This growth quickly reduced poverty rates by 0.5 percentage points annually to a remarkably low 11.3 percent in 1996. This strong rate of economic growth improved the employment situation for workers in Indonesia.

### Political and Policy Changes

Labor policy during this period was characterized by a movement towards proactively improving workforce earnings. The creation of an obligatory national social security program (*Jaminan Sosial Tenaga Kerja*, or Jamstostek), a state-owned pension fund for workers in the formal sector, marked this change. The establishment of provincial minimum wages during the early 1990s was arguably even more significant. Minimum wages increased significantly during 1993-95 in response to three main developments.<sup>20</sup> First, the non-oil manufacturing boom starting in the mid-1980s stimulated demand for a better educated and larger workforce, mostly concentrated in the industrial sectors surrounding Jakarta and Bandung. Second, real wages stagnated since the 1980s, which triggered regular episodes of labor unrest in the first half of the 1990s. Third, economic deregulation was also accompanied by spells of political openness in which the media and labor activists highlighted the plight of workers in the 'new' manufacturing industries. Additional pressure also came from the international front, as the US government announced that renewal of Indonesia's GSP (General System of Preferences) rights would be conditional on an improvement in upholding labor rights in Indonesia.

While the Soeharto regime promoted the use of collective labor agreements, implementation was limited and labor relations remained repressive. Workers could only join one union, which was tightly controlled by the government. Labor disputes were suppressed, usually by ruling in favor of firms, and strictly enforced decisions with the support of the military and police.

### Employment

On the surface, overall employment changed little during these years. There was a small increase in unemployment, which gradually moved upward by 0.1 percentage points per year (Table 1.1).<sup>21</sup> This contributed to a slight decline in the employment ratio — defined as the percentage of adults working — of 0.2 percentage points per year, from 64.6 percent in 1990 down to 63.2 percent in 1997. However, this small aggregate change masked a significant employment expansion in urban areas, where employment ratios rose by 0.5 percentage points per year for both men and women. In contrast, male employment in rural areas declined slightly, while large numbers of rural women exited the workforce.

20 Manning, 1998.

21 See Annex I.1 for a summary of trend indicators by sub-groups. Note: this report uses the 'old' definition of core unemployment that was officially used until 2001. The 'new' and broader definition of unemployment, officially used since 2001, includes discouraged workers (i.e., proportion of the population who are not working and have given up hope of finding a job), which are considered separately in this report. Unemployment from 1992 to 1997 is taken from the National Socio-Economic Survey (Susenas) because, prior to 1994, the National Labor Force Survey (Sakernas) used a shorter job search reference period. Except where indicated otherwise, data presented in Chapter 1 is based on Sakernas.

### Box 1.1 What are the best indicators of labor market health?

**While unemployment and underemployment rates are often used, they can be misleading indicators of labor market health.** The media and politicians typically use unemployment rates to assess the performance of the labor market. The term 'unemployed' includes two groups of people: those who are jobless but still actively searching for work (80 percent of the unemployed in 2007); and discouraged workers who have given up hope of finding a job.<sup>1</sup> Underemployment is another popular indicator that measures the proportion of the population that are working less than 35 hours per week and would be willing to accept another job. Unemployment and underemployment, however, are not only determined by the availability of jobs. These indicators are also dependent on household socio-economic factors including: the levels of income earned by other household members; non-market assistance received by the household; worker status in the household (heads feel more pressure to settle for an informal job); preferences about female workforce participation; and the wage premium between the formal and informal sectors. These household socio-economic factors make it difficult to interpret changes in unemployment and underemployment rates.

**Unemployment and underemployment rates have proven to be unreliable signals about labor market performance in Indonesia.** Examining the recent history of the labor market in Indonesia shows a discrepancy between unemployment rates and the health of the labor market. For example, the increase in unemployment in 1990-97 did not indicate a faltering market. Rather, the number of educated workers (who are more likely to search for a job) increased, while strong economic growth made unemployment a more affordable option. Similarly, the unemployment rate remained surprisingly stable during the Asian financial crisis. Many skilled urban workers were losing their jobs, however this was not reflected in the unemployment rate because poor women began entering the workforce in record numbers.

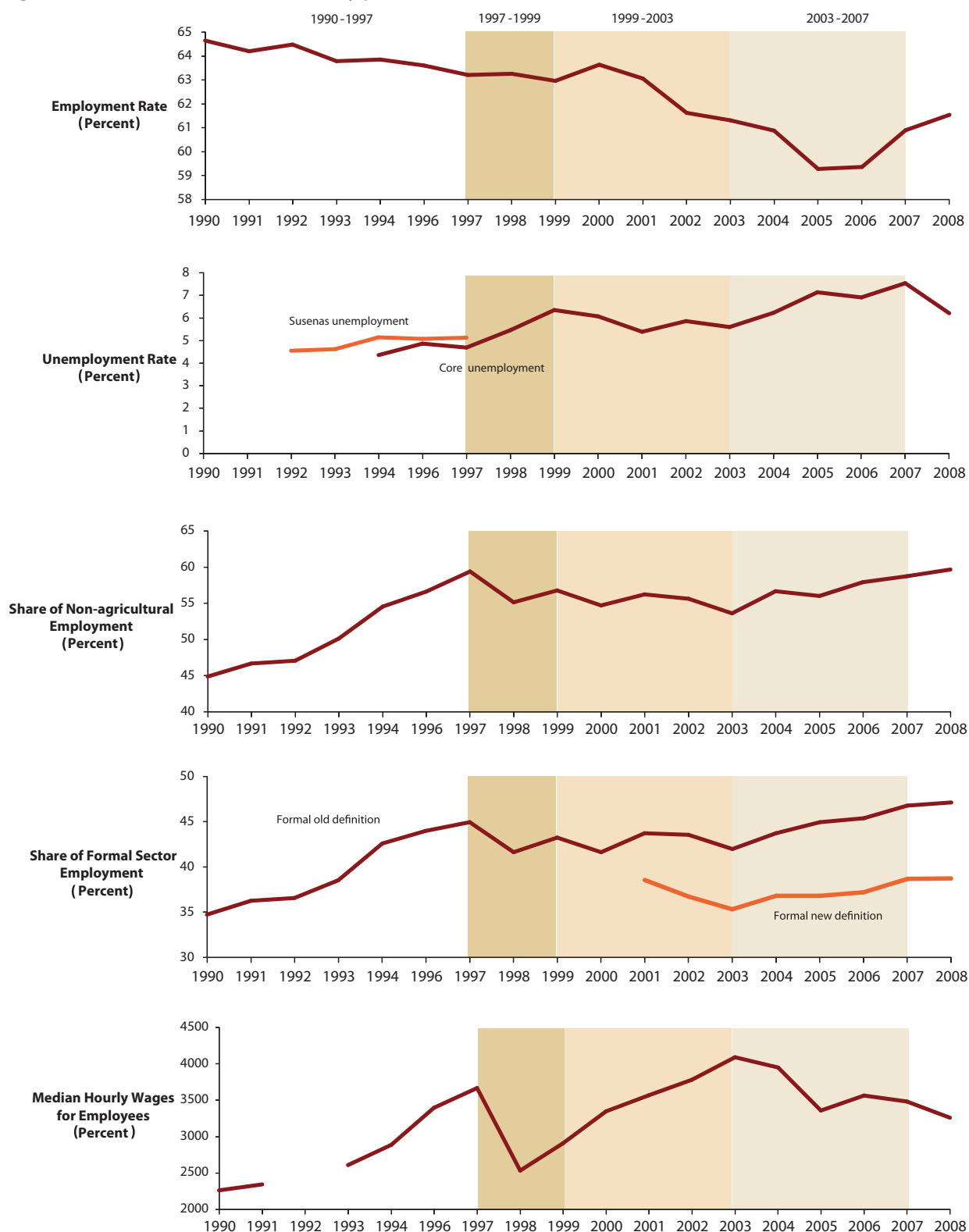
**The Indonesia Jobs Report relies on three main sets of indicators to assess the health of the labor market.**

- a. **Employment:** The adult working-age population is divided into two categories: those in the workforce and those outside of the workforce. The primary employment indicator is the employment ratio, which is defined as the change in percent of adults in the workforce who are working. Secondary indicators capture those in the workforce who are not working, including unemployed and discouraged workers. While unemployment rates receive the most attention, the employment ratio is arguably a more reliable indicator for the reasons explained above.
- b. **Labor market structure:** The health of the labor market can also be measured by looking at the types of jobs that workers are employed in. Two main indicators are used to track structural changes in the labor market:
  - **Non-agricultural share of employment:** Sectoral (agriculture, industry, or services) share of employment is an important indicator because it is simple to measure, comparable across countries, and informative about worker productivity and employment status. Non-agricultural jobs are, in general, preferable to agricultural jobs because the latter sector is less productive, employs more unpaid and casual workers, and employs the lowest percentage of educated workers. The indicator is measured in percent change in the share of the workers who are working in non-agricultural jobs (i.e., industry and service sector jobs).
  - **Share of formal employment:** The other indicator is the percent change in the share of workers with formal jobs. Workers in the formal sector receive regular salaries and are entitled to benefits according to the Manpower Law No.13/2003. A job in the formal sector is, in general, preferable to one in the informal sector.<sup>22</sup>
- c. **Median wages and wage equality:** From the workers' perspective, the most important determinant of job quality is probably the total compensation they receive for their labor, or the value of wages plus benefits. Percent change in the wages is expressed in real terms, and the changes in the distribution of workers are categorized by wages quintiles. Unfortunately, data sources are incomplete and lack benefit values for all workers, and profit data for a sizeable portion of the self-employed.

The movement of these three sets of indicators provides clear indications of strengths and weaknesses in the labor market. During the period of rapid growth (1990-97) all four of these indicators increased, as one would expect, while during the economic crisis (1997-98) all decreased. For this reason, they are more reliable indicators than solely relying on unemployment and underemployment rates.

22 See Chapter 3 for an explanation of why formal sector jobs are preferred over jobs in the informal sector.

**Figure 1.1 Labor trend indicators, by period**



Source: Sakernas; Susenas for 1992-97 unemployment rates.

**Table 1.1 Labor trend indicators, growth by period**

Core Indicators		1990-97	1997-99	1999-2003	2003-07
<b>Employment</b>	Employment ratio growth	-0.2	-0.1	-0.4	-0.1
	Unemployment growth	0.1	0.8	-0.2	0.5
<b>Labor Structure</b>	Non-agricultural employment share growth	2.1	-1.3	-0.8	1.3
	Formal employment share growth	1.5	-0.9	-0.3	1.2
<b>Wages</b>	Median wage growth	7.1	-11.0	8.9	-3.8

Source: Sakernas; Susenas for 1992-97 unemployment rates.

## Labor Structure

The urbanization of the workforce helped to fuel a dramatic improvement in the quality of jobs available in the economy. A rapid structural transformation pulled workers off the farm and into more productive formal sector jobs. The share of employment in agriculture plunged from 55 to 41 percent over seven years. Agricultural workers were increasingly drawn to the service sector, where the employment share expanded by 1.3 percentage points per year, from 30.9 percent in 1990 to 40.3 percent in 1997. The industrial sector also grew by 0.8 percentage points per year, reaching 19.1 percent of the workforce in 1997. As a result of this structural transformation, formal sector employment leapt by 1.5 percentage points annually over this period (from 34.7 percent in 1990 to 44.9 percent in 1997).

## Wages

Not only were workers shifting into more formal jobs, but salaried employees were also earning higher wages. Median employee wages, after adjusting for inflation, grew by an impressive 7.1 percent per year.<sup>23</sup> A dramatic fall in wage inequality accompanied these wage increases. The ratio of the 90<sup>th</sup> percentile to the 10<sup>th</sup> percentile of salaried wages — a common measure of inequality — fell from 7.8 to 6.5, as the wages of the bottom decile of salaried workers grew 50 percent faster than those of the top decile.<sup>24</sup>

Much of the improvement in labor market outcomes came from changes in the composition of the workforce. Workers entering the labor market were increasingly more educated (a rise from 13 to 20 percent in the share of workers who completed at least a senior secondary level of education) and living in urban areas (a rise from 31 to 39 percent in the share of urban workers). Forty percent of the increase in the median wage was due to these changes in workers' characteristics, while the remaining 60 percent came from changes in the labor market conditions they faced. Similarly, 60 percent of the decline in agricultural employment was the result of an increasingly educated and urbanized workforce.<sup>25</sup>

## Winners and Losers

Rural and unskilled workers benefited most from the expansion of the formal sector. Unskilled workers' employment in the formal sector rose 1.1 percentage points per year, while the rate of formality for skilled workers remained essentially constant. Rural workers also enjoyed increases of 1.2 percentage points per year in the share of formality, compared to 0.4 percentage points for urban workers.

23 Note: Wages are only observed for salaried employees, who make up less than one-third of the workforce.

24 World Bank staff calculations, based on Susenas and Sakernas.

25 World Bank staff calculations.

Poor workers also benefited from better jobs, as their movement out of farm work and into formal sector jobs was particularly rapid.<sup>26</sup> As a result of improved household incomes, fewer family members in poor households were forced to work. Consequently, poor women exited the workforce at a rate of 2 percentage points per year between 1994 and 1997. While more poor workers were able to move into formal jobs, those who already had jobs in the formal sector did not benefit as much. Poor workers in the formal sector failed to see any significant wage gains, while non-poor workers' wages grew by over 10 percent per year.

### III. 1997-1999: Crashing and Coping

#### Growth and Poverty Reduction

The Indonesian economy suffered severely during the Asian financial crisis. In 1998, the exchange rate depreciated by a factor of four and real GDP fell by an astounding 13 percent. Although GDP recovered slightly in 1999, poverty rose by an average of 4 percentage points per year between 1996 and 1999, reaching a high of 23 percent of Indonesia's population.

#### Political and Policy Changes

The economic and political crisis saw a resurgence of the labor movement as a political force. This culminated in the ratification of four core ILO conventions this period: Convention 87 on Freedom of Association (ratified in 1998), Convention 105 On the Abolition of Forced labor (1999), Convention 111 on Discrimination (1999) and Convention 138 on Minimum Age (1999).<sup>27</sup> This period also saw a proliferation of labor unions at the national, regional and plant levels.

#### Employment

Employment levels remained surprisingly stable during the crisis. The employment ratio fell by only 0.1 percentage points per year. Employment for adults aged 25 and over increased slightly, due to the fact that rural women — especially poor rural women — rejoined the workforce in large numbers (see Box 1.3). The availability of jobs in rural areas helped to keep unemployment in check. Unemployment rose by 0.8 percentage points per year, with about half of this rise being accounted for by a huge increase in unemployment among youth, rising from 15.5 percent in 1997 to 19.8 percent in 1999.

#### Labor Structure

Indonesia's structural shift out of the agricultural sector reversed, as the crisis pushed formal workers back into the agricultural and informal sectors. In 1998, the share of workers in the formal sector fell steeply, by 3.2 percentage points per year, before recovering partially to 43.2 percent in 1999. Over the same period,

26 Note: Household consumption data are not collected in the Sakernas. For this report, poor and near-poor households were determined based on predicted per capita consumption. Households in the bottom quintile of predicted per capita consumption are considered poor; those in the second quintile of per capita consumption are considered as being 'near-poor'. Households in the third, fourth, and richest quintile are classified as the 'non-poor'. Per capita consumption was predicted in Susenas using demographic variables common to both surveys: the size of the household; the education of the head and the spouse; the age, sex, and marital status of the household head, and; dummy variables for the rural and urban regions of each district. Regression results were then used to construct predicted per capita consumption in Sakernas. Each year, the prediction regression explained between 55 and 65 percent of the variation in log per capita consumption, confirming that predicted consumption is a meaningful indicator of a household's economic status.

27 In 2000, the last ILO core convention – No.182 on the Worst Form of Child Labor – was ratified by Indonesia. In so doing, Indonesia was the first country in Asia to ratify all eight ILO core conventions. (ILO, 2004).

employment in the service sector declined by 0.7 percentage points per year. Workers in the industrial sector lost their jobs at almost the same rate. Manufacturing was the exception: after sharply dropping by 1.5 percentage points in 1998, the share of workers in manufacturing fully recovered to pre-crisis levels by 1999.

Formal sector workers who lost their jobs were pushed into agriculture, where the employment share jumped 1.3 percentage points annually between 1997 and 1999. Non-poor workers and young, less educated males were the most likely people to move into agricultural work.

### Box 1.2 Labor data sources in Indonesia

**The *Survei Angkatan Kerja Nasional (Sakernas)*** is a national labor market and income survey conducted by BPS. Since the survey was initiated in 1976, it has undergone a series of changes affecting its coverage, the frequency of enumeration, the number of households sampled and the type of information collected. It is the largest and most representative source of employment data in Indonesia.

A special module was added in 2007, asking questions about job-seeking, training, union membership, contract workers, and severance payments, aimed at providing a better understanding of the main obstacles to employment creation.

**Table 1.2 Sakernas Survey Summary**

Period	Coverage	Frequency	Survey size	
			Households	Individuals
1976	National	Annual	95,400	290,000
1977-78	National	Annual	71,550	250,000
1986-93	National	Annual	65,490	200,000
1994-97	Province	Annual	70,000	250,000
1998-2001	Province	Annual	40,000	150,000
2002-04	Province	Annual	70,000	200,000
2005-06	Province	Bi-annual (February and August)	68,000	200,000
2007-08	Province	February	68,000	220,000
	District	August	286,000	900,000

**The Indonesia Family Life Survey (IFLS)** is a longitudinal household survey that collects detailed individual and household information including labor market outcomes and migration. There have been four waves of the survey: 1993, 1997, 2000 and 2008. In 1998, a sub-survey of one-quarter of the households was conducted to provide insights into the effects of Indonesia's economic crisis by collecting data on who was affected by the crisis and on the strategies adopted to mitigate the impact.

The first wave interviewed approximately 7,200 households in 13 of the country's 27 provinces, representing about 83 percent of Indonesia's population. By the fourth wave, the number of surveyed households grew to around 13,000 as the survey attempted to re-interview members from the original sample that form or join new households. Overall, 87.6 percent of households that participated in the first waves were again interviewed in each of the subsequent three waves. These re-contact rates are as high, or higher, than longitudinal studies in the United States or Europe, contributing to data quality by lessening the risk of bias due to nonrandom attrition.



**Table 1.3 IFLS Survey Summary**

Wave	Fielding Period	Survey Size		Implementers	Contact/Re-contact Rates
		Households	Individuals		
1	August 1993 – June 2004	7,224	+30,000	RAND, Lembaga Demografi (University of Indonesia).	93% of selected households contacted.
2	June – November 1997	7,619	33,934	RAND, UCLA, Lembaga Demografi (University of Indonesia).	94% of IFLS1 households re-contacted
2+	Late 1998	2,066 (25% subsample in 7 provinces)			94% of individuals not in IFLS2; 96% of IFLS2 respondents
3	June – November 2000	10,435	43,649	RAND, Population Research Center (University of Gadjah Mada).	95.3% of IFLS1 households re-contacted.
4	November 2007 – April 2008	13,535	44,103	RAND, Center for Population and Policy Studies (University of Gadjah Mada), Survey METRE	93.6% of IFLS1 households re-contacted.

The Indonesia Jobs Report relies on Sakernas for labor data whenever possible. In some cases, however, IFLS is the preferred source of data. For example, IFLS is used as the main data source in Chapter 3 because the survey, unlike Sakernas, asks questions not only about earnings in the formal sector, which pays a wage or salary, but also about the earnings of the self-employed. Similarly, IFLS collects detailed information about respondent and household characteristics, which is useful controlling for these characteristics in regression analysis.

Source: Rand Corporation, Family Life Surveys ([www.rand.org/labor/FLS/IFLS](http://www.rand.org/labor/FLS/IFLS)).

## Wages

The biggest impact of the crisis for workers was felt in the collapse of real wages. Median real wages declined by a massive 31 percent between 1997 and 1999. Self-employed and rural workers, however, experienced slightly smaller wage reductions. They were partially buffered from the wage drop because the dramatic devaluation of the rupiah increased the value of agricultural exports and a concurrent draught increased the price of rice. This benefited net rice producers and exporters, who tended to be near-poor and self-employed rural workers.

## Winners and Losers

There were no winners during the crisis. All types of workers suffered the consequences of falling wages, reduced opportunities for formal jobs, and less employment in the industrial and service sectors. Poor female workers experienced huge increases in employment — of 3.5 percentage points per year — but only because they were forced to supplement falling household incomes. Poor and near-poor workers were not spared the effects of the crisis. However, their real wages fell comparatively less than those of other Indonesians (-10.8 and -9.4 percent for poor and near-poor, respectively, compared to -11.9 percent for the non-poor) because they largely belong to the group of self-employed, rural workers whose wage drops were partially buffered by rising rice prices.

### Box 1.3 Workers coping with the economic crisis

By April 1998, 2 million workers had lost their jobs because of the economic crisis. It was predicted that an additional 4–6 million workers would lose their jobs before the end of the year.<sup>28</sup> These predictions turned out to be overly pessimistic; the employment ratio remained relatively stable. The decline in family incomes was also less extreme than expected. While formal sector wages plummeted by 60 percent in rural areas and 55 percent in urban areas, average household incomes including home production fell by 21 percent and 43 percent, in rural and urban areas, respectively — still serious, but not as severe as the wage crisis.

Why did employment levels remain stable during the economic crisis and what prevented household incomes from falling even further?

While many workers lost jobs during the crisis, many people also moved into new forms of employment. More than 3 out of every 10 male workers, and close to 4 out of every 10 female workers, changed sectors between 1997 and 1998. Most of these workers were absorbed by agriculture. The average real earnings of self-employed farmers, buoyed by the increase in the relative price of rice and other export crops, dropped by very little.

Men experienced an increase in self-employment and, to a lesser extent, work on family farms. But the real story lies with women's employment. In both urban and rural areas, there were major increases in the share of women who entered the workforce as unpaid workers in family businesses and farms (3.8 percentage points) or to become self-employed (3.9 percentage points). Since the better educated women were mostly in the formal sector and experienced a 4.2 percent fall in employment, this increase in female employment was driven by less educated women. Poor women's participation in the workforce jumped from 52 to 59 percent between 1997 and 1999. They played a key role in supplementing family incomes that would otherwise have been severely eroded by falling wages.

Finally, families helped to protect each other in order to buffer the effects of the crisis. The mean household size increased by 5 percent, indicating that families moved in with each other to exploit economies of scale and increase their household incomes.

Source: Smith et al, 2000; Thomas et al, 2000.

## IV. 1999–2003: Jobless Growth

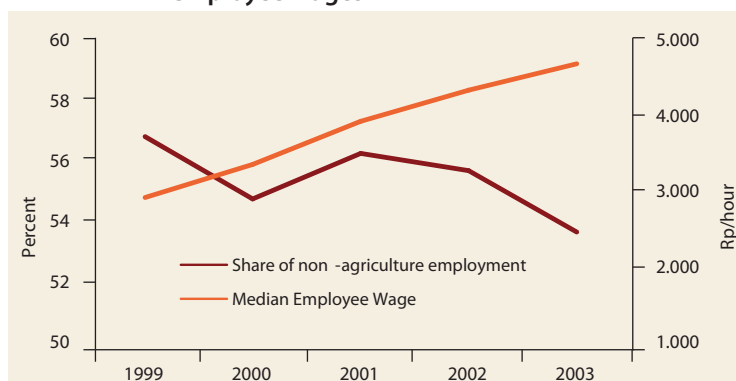
### Growth and Poverty Reduction

After a tumultuous transition to democracy, Indonesia's economy recovered moderately well. Annual GDP growth resumed in 2000 and averaged 4.7 percent between 1999 and 2003. Poverty fell rapidly by 1.5 percentage points per year as households recovered from the crisis.

### Political and Policy Changes

Alongside the transition to democracy came a legislative overhaul that included the enactment of two major pieces of legislation: the Trade Union Law (No. 21/2000) and the Manpower Law (No. 13/2003). The latter was a landmark change in labor policy as it was the first comprehensive law on labor protection and rights, and provided guidelines on collective labor agreements. Several aspects of the Manpower Law caused concerns among employers, particularly the clauses on severance pay provisions, fixed-term contracts and outsourcing. Alongside rapid minimum wage increases at the time, these regulations were viewed as significantly adding to labor costs, especially in the struggling manufacturing sector.

28 World Bank, 1998.

**Figure 1.2** Non-agricultural employment share vs. median employee wages

Source: Sakernas.

## Employment

Economic recovery was not accompanied by job creation. The share of employed workers fell by a substantial 0.4 percentage points annually, from 62.9 percent in 1999 down to 61.3 percent in 2003. The decline in employment was due entirely to a fall in workforce participation; unemployment, on the other hand, fell slightly by 0.2 percentage points. The fall in workforce participation between 2001 and 2003 was caused by a rapid increase in discouraged workers.

Women, especially poor women, withdrew from the workforce in large numbers as the economy revived. Workforce participation fell by 1 percentage point annually for women, while remaining roughly constant for men.<sup>29</sup> The withdrawal of women from the workforce appears to have been largely voluntary since trends in core unemployment and discouraged worker indicators were similar for both men and women. This may be part of a rebound effect: women, who helped protect household income by working during the crisis, were able to exit the workforce again because large wage increases raised household income levels.

## Labor Structure

Increasingly large numbers of workers were pushed into agriculture. Employment in the service sector — which had driven the pre-crisis expansion — contracted by 0.8 percentage points per year. Agricultural employment also increased by 0.8 percentage points, a slower pace than during the crisis. By 2003, 46.4 percent of the workforce was employed in agriculture, a level comparable to 1994. But workers were not drawn to agriculture by higher wages and profits. While employees in the industrial and service sectors enjoyed large increases, the agricultural wages and profits of employees were growing at a constant rate during this period (Figure 1.2). This suggests that workers were pushed, rather than pulled, onto the farm.

Formality declined slightly, by an average of 0.3 percentage points per year, from 43.2 percent in 1999 to 42 percent in 2003.<sup>30</sup> This decline in formality would have been worse had it not been for the entry of more educated, urban workers into the workforce. Holding worker characteristics constant, formality declined by 0.7 percentage points per year. Much of the decline in formality was likely due to significant downsizing of the public sector, whereby predominantly low-skilled civil servants lost their jobs. As a result, the employment share of the public sector fell by 0.5 percentage points annually, the scale of which is sufficient to explain the entire decline in formality during this period.

29 Workforce participation is based on the pre-2001 definition of unemployment, which excludes discouraged workers from the workforce.

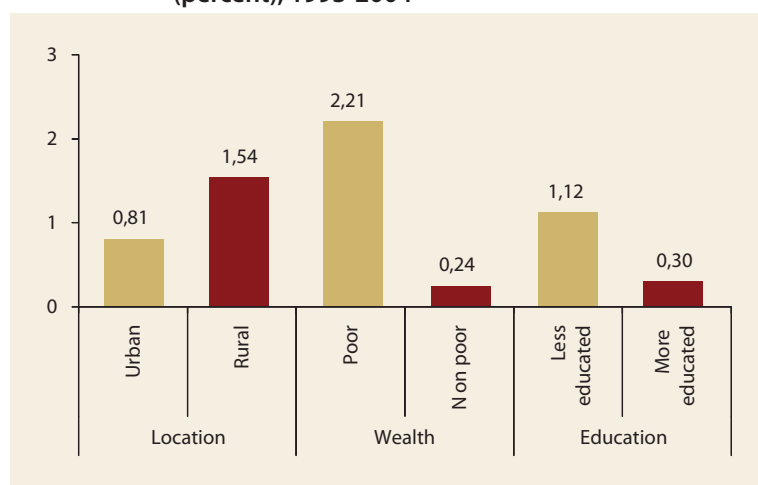
30 In 2001, Sakernas introduced two new categories of employment status: casual agriculture and casual non-agricultural laborers. Prior to 2001, casual agricultural workers and casual workers in the construction industry were classified as salaried and employed laborers and, therefore, included in the formal sector. For consistency, we maintain this old definition when considering changes in wages and formality between 1999 and 2003.

## Wages

Real wages for salaried employees increased rapidly. For employees, median real wages increased by almost 9 percent per year, which was greater than the 7 percent annual increase in the pre-crisis period. Increases were uniformly high throughout the wage distribution, as wage inequality increased only slightly among salaried workers.<sup>31</sup> Changes in worker characteristics played a significant but not dominant role in wage increases; roughly 25 percent of the increase in median wages can be explained by the changing characteristics of workers, who were becoming more skilled and urban.

Workers who were able to remain in salaried employment benefited from large wage increases, although high-wage workers experienced slightly larger increases. These broad-based wage increases, combined with informal transfers among families and communities to spread risk, partially explain why poverty continued to fall at an impressive rate.

**Figure 1.3** Growth rate of non-agriculture employment share (percent), 1993-2004



Source: Sakernas.

## Winners and Losers

Workers with salaried jobs all benefited from large wage increases, with urban and wealthier employees experiencing the largest gains. Wage increases averaged 9.3 percent per year for non-poor employees and only 6 percent per year for poor and near-poor employees. Workers without salaried jobs, however, were increasingly shut out of good jobs. Declines in formality were largest for rural, unskilled, and poor workers. More striking, however, are the increases in agricultural employment for

these disadvantaged workers. For poor workers, employment shares in agriculture skyrocketed, while the share of industrial sector employment dropped sharply. The story is similar for rural and unskilled workers, who were also pushed out of industry and into agriculture. The non-poor, on the other hand, largely escaped the push back into agriculture. For these workers, agricultural employment only rose slightly, while employment in the industrial sector rose two and a half times.

31 See Chapter 5 for a discussion on why increases in minimum wages not only have an effect on low-wage earners but across the entire wage distribution.

## V. 2003-2007: Job Recovery

### Growth and Poverty Reduction

Economic growth continued to accelerate. Annual GDP growth remained moderately strong, averaging 6.3 percent between 2003 and 2007, but still falling short of pre-crisis levels. The poverty rate rose from 16 to 17.8 percent in 2006 primarily because of increases in the price of rice, before partially recovering in 2007.

### Political and Policy Changes

Three significant labor laws were issued during this period: the Industrial Disputes Settlement Law 4/2004, the Social Security Law 41/2004 and the Migrant Worker Law 39/2004. The first two laws added to investor concerns about increasing hiring and firing costs. The Industrial Disputes Settlement Law introduced labor courts in all provinces as the new mechanisms to settle labor disputes. The new Social Security Law 41/2004 mandates the merging of existing social insurance schemes under a new national social security agency (*Dewan Jaminan Sosial Nasional*, DJSN). In addition, it aims to extend mandatory social insurance to informal sector workers. The law is not specific on the governance and financing aspects of the new system, raising concerns regarding fiscal sustainability and the potential additional employment costs to firms.

Concerns about sluggish formal job creation particularly in manufacturing – voiced primarily by investment climate surveys and the private sector – prompted the government to put labor law reforms high on the political agenda. In early 2006, the government circulated a list of proposals to revise the Manpower Law, mainly focusing on severance pay, fixed term contracting, minimum wages and outsourcing issues. The union movement, however, resisted these changes and initiated large-scale demonstrations during April-May 2006, prompting the government to stop its reform attempt.

### Employment

Total employment stagnated during this period, despite some encouraging signs. The employment ratio fell slightly by 0.1 percentage points per year. The core unemployment rate held steady, and the increased availability of formal jobs led to a decrease in the number of discouraged workers. In contrast to the previous period, employment declined for men and increased for women. Employment declines were greatest for rural men and increases were greatest for urban women. This reflects the fact that women re-entered the workforce, in response to expanded job opportunities off the farm and, perhaps, also because of falling household incomes due to lower wages.

Under-employment (the percentage of workers working less than 35 hours per week who would be willing to accept another job if it were offered), which was relatively constant in the previous period, climbed from 14.6 percent to 17.4 percent. The rate increased not because more workers worked fewer than 35 hours, but rather because more already under-employed workers were willing to accept another job. This might be explained by the increase in opportunities in the formal sector, together with stagnating wages.

## Labor Structure

Although total employment did not increase, the quality of jobs improved and recovered to pre-crisis levels. Employment in the agricultural sector fell sharply. Workers moved off the farm by an average of 1.3 percentage points per year during this period and agricultural employment fell to 41.2 percent in 2007, the lowest level since 1997. Relatively little of this improvement in off-farm employment — less than one third — was due to the continuing increase in the education levels of workers.

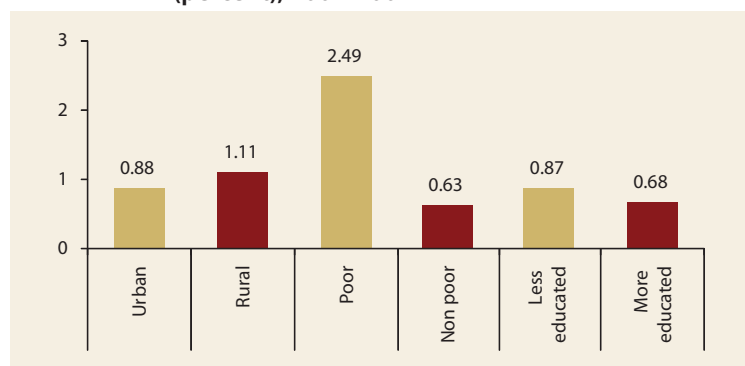
Formal and off-farm employment expanded rapidly during this period. Formality grew at an impressive rate of 1.2 percentage points per year — only slightly lower than strong pre-crisis growth rate of 1.5 percentage points per year. Using the more accurate new definition, formality still grew strongly, at 0.8 of a percentage point per year.<sup>32</sup> This increase in formality, however, did not extend to the lowest quality jobs. The percentage of workers who were casual daily laborers actually rose, from 8.5 percent in 2003 to 10.4 percent in 2007.

## Wages

For the first time since the crisis, median real wages fell. Employee wages during the period fell by 14.2 percent — an average of 3.8 percent per year. This wage decline is entirely explained by the drop in wages from August 2004 to November 2005, when median wages declined by 14 percent.<sup>33</sup> All types of workers experienced sharp real wage declines in 2005, but high-wage workers had fully recovered by 2007. Wages at the 90<sup>th</sup> percentile grew slightly between 2003 and 2007, while wages at the 10<sup>th</sup> and 50<sup>th</sup> percentile declined by over 3.5 percent per year, possibly because of the entrance of less educated workers.

## Winners and Losers

**Figure 1.4** Growth rate of formal employment share (percent), 2004-2007



Source: Sakernas.

Rural and less educated workers were more likely to move out of agricultural employment and into formal sector jobs. Formal sector employment rose by 1.3 percentage points per year in rural areas, compared with only 0.2 percentage points in urban areas.<sup>34</sup> Less educated workers also experienced a similar increase. They enjoyed an increase in formality of nearly 1 percentage point per year, while the formality rate of more educated workers fell slightly.

32 This refers the growth rate using the new official definition, which appropriately classifies casual agricultural and construction workers as informal.

33 Because of large fuel price increases in 2005, the labor force survey was delayed until November that year. Therefore, it is impossible to accurately differentiate the effects of collecting data in a different month from legitimate trends when comparing 2005 to 2004 or 2006.

34 This is the new definition, which correctly excludes casual agricultural and construction workers.

Although poor workers exited agriculture, too, they were less successful in entering the formal sector. Agricultural employment amongst the poor declined at a remarkable rate — nearly 4 percentage points per year — from 69 percent in 2003 to 58 percent in 2006. In contrast, agricultural employment declined only 1.3 percentage points per year for the near-poor and remained constant for the non-poor. However, only a small number of the poor who left agriculture found formal sector jobs. Despite the huge movement out of agriculture, formal sector employment for the poor increased by only 0.8 percentage points and remained roughly constant for the near-poor.<sup>35</sup> This suggests that, unlike during the pre-crisis period, poor and near-poor workers tended to move out of agricultural jobs into informal jobs.

## VI. 2007-08: Signs of Optimism

### Employment

Between February 2007 and February 2008, the employment ratio rose by 1.7 percentage points for women, while increasing only slightly for men. This increase in employment came both from a sharp decline in the percentage of women that were discouraged workers, as well as a continued steady increase in the number of women who entered the labor force.

### Labor Structure

Job quality also continued to see strong improvements. The formality rate continued its strong growth trend following the 2003-07 period, increasing by roughly one percentage point between 2007 and 2008. Rural men benefited the most from increased job quality. The formality rate jumped by 1.6 percentage points for men, compared to only 0.7 percentage points for women. This was spurred by strong increases in rural areas. This coincided with more workers moving off the farm, as the percentage employed in agriculture fell nearly 2 percentage points between 2007 and 2008.

### Wages

This robust employment expansion occurred amidst a slight increase in median wages. This wage expansion was concentrated in the top of the wage distribution; wages rose 7 percent for the top earners in the 90<sup>th</sup> percentile while falling 5 percent for the lowest earners in the 10<sup>th</sup> percentile. While median wages for women increased by 5 percent, wages increased most strongly for more educated women and urban women.

## VII. Conclusion

**Indonesia has not generated enough good jobs to fully pass on the benefits of sustained economic growth to workers.** Labor is one of the few productive resources of the poor. If provided with a good job, they have a chance to earn their way out of poverty. Indonesia, however, experienced significant jobless growth from 1999 until 2003, which contributed to the current situation where the majority of the Indonesia's working population of 104.5 million people is still employed in agricultural and informal jobs. Despite sustained economic growth, the rate of poverty reduction is slower than hoped, partly because there are not enough opportunities for poor workers to move into “better” formal and non-agricultural jobs.

35 Based on the new definition of formal sector employment.





**Over the last decade, Indonesia's policy makers have been forced to make difficult choices between rising wages and expansion of good jobs.** Indonesia's labor market before the financial crisis provided workers with more jobs at higher wages. Job quality was improving, as more workers were pulled off the farm and into formal and non-agricultural jobs. Following the crisis, trends in the labor market alternated between rising wages and job expansion. Policy makers were forced to make hard choices. During the period of 1999-2003, wages increased but the formal sector contracted, forcing more workers back into agricultural work. Later, during 2003-07, formal and off-farm employment expanded while wages reached a plateau. Since the crisis, job quality has been highly sensitive to changes in wages, especially for poor workers who were most affected by these changes.

**Why has Indonesia's labor market been unable to generate quality jobs while, at the same time, raising wages?** Indonesia's performance in creating quality jobs following its recovery from the 1997 Asian financial crisis has been disappointing. The next chapter will examine changes in the nature of Indonesia's economic growth, how these changes have affected job creation, and whether these changes are unique to Indonesia or characteristic of broader regional trends.

# Chapter 2



## Jobless Growth in Indonesia

Learning from the Past to Promote Growth with Jobs

## Chapter 2 Summary

Before the 1997 crisis, Indonesia outpaced its neighbors in moving workers into non-agricultural jobs. Two years of financial crisis, during 1997-98, hit Indonesia harder than other countries and drove a higher percentage of workers back into agriculture. While other countries recovered during 1999-2003, Indonesia was the only country to experience jobless growth. Since 2003, Indonesia's off-farm employment growth has recovered but remains far behind fast-growing China and Vietnam.

Indonesia was the only country in the region to experience jobless growth during the post-financial crisis recovery period, pushing workers into the agricultural sector. Two-thirds of the slow-down in non-farm job creation was due to the service sector, which failed to generate jobs between 1999 and 2003, despite strong economic growth. Indonesia was the only country in the region where the service sector growth became less labor-intensive, resulting in relatively poor performance in job creation. This is most likely due to the effect of rapid wage increases, which lowered service sector elasticities in China and even more so in Indonesia.

Despite an impressive recovery, non-agricultural employment growth in Indonesia continues to remain below what it was during 1990-97. This is primarily due to the service sector – especially in the trade sub-sector – that remained less labor intensive than they were before and, therefore generated fewer jobs. This situation is not unique to Indonesia, but a common experience that is shared across the region.

## I. Introduction

**Why did Indonesia experience 'jobless growth' after the 1997 financial crisis and why has non-farm employment growth not yet fully recovered?** The generation of non-agricultural jobs is one of the key indicators of a healthy labor market.<sup>36</sup> Non-agricultural job creation, however, continued to fall in Indonesia during the 1999-2003 recovery period despite moderate economic growth, which created a situation of 'jobless growth' (Box 2.1). Since 2003, Indonesia has recovered from jobless growth but non-farm employment has only partially recovered to what it was during the 1990s. Understanding the constraining factors that caused jobless growth after the 1997 crisis and have hampered non-farm job creation since then can help identify which labor policies will support the creation of more quality jobs.

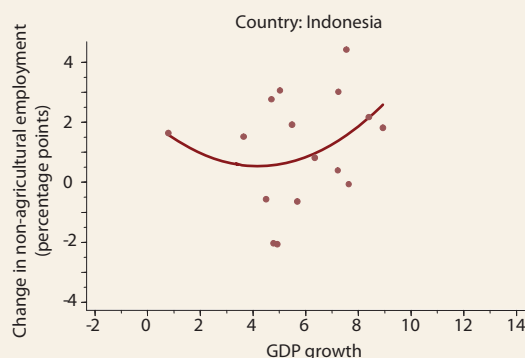
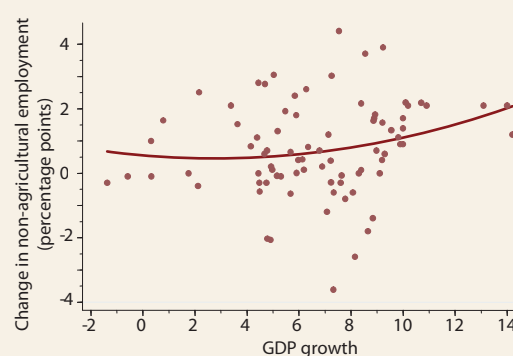
**Chapter 2 aims to understand the factors that led to the slow-down of non-farm employment growth in Indonesia.** The chapter consists of four sections:

- The first section compares Indonesia's performance in economic growth and job creation with five neighboring comparator countries in East Asia – China, Malaysia, the Philippines, Thailand and Vietnam – to find out whether the slowdown was a regional phenomenon or unique to Indonesia alone.
- The second section examines possible causes of Indonesia's weak non-agricultural employment generation from 1999 to 2003.
- The third section will look at why off-farm job creation since 2003 has failed to recover to pre-financial crisis levels.
- The fourth and final section concludes the chapter.

36 The non-agricultural sectors refer to both the industry and service sectors. Each of these sectors, in turn, consists of several sub-sectors that include the full range of non-agricultural jobs. They are as follows:  
• Industry: mining and excavation; industry (manufacturing); electricity, gas and water; construction.  
• Services: trade, restaurant and hospitality services; transportation, storage and communications; financial institutions, real estate, rental businesses and company service; community, social and individual services.

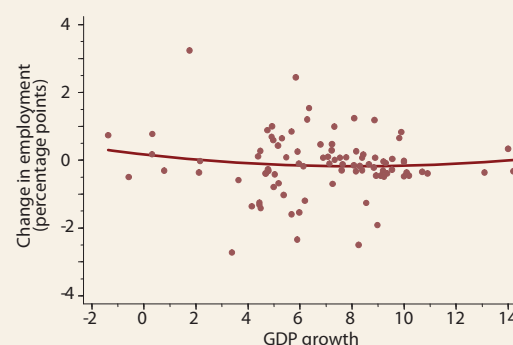
**Box 2.1** What is 'jobless growth'?

**Jobless growth, as defined in the Indonesia Jobs Report, refers to economic growth that fails to generate non-agricultural employment.** Non-agricultural employment typically increases as the economy grows. Higher rates of non-agricultural employment are positively associated with GDP growth, both in Indonesia (Figure 2.1) and across the region (Figure 2.2). In some cases, however, growth can fail to create higher wage jobs that are typically found in the non-agricultural sectors. This is observed in a fall in the non-agricultural employment elasticity (the percentage change in non-farm employment associated with a percentage change in real GDP growth) – which characterizes jobless growth.

**Figure 2.1** GDP Growth and Change in Non-Ag Employment**Figure 2.2** GDP Growth and Change in Non-Ag Employment

**Defining jobless growth based on non-agricultural employment is preferable to a definition based on total employment.** Although jobless growth is a term frequently used, it is rarely defined clearly. Often, it is intended to refer to the economic growth that fails to increase the total number of jobs or the percentage of adults working. This is problematic because economic growth often enables workers to leave low quality jobs and exit the labor force. For example, during the period of rapid growth from 1990 to 1997, the employment ratio in Indonesia declined by 0.2 percentage points per year, as rural women could afford to exit the labor force, leaving poor jobs behind. Focusing on total employment would lead to the false conclusion that this was a spell of jobless growth, despite the large number of non-agricultural jobs created.

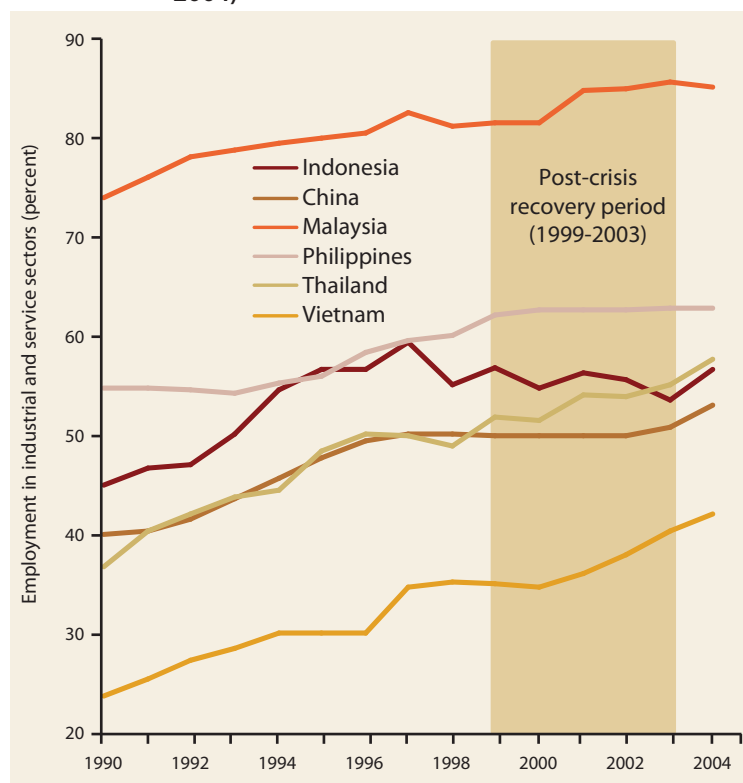
**Growth frequently fails to increase total employment.** The relationship between GDP growth and changes in the employment ratio between 1990 and 2006 (excluding the main financial crisis year, 1998) is weak and inconsistent both in Indonesia (Figure 2.3) and regional comparator countries (Figure 2.4). Strong economic growth of 8-10 percent is frequently associated with little or no growth in total employment. For these reasons, the Indonesia Jobs Report focuses on the inability to create preferred non-agricultural jobs.

**Figure 2.3** GDP Growth and Change in Employment**Figure 2.4** GDP Growth and Change in Employment

Source: Bank staff calculations from National Accounts, Sakernas, CEIC.

## II. Economic growth and job creation: Comparing Indonesia with East Asian neighbors

**Figure 2.5** Share of non-agricultural jobs, by country (1990-2004)



Source: Sakernas, World Development Indicators (WDI), CEIC.

Before the crisis, economic growth expanded off-farm employment throughout the region. During the early to mid-1990s, growth was strong throughout the region, averaging 7.5 percent per year for Indonesia and its five major neighbors.<sup>37</sup> The effect of this growth was not apparent in total employment changes. Total employment – measured as a share of working-aged adults – fell in all six countries, by an average of 0.2 percentage points per year. Instead, growth in the region, and especially in Indonesia, was reflected in off-farm job expansion. Even though Indonesia's solid growth rate still trailed behind that of China, Malaysia, and Vietnam, Indonesia's off-farm employment expanded by 2.1 percentage points per year – faster than all five neighboring countries.

**The 1997 financial crisis hit Indonesia and Thailand the hardest, but the consequences**

**for the two countries' labor markets were very different.** Between 1997 and 1999, the economies of only two of the six comparator countries slowed during the crisis. Indonesia's GDP contracted by 6.4 percent per year and Thailand's by 3.3 percent per year. While total employment rates shrank in Thailand, they remained stable in Indonesia as the agricultural and informal sectors absorbed more workers. In fact, in the wake of the crisis, a greater share of workers was driven back onto the farm in Indonesia than any other country. In Thailand, off-farm employment initially declined slightly in 1998, before recovering in 1999 as the economy recovered. Malaysia also experienced an increase in agricultural employment, but it did not match the extent of the reverse structural transformation in Indonesia.

**During the 1999-2003 recovery period, only Indonesia experienced the phenomenon of jobless growth.** Between 1999 and 2003, Indonesia's GDP growth recovered to an average of 4.7 percent per year. This growth rate was relatively weak, slightly surpassing Thailand and the Philippines, but lagging substantially behind Malaysia, Vietnam and China (Table 2.1). Furthermore, Indonesia's non-agricultural employment growth was dismal. Even after recovering from the crisis, workers in Indonesia continued to move back into

37 Annex II.1.

farm jobs, as employment in agriculture grew 0.8 percentage points per year, nearly the same rate as during the financial crisis itself. This stands in contrast to all the other major countries in the region, where structural transformations resumed and off-farm employment rates increased rapidly.

**Table 2.1 Non-agricultural performance and wage growth, by country (1999-2003)**

Average rates		Indonesia	China	Malaysia	Philippines	Thailand	Vietnam
GDP growth		4.7	8.9	4.8	4.5	4.3	7.0
Wage growth		11.2	13.6	N/A	-0.1	-5.7	4.6
Annual change in total non-agricultural employment		-0.1	1.6	4.1	3.5	3.7	7.0
Industrial sector	Employment growth	-0.1	-0.4	0.1	-0.1	0.6	1.8
	GDP growth	4.2	10.1	5.2	3.5	5.9	10.1
	Elasticity	0.3	-0.1	0.6	0.7	0.9	1.6
Service sector	Employment growth	-0.7	3.2	4.7	3.9	3.0	2.3
	GDP growth	5.4	10.0	4.5	5.0	3.5	6.1
	Elasticity	-0.1	0.3	1.1	0.8	0.8	0.4

Source: Sakernas, CEIC, WDI.

**Since 2003, off-farm job creation has picked up in Indonesia, but falls short of the pre-crisis period.**

Indonesia's annual GDP growth rate of 5.4 percent between 2003 and 2006 slightly exceeded Thailand but lagged behind that of China and Vietnam. Despite moderate economic growth, however, Indonesia's employment record outshined many of its neighbors. Overall employment declined slightly in Indonesia, with only China and Malaysia experiencing more rapid declines. More striking, however, was Indonesia's turnaround in non-agricultural employment growth. The number of Indonesians employed outside of agriculture jumped by 3.5 percent per year. This resumption of non-agricultural growth, while better than some of its neighbors, falls well short of the pre-crisis 6.3 percent annual growth rate in non-agricultural employment.

**Comparing Indonesia's recent employment history to its neighbors raises two puzzling questions.**

First, why was Indonesia's jobless growth from 1999 to 2003 far more severe than in neighboring countries? Second, why has Indonesia's structural transformation out of agriculture remained weaker since 2003 than it was before the crisis? The following sections consider potential explanations for these questions, based on comparisons between Indonesia and its regional neighbors.

### III. Jobless growth: Understanding weak off-farm job creation after the 1997 financial crisis

**There are two common explanations for the jobless growth of 1999-2003.** First, low GDP growth dampened the creation of non-agricultural jobs. Second, a decline in the growth of the industrial sector (especially in manufacturing) caused the slow-down in non-farm job creation. This section will examine and assess each of these theories, and propose an alternative explanation.



## Did slowing GDP growth in Indonesia cause jobless growth?

**Economic growth generally promotes off-farm job creation, but the relationship depends on many factors.** These include the extent to which growth occurs in labor-intensive sectors, the cost of hiring workers, the institutions and regulations governing hiring and firing, and the preferences and characteristics of non-employed workers. These factors can vary dramatically across countries and even in different periods within the same country. This results in a highly variable relationship between economic growth and off-farm job growth, both in Indonesia and the region.<sup>38</sup>

**Slowing growth explains only a small portion of Indonesia's dramatic slowdown in off-farm employment growth.** From 1999 to 2003, annual GDP growth recovered to 4.7 percent, which remained far short of the 7.4 percent Indonesia enjoyed from 1990 to 1997. The noticeable but limited relationship between GDP growth and off-farm employment (Figures 2.1 and 2.2) provides a rough estimate of the effects of growth slowdown. They suggest that raising GDP growth from Indonesia's 4.5 percent rate from 1999-2003 to its pre-crisis level of 7.5 percent is associated with an increase in off-farm employment of roughly 0.5 to 1 percentage point per year. As noted above, these estimates are rough, given the striking diversity of country experiences, but they are plausible. While a 0.5-1 percentage point increase in off-farm employment is considerable, the share of employment outside agriculture grew by 2.1 percentage points per year from 1990-1997 and declined by 0.8 from 1999-2003. Therefore, slowing growth appears to only explain a small portion of Indonesia's massive three percentage point de-acceleration in off-farm employment growth.

**Further, slower growth alone cannot explain why Indonesia's off-farm employment growth was far worse than Malaysia and Thailand's.** Like in Indonesia, GDP growth in Malaysia and Thailand between 1999 and 2003 fell far short of pre-crisis levels. Indonesia's annual GDP growth dropped from 7.4 percent per year during 1990-1997 to 4.7 percent per year from 1999 to 2003, while Thailand's growth fell from 7.3 to 4.3 percent per annum and Malaysia's declined even more, from 9.2 to 4.8 percent. Indonesia's plunge in off-farm employment growth, however, was far worse than these two neighbors. Indonesia off-farm employment growth fell by 3 percentage points per year, from a 2.1 point per year increase to a -0.8 per year decline. Meanwhile, Thailand's non-farm employment share declined only by 1 percentage point, and Malaysia's actually increased. It therefore appears that something unique to Indonesia – rather than slowing growth – was driving the dramatic slowdown in non-agricultural employment during this time.

**The limited role of overall growth is also apparent when comparing Vietnam to Malaysia and Thailand.** Between 1999 and 2003, Vietnam continued to grow at 7 percent per year, while Indonesia, Malaysia, Thailand and the Philippines all grew at less than 5 percent per year. Vietnam's strong growth had a noticeable but limited effect on non-agricultural employment, as Vietnam's off-farm employment share expanded by 1.3 percentage points per year. This was only slightly faster than similar expansions in Malaysia and Thailand, where non-agricultural employment share grew by 1.0 and 0.8 percentage points per year.

## Did slowing industrial growth cause jobless growth?

**There is a perception that jobless growth following the crisis was mainly caused by the slowdown of growth in the industrial sector.** From 1999 to 2003, Indonesia's industrial sector grew by only 5 percent per year, after growing by 9.3 percent from 1990 to 1997. This occurred at exactly the same period that the share of employment in agriculture jumped, as non-agricultural and formal employment growth stagnated. For this reason, slowing industrial growth is a common reason cited for the rise of jobless growth in Indonesia.

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38 See Figure 2.1 and 2.2. The variable relationship between economic growth and non-agricultural employment growth is seen in the considerable dispersion around the curves.



**Box 2.2 Identifying the culprit of jobless growth**

To analyze non-farm employment growth, this chapter introduces a framework to help better understand how jobless growth occurs. This framework analyzes how two periods' off-farm employment growth rates differ. Non-agricultural growth is the focus, for reasons described in box 2.1. The framework examines the role of changes in employment growth versus changes in the employment elasticity, for both the service and industrial sector.

The first step is to decompose differences in non-agricultural employment growth according to the two main non-agricultural sectors: industry and services. This indicates what percentage of the change in non-agricultural employment growth is due to the industrial versus the service sector. The second step is to decompose the difference in each sector's employment growth into the portions due to the change in the sector's growth rate, versus the change in the sector's employment elasticity. After carrying out these two steps, we can divide the change in non-agricultural employment creation into portions caused by changes in four components: Service sector growth, service sector employment elasticity, industrial sector growth, and industrial sector employment elasticity.

Comparing these findings (Table 2.2.) across different periods and between regional neighbors sheds further light on why non-farm job creation in Indonesia has been struggling since the 1997 financial crisis and continues to lag behind some of its fast-growing neighbors.

**Table 2.2 Non-agricultural employment decomposition for Indonesia, 1999-2003**

	Indonesia (1990-97)	China	Malaysia	Philippines	Thailand	Vietnam
<b>A. Annual non-agricultural employment growth (percent)</b>						
Comparison Country	<b>6.3</b>	1.6	4.1	3.5	3.7	7.0
Indonesia						
(1999-2003 rate)	<b>-0.1</b>	-0.1	-0.1	-0.1	-0.1	-0.1
Difference	<b>6.4</b>	1.7	4.2	3.5	3.8	7.1
<b>B. Percent of difference due to:</b>						
Industrial growth	<b>12%</b>	14%	4%	-2%	9%	28%
Industrial elasticity	<b>16%</b>	-49%	15%	9%	28%	47%
Service growth	<b>6%</b>	15%	-6%	-3%	-11%	1%
Service elasticity	<b>66%</b>	120%	87%	96%	73%	24%

Source: World Bank calculations

**Slowing industrial growth was not the main factor behind Indonesia's jobless growth during this period.** To better understand the increase in jobless growth during this time, the large slowdown in off-farm employment growth, from the 1990-1997 to the 1999-2003 period, is decomposed by two main sectors – industry and services – to see which sector was responsible for slowing employment growth (Box 2.2). Within these two sectors, lower employment growth can occur because of lower growth in the sector, or because employment in the sector becomes less responsive to growth. Only 28 percent of the change is attributable to the industrial sector (Table 2.2). Slowing industrial growth was only responsible for 12 percent of the decline in Indonesia's non-agricultural growth, while the remaining 16 percent was explained by a decline in the industrial sector's ability to turn growth into jobs.

**The main culprit behind slower off-farm job creation, however, was the service sector, which became less labor-intensive.** The majority of the decline in off-farm employment growth – 72 percent – came

from slowing employment growth in the service sector. Despite healthy service sector growth of 5.4 per year during 1999-2003, the total number of workers in services actually declined slightly, and the share of employment in services plummeted. As a result, the employment elasticity in the Indonesian service sector was negative during this time. Across all six countries and three non-crisis periods, this is the only case where the service sector employment elasticity was negative.

**Off-farm employment growth in Malaysia, Thailand, and the Philippines, on the other hand, grew faster due to the ability of their service sectors to create jobs.** Indonesian GDP growth was almost identical to that in Malaysia, Thailand, and the Philippines. In each of these countries, however, growth in non-agricultural employment was much higher than in Indonesia. The number of employees working off the farm grew by nearly 4 percent in all three countries, while falling slightly in Indonesia. In each case, the vast majority of the difference in non-farm employment is due to their higher service sector growth elasticities, ranging from 0.8 to 1.1 among these countries compared to -0.1 in Indonesia.<sup>39</sup> The low service sector elasticity in Indonesia accounts for the greatest share of Indonesia's disappointing off-farm employment growth compared to these countries: 87 percent compared to Malaysia, 73 percent compared to Thailand, and 96 percent compared to the Philippines.

**Similarly, non-farm employment in China grew because the service sector was able to generate more jobs with rising growth.** Chinese growth rates accelerated during this period, reaching 9 percent per year. Despite strong industrial sector growth rates, however, no jobs were created in the Chinese industrial sector, according to the World Bank's world development indicators. The industrial employment elasticity was a shockingly low -0.05 in China during this time. If China's industrial sector employment elasticity was as high as Indonesia's 0.3, China's advantage in off-farm job creation would have increased by 50 percent. Overall, however, China benefited from a service sector that created jobs, which compensated for the inability of the industrial sector to create jobs. China's service sector employment elasticity of 0.3 far exceeded Indonesia's, which was -0.1. This is the major factor explaining China's faster rate of off-farm employment growth.

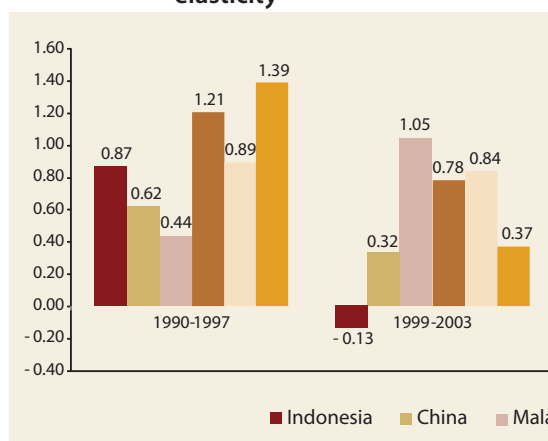
**Vietnam was the only country that benefitted from industrial sector growth and rising labor-intensity in this sector.** During this time, Vietnam enjoyed annual GDP growth rates of 7 percent, and moved workers off the farm by 1.3 percentage points per year, even faster than during the pre-crisis period. Vietnam's booming industrial sector was a major factor, growing by 10.1 percent per year, more than double Indonesia's rate of 4.2 percent. This difference alone accounted for 31 percent of the difference in off-farm employment growth between the two countries. A much larger factor, however, was Vietnam's ability to turn industrial growth into jobs. During this time, Indonesia's employment elasticity in the industrial sector was only 0.3, while Vietnam's was 1.6. This stunning difference in employment elasticity accounted for 47 percent of Indonesia's shortfall, compared to Vietnam, in off-farm employment growth.

## Why did the service sector become less labor intensive?

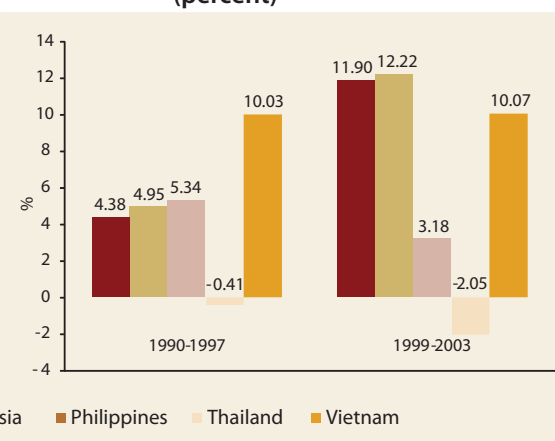
**Wage increases in Indonesia and China appear to have hindered the ability of the service sector to turn growth into jobs.** From 1999 to 2003, real average wages increased by 11 percent per year in Indonesia, driven by real minimum wage increases of 10 percent per year (Table 2.1). Only China experienced greater wage growth, at 15 percent per year. In contrast, average real wages in Thailand fell slightly during this time, while wages held constant in the Philippines. The service sector in Indonesia was unable to create jobs, as employment declined despite solid growth in the sector. The service sector also struggled to create jobs in China, as the employment elasticity was relatively low. However, the service sector was better able to create jobs in Thailand and the Philippines, where wages did not increase

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39 Annex II.2.

**Figure 2.6** Service sector employment elasticity

Source: Sakernas, WDI, CEIC.

**Figure 2.7** Annualized wage changes (percent)

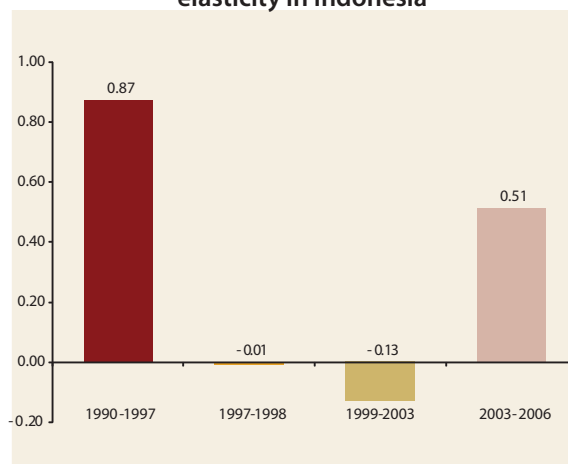
Source: Sakernas, WDI, CEIC.

**A comparison of trends in Indonesia and Thailand also suggests that Indonesia's wage growth reduced service sector employment.** Comparing Indonesia and Thailand is particularly instructive because both countries experienced similar growth trends but very different wage trends. In both countries, GDP growth declined from about 7 percent before the crisis to about 4.5 percent from 1999 to 2003. Average annual wage growth in Indonesia's accelerated from 3 percent growth before the crisis to 11 percent from 1999 to 2003. Meanwhile, wage growth reversed in Thailand – after growing by 3.5 percent before the crisis, wages declined by 5.5 percent from 1999–2003. The divergence in wage growth was reflected in the service sector elasticity. In Indonesia, the service sector elasticity plummeted, while it remained nearly constant in Thailand.

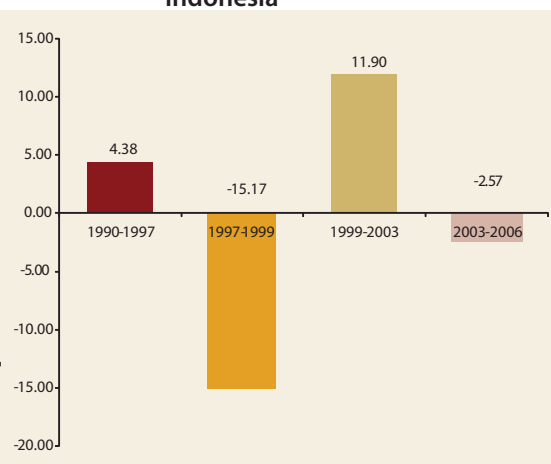
## IV. Partial Recovery: Why did the structural transformation resume at a slower pace during 2003-2007?

**Indonesia, similar to other regional countries, has been unable to return to off-farm employment growth levels enjoyed before the 1997 financial crisis.** Since 2003, the share of non-agricultural employment in Indonesia has grown rapidly, at 1.3 percentage points per year as average wages fell by 3.8 percentage points per year (Table 2.3). Nevertheless, despite falling wages and increasing movement off the farm, non-agricultural employment growth since 2003 remains substantially below the rate before the 1997 crisis when it was expanding by 2.1 percentage points per year. Indonesia's inability to recover to pre-crisis levels of non-agricultural employment growth is similar to the experience of Malaysia, the Philippines, and Thailand. The share of employment outside of agriculture hardly changed in Malaysia and the Philippines between 2003 and 2007, while growing at 1.2 percentage points per year in Thailand. Only in Vietnam and China, where growth has remained strong, is non-farm employment growth above its pre-crisis growth level.

**Figure 2.8** Service sector employment elasticity in Indonesia



**Figure 2.9** Annualized wage changes in Indonesia



Source: National Accounts, Sakernas

**Table 2.3** Non-agricultural performance and wage growth, by country (2003-06)

Average growth rates		Indonesia	China	Malaysia	Philippines	Thailand	Vietnam
GDP growth		5.4		6.1	5.5	5.2	8.1
Wage growth		-2.0		N/A	-1.8	-1.8	0.4
Non-agricultural employment		1.3	2.1	-0.1	0.1	1.2	1.6
Industrial sector	Employment growth	0.4	1.2	N/A	-0.4	0.3	N/A
	GDP growth	4.5		7.8	4.5	6.6	10.2
	Elasticity	0.6	0.5	-0.3	-0.1	0.5	0.9
Service sector	Employment growth	1.1	1.0	N/A	0.5	0.9	N/A
	GDP growth	7.8		6.2	7.3	5.9	7.3
	Elasticity	0.5	0.4	0.2	0.4	0.8	0.9

Source: Sakernas

**The partial recovery is due to the service sector's continued inability to translate growth into jobs.** The decomposition used earlier is applied to the 2003-07 period to more closely examine why non-agricultural employment growth has fallen short of the rapid structural transformation during 1990-97 (Table 2.4). Lower employment growth in the industrial and service sector each account for about half of the total shortfall in employment growth. The service sector grew faster during 2003-2006 than it did in the 1990-1997 period. The service sector employment elasticity, however, remains short of its pre-1997 level even though it recovered substantially from the 1999-2003 period. Because the service sector employs twice as many workers as the industrial sector, even this moderate shortfall in the employment elasticity has a large effect, accounting for 69 percent of the total shortfall in non-agricultural employment.

**Table 2.4 Non-agricultural employment decomposition for Indonesia, 2003-07**

	Indonesia (1990-97)	Malaysia	Philippines	Thailand	Vietnam
<b>A. Annual non-agricultural employment growth (percent)</b>					
Country	<b>6.3</b>	1.2	2.2	4.4	7.3
Indonesia (2003-2006)	<b>3.5</b>	3.5	3.5	3.5	3.5
Difference	<b>2.8</b>	-2.3	-1.3	0.9	3.8
<b>B. Percent of difference due to:</b>					
Industrial growth	<b>32%</b>	-6%	0%	-34%	21%
Industrial elasticity	<b>14%</b>	72%	241%	4%	12%
Service growth	<b>-16%</b>	8%	-12%	80%	-12%
Service elasticity	<b>69%</b>	26%	-128%	50%	79%

Source: World Bank staff calculations

**The decline in service sector elasticity is mostly due to the trade subsector, which is part of a regional phenomenon.** The elasticity of trade declined from 0.45 before the crisis to 0.3 in the 2003-2007 period. This means that a 10 percent increase in trade growth would only raise employment by 3 percent rather than 4.5 percent. Elasticity declines in public and private services were also significant, amounting to 28 percent, but transport and financial services had much smaller elasticity declines. This situation is not unique to Indonesia; service sectors throughout the region remain less labor intensive than they were before and generate fewer jobs. During the 1999-2003 period, Indonesia's negative service elasticity was lower than its neighbors. Since then, Indonesia's service elasticity recovered to the middle of the pack. The inability of the service sector elasticity to match 1990-97 levels is common throughout the region. Unlike the previous period, wage growth cannot explain continued sluggishness in service sector employment growth. During 2003-07, average wage growth actually fell by 2 percent in Indonesia and 1.8 percent in Malaysia and the Philippines (Table 2.3). Indeed, service sector employment elasticities have declined throughout the region. One possible explanation for this universal decline is that improvements in information and communications technologies are making the service sector less labor intensive.

**Slower industrial growth was also an important factor explaining the slow-down in off-farm job growth, both for Indonesia and its neighbors.** A third of the shortfall, relative to the pre-crisis era, is explained by slower industrial employment growth, which fell from an annual 9 percent pre-crisis to 4.5 percent from 2003-2007. About half of the decline in industrial growth is due to the manufacturing subsector, where growth declined from 5.4 percent pre-crisis to 3.1 percent post-crisis. Growth in construction and mining also slowed considerably, and accounted for the remaining half. While Indonesia's industrial sector growth has slowed the most, from 9 to 4.5 percent per year, most countries have also been unable to match their pre-crisis industrial growth rates. Industrial growth in Malaysia, for example, slowed from 11 to 7.8 percent, while industrial growth in Thailand slowed from 8.8 to 6.6 percent. Industrial growth in fast-growing China and Vietnam has also declined, from very high levels.

**Indonesia, however, has averted the collapse in industrial employment growth that has hurt Malaysia and the Philippines.** Indonesia and the Philippines have the lowest industrial growth rates in the region, at 4.5 percent per year, while the other neighbors are experiencing industrial sector growth rates ranging from 6.5 to 11 percent. But Indonesia's employment elasticity has remained high relative to its neighbors, trailing only Vietnam. This suggests that Indonesia's industrial sector is generating jobs at a reasonable pace, especially compared to Malaysia and the Philippines, where industrial sector employment elasticities were negative.

## V. Conclusion

**Indonesia has recovered from jobless growth, but rapid increases in formal labor costs, especially during 1999-2003, have undermined the creation of non-farm jobs.** The worst of the jobless growth occurred in the 1999-2003 period. It was driven by a massive decline in the service sector employment elasticity that was unique to Indonesia. At the same time, Indonesia's wages rose faster than its neighbors, which combined with moderate economic growth, considerably dampened off-farm job creation.

**Off-farm employment growth has yet to reach its pre-crisis levels in Indonesia, due to technological changes in the service sector and industrial competition from China and Vietnam.** Off-farm job growth mostly recovered in the 2003-2007 period, as wages flattened, but did not recover to pre-crisis levels. Two thirds of this remaining gap is due to a lower service sector elasticity, which is a region-wide phenomenon and may result from technological change. The other main factor explaining the remaining gap is slower industrial growth, as production increasingly has shifted to fast-growing China and Vietnam. Their ability to avoid this slowdown has allowed them to maintain their pre-crisis growth rates in off-farm employment.

**Further research is needed to understand the barriers to off-farm job-creation, especially the factors that decreased the employment elasticity of the growing service sector.** This chapter proposes that rapid increases in wages may have been a key factor influencing service sector employers to hire fewer workers, creating fewer new jobs. Further studies could examine the impact of changes in labor regulations, wages, and legal institutions in attracting foreign investment in industry and services and generating non-agricultural jobs. Research can also deepen our understanding of the regional changes taking place in the service sector that are contributing to the widespread reduction in labor-intensity.

**The next chapter examines one of the consequences of slow non-agricultural job growth: a labor market that remains highly segmented.** This chapter examined off-farm employment growth throughout the region rather than formality, since agricultural employment is consistently defined and easily available for countries throughout the region. Trends in non-agricultural employment, as we saw in Chapter 1, generally mirror trends in formal sector employment. Therefore, policies that reduce non-agricultural employment growth will also reduce the opportunities for workers to work in the formal sector. Chapter 3 considers how the rationing of jobs in the formal and non-agricultural sectors reinforces a stratified workforce, creating groups of 'insiders' and 'outsiders' who benefit from current labor regulations and policies.





## Labor Market Segmentation

In the Formal and Informal Sectors



## Chapter 3 Summary

### **Despite the recent positive labor trends, most Indonesians continue to work in the informal sector.**

Employment trends in Indonesia's labor market have been positive, albeit gradual, since 2003. Nevertheless, the workforce remains highly informal. Almost one-quarter of the active workforce is informally employed in the service and industrial sectors, while over one-third work informally in agriculture. Indonesia's informality rate – 63 percent – is significantly higher than other countries in the region.

### **Although informal jobs are preferred by some, informal workers earn less and do not receive the benefits associated with formal sector employment.**

Self-employment in the informal sector provides some workers – especially highly educated and more experienced workers – with higher earnings than they could expect in formal jobs. Others, especially women, may prefer informal jobs because they offer greater flexibility. On average workers in the informal sector earn significantly less than employees in the formal sector or employers. They do not benefit from non-wage benefits that formal sector workers are more likely to receive, such as medical benefits, transportation or access to credit. Given that transitions from informality into formality are not common, informality appears to be more often a trap than a stepping-stone to a better job.

### **Jobs in the formal sector, however, are not always better than those in the informal sector.**

There are three categories of employees in the formal sector: i) employees with permanent contracts, ii) those temporarily employed with fixed-term contracts, and iii) those who work in the formal sector without a contract. Permanent employees enjoy more income security than temporary workers. Contract-less employees (81 percent of the formal workforce), however, are the worst off and earn approximately the same as agricultural or non-agricultural workers in the informal sectors. They are less likely to receive any of the non-wage benefits typically associated with formal sector employment, including severance pay, pension, credit and transportation benefits. When disputes arise with employers, contract-less employees are also disadvantaged. Without job documentation to use as evidence of employment they face barriers in accessing channels for dispute resolution in industrial relations courts.

## Recommendations

### **In a segmented workforce like Indonesia's, policy makers must focus on accelerating the creation of 'better' jobs while still protecting vulnerable workers.**

Without an increase of opportunities in the preferred formal and non-agricultural sectors, the majority of Indonesian workers will remain in informal jobs. Since informal workers tend to be poorer, stagnant formal employment growth will also slow-down the pace of poverty reduction in Indonesia. The challenge faced by the new government, therefore, is to identify and support policies that will serve the interests of the majority of workers seeking better jobs, while still ensuring that workers who already have contracted jobs remain protected. Further work is still needed to explore policy options in the following areas:

- Understanding how to improve access to credit for micro-entrepreneurs and small- and medium-enterprises, and reducing bureaucratic barriers for these groups in order to stimulate job creation.
- Improve information flows so that informal workers can find better jobs, and explore matching strategies that connect informal workers and contract-less employees with prospective employers.
- Identifying training services and benefits, such as healthcare and pension systems, that can be designed to support and protect informal workers.

## I. Introduction

### **Slow job creation has reinforced a workforce that remains predominantly informal and agricultural.**

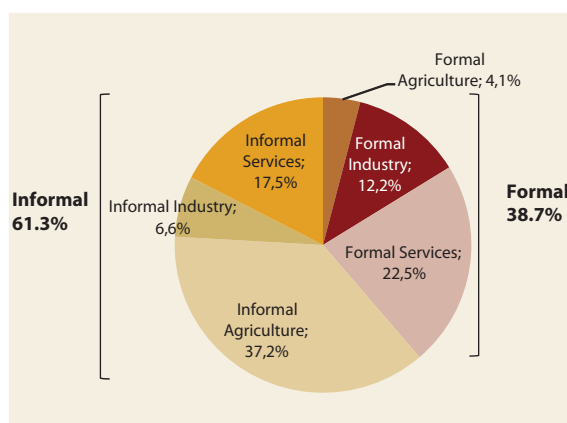
Employment trends in Indonesia's labor market have been positive, albeit gradual, since 2003 after the period of jobless growth came to an end. Nevertheless, the majority of the active labor force in Indonesia – about 100 million workers – continues to depend on jobs in the informal and agricultural sectors (Figure 3.1).

Indonesia's rate of informality – 63 percent of the employed workforce – is significantly higher than most of its neighbors and developing country comparators (Figure 3.2).<sup>40</sup>

**As a result, Indonesia's workforce is highly segmented with most workers facing a high degree of income insecurity.** Contract status is a key factor that affects the income security of workers in the formal sector. Employers and permanently contracted employees (including both the private and public sectors) earn the most. However, they only constitute approximately 5 percent of the active workforce (Figure 3.3). Fixed-term employees with temporary contracts earn substantially less, but still only represent 3 percent of the workforce. The remaining majority of workers face a much higher degree of income insecurity. They include employees in the formal sector who work without a contract (38 percent of the workforce), and self-employed workers and unpaid family workers (54 percent) who are included in the informal agricultural and non-agricultural sectors. These workers earn less, on average, than contracted workers in the formal sector and do not receive the non-wage benefits associated with having a contract (Figure 3.4). At the same time, employment laws and regulations tend not to protect these workers who must fend for themselves.

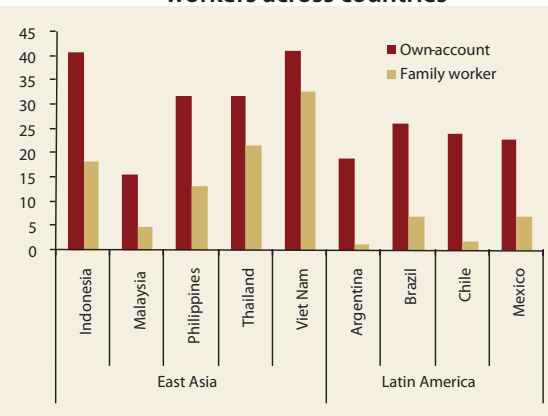
**The success of individuals in the labor market is not entirely defined by their inclusion in the formal sector or their job status.** Aggregate categories mask the diverse experiences of Indonesian workers. Not all jobs in the informal sector are necessarily 'bad' jobs. Some workers, in fact, are better off in the informal sector than in the formal sector. Nor can all jobs in the formal sector be considered as 'good' jobs.

**Figure 3.1** Distribution of workers by sector



Source: Sakernas, 2007.

**Figure 3.2** Share of own-account and family workers across countries

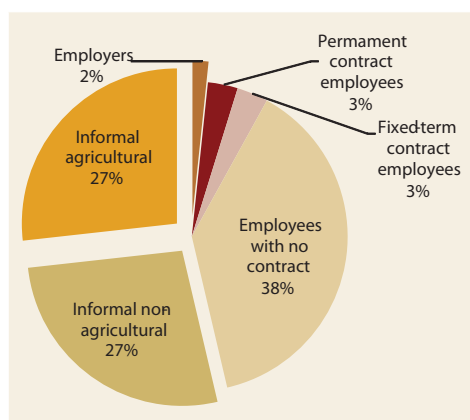


Source: ILO LABORSTA.<sup>41</sup>

40 Since the definition of informality is different across countries, two categories of workers, own-account (self-employed with and without workers) and family workers, are used as proxies for informality. This is fairly accurate proxy. Analysis using Sakernas (2008) finds that over half of all informal workers are self-employed, with 32 percent in agriculture and 24 percent in non-agricultural sectors. About one quarter work as unpaid workers in family businesses, and the rest are casual workers.

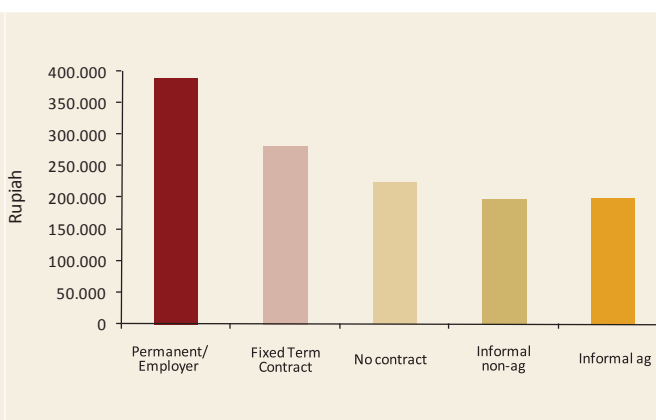
41 All data from 2006, except Brazil and Viet Nam (2004) and Malaysia (2003).

**Figure 3.3** Distribution of active workers by job status



Source: IFLS, 2007.

**Figure 3.4** Worker (mean) monthly earnings by job status



Source: IFLS, 2007.

**Chapter 3 examines segmentation in Indonesia's jobs market by looking at the situation of workers within the formal and informal sectors.** Policy makers in a country with a highly segmented jobs market face unique challenges. Their concern is not only to better protect workers who have contracted jobs and are covered by labor regulations, but also to spur job creation so that more non-contracted and informal workers can improve their income security and access to non-wage benefits. Therefore, it is important for policy makers to not only recognize general segmentation in the labor market, but also to understand segmentation within the formal and informal sectors. This chapter is divided into three sections:

- The first explores segmentation within the formal sector based on employee contract status.
- The second looks at informality in Indonesia and examines the four possible reasons why people are employed in the informal sector: job of choice, trapped, stepping-stone or safety net.
- The final section identifies the challenges that today's policy-makers face in accelerating the pace of creating "better" jobs.

## II. Segmentation in the Formal Sector

**Quality of job in the formal sector depends largely on contract status.** There are three types of employment arrangements found in the formal sector. These arrangements are as follows:

- Indefinite-term contracts where a worker is employed on a permanent basis.
- Fixed term contracts (FTC), or temporary contracts, where a worker is directly hired for a specified period of time. Similarly, some services may be outsourced whereby a worker is hired through a placement agency that provides services for a client firm.
- No formal contract to define the employment relationship.<sup>42</sup>

**While around one-tenth of Indonesian employees report working with a temporary contract, the overwhelming majority report having no contract in place.** Only approximately 20 percent of workers in the formal sector say that they work with a contract in place. About 8.7 percent of wage and salary employees in the formal sector are employed on a permanent basis and about 10.2 percent have an FTC

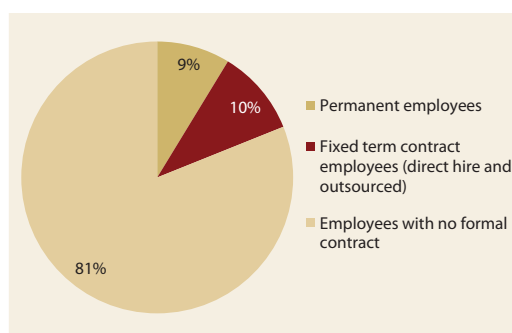
42 This category of employees is referred to as "contract-less" employees in this report.

(Figure 3.5).<sup>43</sup> Regional comparisons are not available, but the incidence of FTC contracts in Indonesia falls in the range of OECD countries, ranging from 5 to 17.5 percent.<sup>44</sup> The overwhelming majority of formal sector employees work without a formal contract in place. There are indications that the share of employees with contracts in Indonesia falls below that of other countries with similar income levels.<sup>45</sup>

**FTC workers are younger and more educated; they tend to work for larger-sized firms, especially in manufacturing.** The average age of FTC employees is 28.9 years, much younger than either permanent employees (35.6 years) or contract-less workers (34.2 years).<sup>46</sup> Both FTC and permanent employees, 81.0 percent and 80.7 percent, respectively, have completed at least senior secondary school compared to 52.6 percent of employees with no formal contract. Larger-sized firms in developed areas tend to use fixed-term contracts more frequently, possibly as a screening process for new employees. They most often work in the manufacturing and social service sectors, and tend to be concentrated in industrial regions: Jakarta, East and West Java.

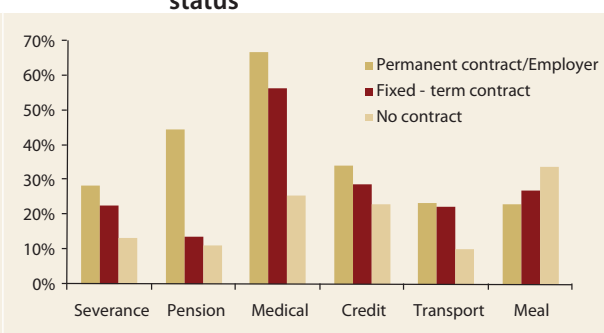
**FTC workers face a higher degree of income insecurity than permanent workers.** This is because those employed under temporary contracts receive lower wages than permanent workers (Figure 3.4) and work fewer weeks per year.<sup>47</sup> They also report receiving fewer benefits than permanent workers including health care, pension and severance pay. In addition, because FTC workers are less likely to be organized they are less able to enjoy the benefits associated with union membership.<sup>48</sup>

**Figure 3.5** Distribution of employees by contract status



Source: IFLS, 2007.

**Figure 3.6** Receipt of non-wage benefits as reported by employees, by contract status



Source: IFLS, 2007.

43 IFLS, 2007. Unless stated otherwise, IFLS (2007) is the data source for all descriptive statistics and analysis concerning contract status. The relevant question asks workers "Do you work with a contract?" The three possible answers are "No", "Yes, with no time limit", and "Yes, with a time limit"

44 OECD, 2007b.

45 Based on World Bank comparative estimates using data from the World Development Indicators (WDI) for population and per-capita real GDP, and wage and salary employment share data from Eurostat, ILO, and the OECD.

46 Annex III.1 provides a full profile of employee, job and job quality characteristics by contract status.

47 Annex III.2. The annex shows labor market outcomes (work intensity, wages, and non-wage benefits) comparing permanent and fixed-term contracted employees with those employees who work without a contract. A full range of characteristics are controlled for including: sex, age, level of education attainment, firm size, sector of employment (two-digit) and geographical location by region.

48 See discussion on union member premiums in Chapter 6.

**Employees who work with no contract in place, however, face even greater insecurity.** The lack of any contractual arrangements in the formal sector may be a more serious concern than the use of FTCs. Being an employee in the formal sector with no contract disadvantages workers in four ways. First, contract-less employees face a higher degree of income insecurity than either permanent or temporary employees. Although on average they work more weeks per year than temporary staff, they receive the lowest wages: 25 percent lower than permanent contract employees and 11 percent lower than FTC staff. Second, although employees with no contracts are in the most physically demanding and injury-prone jobs, they are the least likely to receive medical benefits from their employers. Third, they are also the least likely to receive training. Finally, contract-less employees are disadvantaged when accessing the formal justice institutions – such as the industrial relations courts – because they lack job documentation to use as evidence.

**This affects older and less educated employees, working in smaller-sized firms, who are more likely to work in the absence of a contract.** On average, contract-less workers are typically older than FTC employees but similar to permanent employees in age.<sup>49</sup> Employees with no formal contract have also completed fewer years of formal education. While slightly more than half have graduated from senior high school, only 19.8 percent have completed some tertiary education, compared to 38.4 percent for permanent and 27.5 percent for FTC employees. Contract-less employees are more likely to work in firms with fewer than 20 employees than either permanent or FTC employees. They are concentrated in the services sector: about one-third work in the social services sector, one-quarter work in the manufacturing sector, and one-fifth work in trade. Contract-less employees are disproportionately found in less-industrialized parts of the country.

**The situation of contract-less workers deserves more policy attention.** While employees without a contract dominate the formal sector, they have little voice in shaping labor policies and regulations. Indonesia's policy makers face the challenge of representing the concerns and interests of these workers by improving their employment prospects and income security. At the same time, however, they need to be equally concerned about the majority of the workforce – those concentrated in the informal sector. The next section describes who the informal workers are and explores the reasons why they work in the informal sector.

### III. The Informal Sector

#### Who are the informal workers?

**The majority of informal workers live in rural areas; they tend to be poor and are typically self-employed.** More than 70 percent of all informal workers live in rural areas. Sixty percent of these rural informal workers are poor or near-poor and 73 percent have only elementary education or less.<sup>50</sup> Most informal workers are self-employed. Most rural informal workers are self-employed workers in farming, fishing and raising livestock. Although the majority live in Java and Sumatra, they are mostly concentrated in remote areas where fewer firms operate and agriculture is the main source of livelihood. Workers in eastern Indonesia are 2.3 times more likely to be informal than workers with identical characteristics in western regions of the country.

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49 Annex III.1.

50 Sakernas 2008

**Box 3.1** Defining the informal sector**Table 3.1** BPS definition, formal and informal sectors

Status	Occupation				
	Professional, Director, Manager	Sales, Labor	Agricultural Workers	Production, Transport, Unskilled	Other
Self-employed	Formal	Informal	Informal	Informal	Informal
Self-employed with family workers	Formal	Formal	Informal	Formal	Informal
Employers with permanent workers	Formal	Formal	Formal	Formal	Formal
Employees	Formal	Formal	Formal	Formal	Formal
Casual employees, agriculture	Formal	Informal	Informal	Informal	Informal
Casual employees, non-agriculture	Formal	Informal	Informal	Informal	Informal
Family workers	Informal	Informal	Informal	Informal	Informal

There is no standard definition of the informal sector. A common definition refers to economic activities that fall outside the legal rules and institutions of a country. In developed countries, this often refers to unregistered businesses that do not pay taxes or provide worker benefits. This approach may be unsuitable in developing countries where records of business activities and legal compliance are poor. An alternative definition, and one used in Indonesia, is based on employment status — a proxy for income security and the first definition.

The **official definition** of informal and formal sector activities adopted by BPS in 2001 uses a combination of work status and types of main occupation (Table 3.1). All employees and employers with permanent workers are defined as formal. Similarly, all professionals or workers in managerial positions are formal workers, except for those classified as family workers whose numbers are almost negligible. All other combinations are informal, except for the self-employed with family workers.

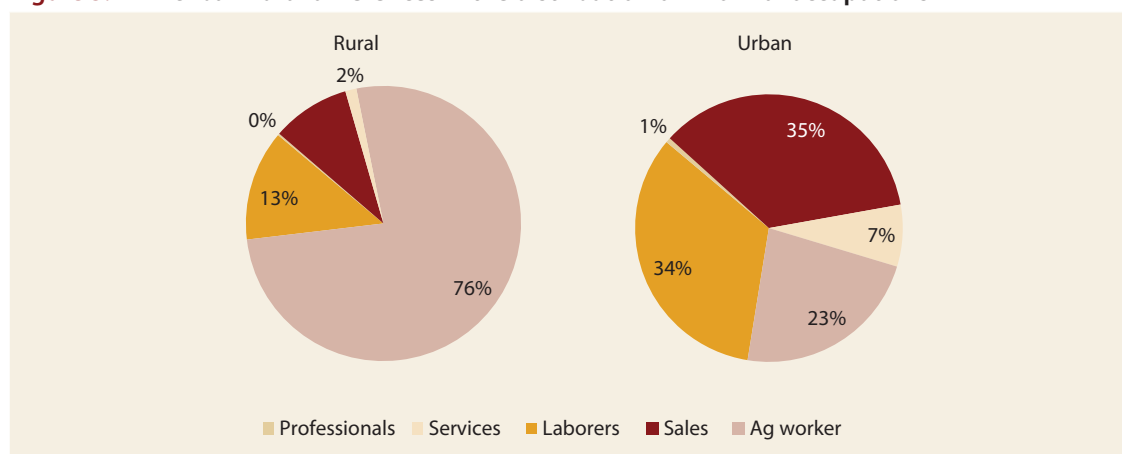
The **simplified definition** is used when working with data that lacks information about types of main occupation, upon which the official definition depends (Table 3.2). In these cases, the alternative definition uses a combination of job status and agriculture/non-agriculture classification. According to this definition, all family workers and self-employed workers without family workers are informal. Self-employed with family workers are formal if working in non-agriculture, but informal if in agriculture. All employers and employees are formal. The simplified version matches the official definition for over 99 percent of workers.

**The Indonesia Jobs Report uses both definitions depending on the data available.** This report uses the official BPS definition whenever possible. The alternative simplified definition is used only when data on occupational categories do not exist or are problematic. This is the case for analysis of Sakernas data for the periods 1990-93 and 2000 and all analysis using the IFLS. Given the high rate of matching between the two definitions, using both definitions does not cause a serious problem in terms of accuracy or reliability.

**Table 3.2** Simplified definition, formal and informal sectors

Status	Industry	
	Non-Agriculture	Agriculture
Family workers	Informal	Informal
Self-employed	Informal	Informal
Self-employed with temporary workers	Formal	Informal
Employers or employees	Formal	Formal

**Figure 3.7** Urban-rural differences in the distribution of informal occupations



Source: Sakernas, 2008.

**Informal workers in urban areas tend to be better educated, less poor and typically work in sales and transportation.** Urban informal workers differ significantly from those in rural areas. While most rural workers depend on agriculture, only less than a quarter of informal workers in urban areas depend on the agricultural sector (Figure 3.6). The majority work in sales, transportation, domestic service and as construction laborers. Urban informal workers are also better educated: 25 percent have a high-school education or above, compared to only 9 percent in rural areas.<sup>51</sup> For these reasons, they also have higher levels of income. Over 82 percent of urban informal workers are considered non-poor.

**Informal workers are less educated; the longer people stay in school, the more likely they are to find a formal job.** Ninety-one percent of all informal workers have less than high school education.<sup>52</sup> Multivariate analysis shows that education level plays a significant role in determining which sectors workers end up in. If two workers are identical except for their level of education, the one who graduated from junior high school is twice as likely to have a formal job as the one who only completed primary school. Completing a high school degree increases this probability more than twofold. Those who have a university degree or a vocational diploma are the least likely to work in the informal sector<sup>53</sup>.

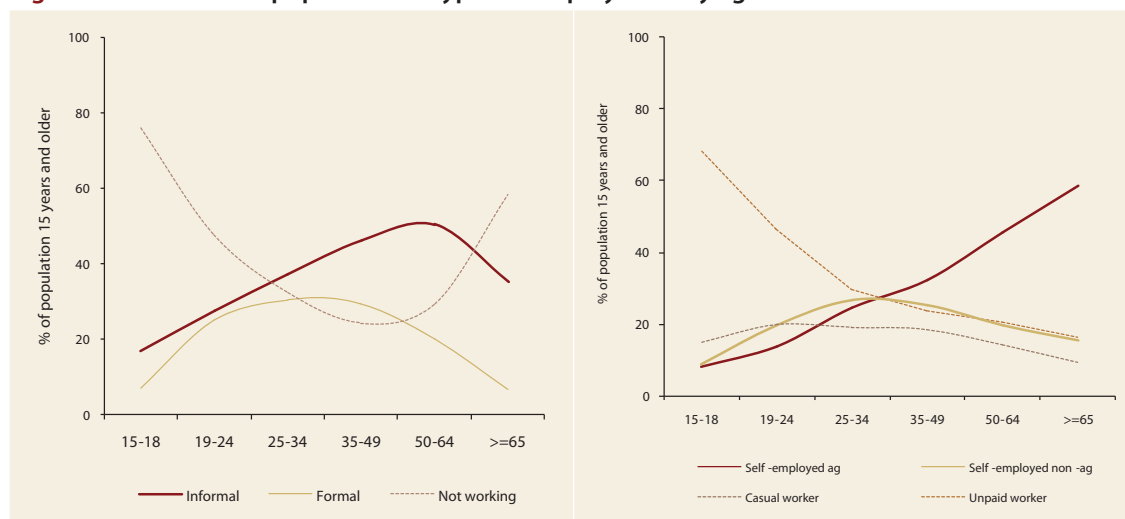
**Young people use informality as a starting point, while older workers are more likely to move into informality or to run their own businesses.** Many workers move in and out of the labor market, and in and out of informality. Most young people lack the necessary experience or education to find a formal job. Instead, they typically enter the labor market by working informally, either by taking an unpaid job in the family business or as a casual worker (Figure 3.7, Panel a). With the accumulation of experience and assets, workers in their prime working years have a higher chance of moving into the formal sector or becoming self-employed. Workers over the age of 50 are much more likely to have their own non-farm business, suggesting that some informal workers move up the ladder while staying in the informal sector.

<sup>51</sup> Sakernas 2008

<sup>52</sup> Sakernas 2008

<sup>53</sup> Appendix III.3.

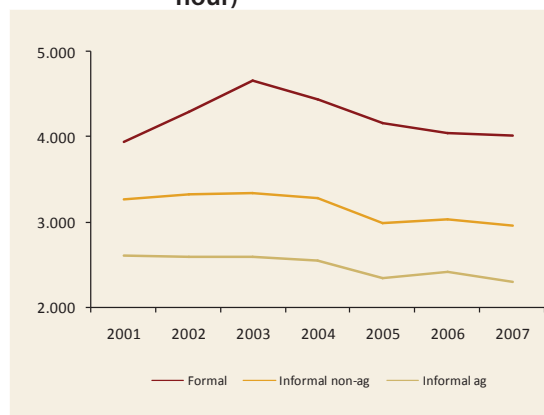


**Figure 3.8** Share of population in types of employment by age

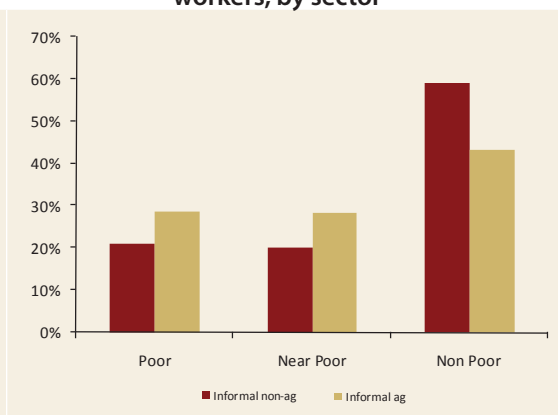
Source: Sakernas, 2008.

**Women are more likely to be informal workers than men.** Being a woman increases the probability of working informally by 24 percent.<sup>54</sup> Women and men with informal jobs are both concentrated in agricultural jobs. Outside of agriculture, most informally employed men work in transportation, while 60 percent of informal non-agricultural women work in household retail and as grocery traders.

**A wide gap in earnings exists between formal and informal workers.** In 2001, the median wage of formal workers was 14 percent higher than the average earnings per hour for informal workers. The gap increased to 33 percent in 2003, but began to narrow slightly in 2006 (Figure 3.9). The gap is larger for informal workers in the agriculture sector and living in rural areas. Not only do they earn even less than informal workers in non-agricultural sectors, but they also tend to be poorer (Figure 3.10). In fact, half of rural informal workers come from poor or near-poor households, in contrast to 18 percent for urban informal workers.

**Figure 3.9** Earning rates by worker type (Rp/hour)

Source: Sakernas, various years

**Figure 3.10** Welfare status of informal workers, by sector

Source: Sakernas, 2006

## Why do people work in the informal sector?

**There are four possible reasons why people work informally.** Informal workers tend to be poor, unskilled and concentrated in rural, agricultural jobs. But it is not clear whether they choose informal work or are excluded from the formal job market. This section attempts to uncover the reasons why workers stay in informality and why they move back and forth between formal and informal jobs. Although people's motivations and choices vary widely and may overlap, informal workers fall into four broad categories.

- i) **Workers trapped in informality.** Informality is often seen as a trap for those who cannot find a formal job and are instead forced to work informally without regular salaries and benefits. The labor market is segmented into the 'disadvantaged' informal sector and 'preferred' formal sector where workers command higher wages and better benefits. Wanting to move into formality but unable to do so, workers find themselves unable to move beyond informality.
- ii) **Workers who prefer informal jobs.** Presented with an opportunity, workers make implicit cost-benefit calculations before deciding to move to the formal sector. Decisions are made on the basis of wages, benefits, working hours, location and working environment. For some people, after they have weighed the advantages and disadvantages, informal sector jobs are preferable. Some people earn more in the informal sector, while others are willing to trade higher earnings for the more flexible working hours that informal jobs may provide.
- iii) **Workers using informality as a stepping-stone to a better job.** Informal jobs may be a starting point for those who hope to work themselves into a better job. Youth in particular see the informal sector work as a way to gain experience and build networks, eventually leading to a formal sector job. Workers with experience may use informal jobs as a means to accumulate assets so that they can start their own business. Some informal workers may also climb the ladder by working themselves into better informal jobs.
- iv) **Workers who cope with shocks by using informality as a safety net.** An informal job is often a coping mechanism for an individual who has recently experienced a shock, such as being laid off from a formal job. This can happen on a large scale during a macroeconomic shock or recession, when firms file for bankruptcy or dismiss workers in order to stay afloat.

## Do people want to work in the informal sector?

**Informal workers face a wage penalty of over 30 percent compared with workers in the formal sector.** If two people shared identical qualifications and characteristics (same level of education, age, sex and location) and differ only in their sector of work, the one working in the formal sector would earn 31 percent more than the one with an informal job.<sup>55</sup> Higher wages, combined with greater job security and formal sector benefits, make it likely that most informal workers would prefer a formal sector job. Informal workers who successfully made the switch into the formal sector between 2000 and 2007 earned 23.4 percent more than those who remained in the informal sector.<sup>56</sup>

55 Annex III.4. Based on a standard wage regression analysis using IFLS4 data and controlling for gender, location, age, education and region. The wage penalty is even larger for informal workers with at least a high school degree; they earned 62 percent less than workers with identical characteristics in the formal sector.

56 Marcouiller, Ruiz de Castilla and Woodruff (1995), found the formality premium of roughly 30% in El Salvador and 20% in Peru. Note that the authors applied a slightly different method, the Oaxaca decomposition, and the definition of informality used may be different with that in Indonesia. However, the numbers can be a rough comparison of wage premium associated with formality.

**The informal sector is mostly a trap for Indonesian workers.** Another way to approach this question is to compare informal workers' actual wages with what they could expect to receive in a formal job based on their qualifications and characteristics. Assuming that job preferences are based on potential wages, it is possible to predict how many workers prefer to remain in informality and how many would rather have a formal job. Workers are considered to be trapped in informality if their actual earnings are less than their estimated wages would be in the formal sector, based on workers' qualifications and characteristics. Using this definition, currently 44.3 percent of informal workers who stay in the informal sector between 2000 and 2007 are trapped and would earn more if they found a formal job (Table 3.3). The situation was different in the 1990s when informality was less of a trap, and most informal workers stayed in informal sector because they could earn more.

**Informal workers are not only worse off in terms of wages but are also less insured, pensioned and trained.** About one fifth of formal workers have access to health or life insurance.<sup>57</sup> But only 2.3 percent of informal workers are self-insured or have access to health or life insurance through a family member. Similarly, while 8 percent of formal workers have pension benefits, only 2.5 percent of informal workers do. In addition, less than 3 percent of informal workers have ever received any formal training, compared with 10 percent of formal workers. The lack of access to formal training may be another barrier to entering the formal job market. Informal workers in the agricultural sector tend to be the worst off (Figure 3.11).

**Table 3.3 Categories of formal and informal workers<sup>58</sup>**

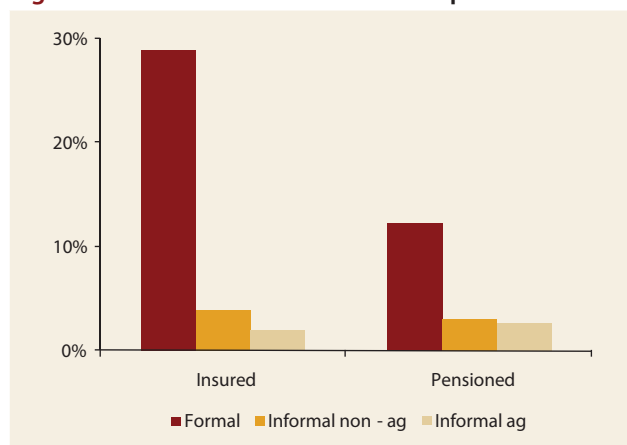
		1993-2000	2000-2007
<b>Initially Informal</b>			
Stay in Informal	Trap	30.5%	44.3%
	Preferred outcome	41.4%	30.1%
More to Formal	Stepping stone	13.0%	15.8%
	Unlucky	15.2%	9.8%
Total		100.0%	100.0%
<b>Initially Formal</b>			
Stay in Formal	Sub-optimal	28.2%	15.7%
	Preferred outcome	44.6%	49.1%
Move to Informal	Stepping Stone	14.1%	13.7%
	Safety net	13.1%	21.5%
Total		100.0%	100.0%

Source: IFLS 1993, IFLS 2000, IFLS 2007.

57 Public servants are covered by government-provided ASKES, some private employees are covered by Jamsostek or other company-provided private insurance, and some others have the access to private health insurance by their own or other family members' initiative

58 The categories of formal and informal workers used in this summary are: a) **Trapped workers** are those who remain in their informal jobs but, based on their qualifications and characteristics, would earn more if they worked in the formal sector; b) **Preferred outcomes** refer to workers who are already in the sector – formal or informal – where they earning the most they can expect; c) Workers who use the **stepping stone** have moved from a lower wage job from one sector into a higher-paying job in the other sector; d) **Unlucky** are informal sector workers who moved into a formal job but would have earned more if they had remained in the informal sector; e) Finally, formal sector workers who use the **safety net** moved into an informal job and experienced a wage drop in the process. The numbers are different from Table 4 as the sample in Table 6 separates the movers into those who were initially formal and informal.

**Figure 3.11 Access to insurance and pension**



Source: Sakernas, 2008.

### Informal workers are less likely to be satisfied with their jobs than formal workers.

Informal workers are more likely to be dissatisfied with their jobs than formal workers by 3.3 percentage points.<sup>59</sup> Their dissatisfaction seems to stem from the lower wages that they earn; once we control for wages, there is no discernable difference in how formal and informal workers view their jobs. Combined with wage comparisons above, this suggests that the majority of informal sector workers would prefer formal sector jobs.

### Box 3.2 Trapped in Informality

Many informal workers earn less and receive fewer benefits in their informal job than they would in the formal sector. Some workers – like Dasuki – feel trapped in their informal jobs. They would prefer a formal job but find it difficult to find one in a competitive jobs market with more skilled workers and fewer opportunities.

Dasuki first came to Jakarta in 1992 with a high school certificate and a diploma in computer science. He first found work teaching computers at a junior high school and then found a job as a machine operator in a factory. “Back then, it was much easier to get a job. Even with only primary education, you could get a job in a factory.”

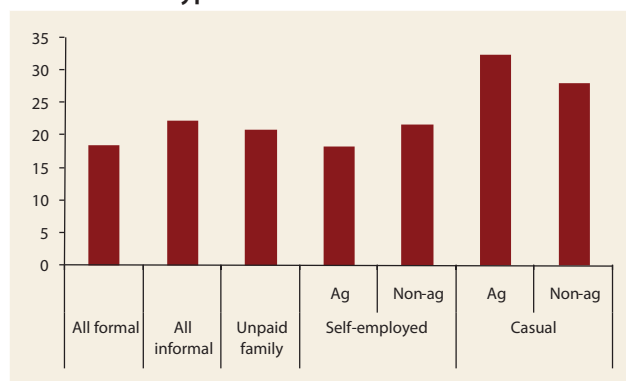
Dasuki lost his job. Now, he and his wife, Della, run a warung (food stall) in Jakarta selling *gado-gado* (steamed vegetables, tempe and tofu with peanut sauce) and nasi uduk (coconut rice). Their monthly net profit is about Rp 800,000 (US\$88), just enough to cover their basic needs.

“Now, there are far more people with high school certificates and far fewer jobs available,” says Dasuki. “I’m 33 years old now; for Indonesian factories, that’s too old, unless you have some special skills they need. If you lose your job, it’s very hard to get another one.”

Source: Mercy Corps, 2008

**Casual workers are the most dissatisfied of all informal workers.** Although casual workers earn 42 percent more than self-employed agricultural workers and almost the same as the self-employed non-agricultural workers, they are less satisfied with their positions (Figure 3.12). This may be because casual labor is characterized by low job security, few or no benefits, and low social status. Even if casual workers are paid well on an hourly basis, their incomes may fluctuate significantly throughout the year, eroding this hourly advantage. Given an opportunity, most casual workers would prefer to move into a formal position or a better informal job.

59 To analyze job satisfaction levels, we used a multinomial logit on individual satisfaction using the 2007 IFLS and controlling for gender, location, age, education, regions and some information regarding previous employment.

**Figure 3.12** Self-reported dissatisfaction rates, by type of worker

Source: IFLS2007.

**But not all informal workers feel trapped; self-employed agricultural workers are no less satisfied with their jobs than formal workers.**

Compared with formal workers, self-employed informal workers outside of agriculture and casual workers face wage penalties of 28 percent and 25 percent, respectively. The penalty is higher for informal workers who are self-employed in agriculture, at 57 percent. Yet despite this, self-employed agricultural workers, when asked, are just as likely to be satisfied with their jobs as formal workers.<sup>60</sup> All other informal workers are less satisfied than formal workers, even when reported levels of income are held constant.

### Box 3.3 Choosing Informality

Not all workers aim to work in the formal sector. Some choose an informal job that offers a better salary than they can earn in the formal sector. Other workers, such as Eni, are attracted by non-wage benefits such as shorter or more flexible working hours.

Eni sells *jamu* – a traditional, medicinal mixture of herbs, roots, medicine, eggs and honey – to the men who work along the dockyards and wharfs of Sunda Kelapa, North Jakarta. On a good day she sells 50-100 packets of *jamu* and 20-30 eggs, earning Rp 200,000-300,000 (US\$22-33) for four hours work. In one month she can make up to Rp 2.2 million (US\$242). Previously she worked in a fish-processing factory as a machine operator. “The money wasn’t bad,” says Eni. “About the same as what I make selling *jamu*, except that I had to work from morning to evening.”

Eni chose this job because of its flexibility. She is not alone. “Almost all of the women selling *jamu* have kids,” says Eni. Almost all of them switched to selling *jamu* after they got married so they’d have more time for their families. A lot of them had good jobs in offices. I know a few of the vendors that have university degrees and who worked at big companies in the cities. Women sell *jamu* because it gives them the flexibility to look after their husbands and children, not because they aren’t qualified to do anything else.”

Source: Mercy Corps. 2008

**Several factors explain why self-employed agricultural workers are satisfied with their jobs.** Why are farmers, unlike other informal workers, satisfied with their jobs despite earning less than they could in a formal job? Most farmers are born in agricultural communities and grow up on farms — a trend that tends to stay constant across generations. They inherit agricultural skills more suited to farm work than employment in other sectors. They may also earn more than they estimate or report, or value non-wage benefits such as flexible working hours or maintaining their social networks by staying in their home communities. Finally, farmers may have limited information regarding other job markets, and remain content with the only livelihood that they know.

**Some groups of workers are more likely to earn higher wages in informality than they could expect from the formal sector.** This includes workers in their middle-ages, between 35-64 years. Older workers may have accumulated capital and networks to start their own informal business, and they might be better

60 Based on the results of a multinomial logit on individual satisfaction using the 2007 IFLS, as above.

off by remaining self-employed. Another group includes workers with tertiary degrees, who command a higher salary than those with less education, who positively choose to work in the informal sector. The other groups are workers in construction, trade and transportation sectors, and casual workers outside of agriculture.

**Table 3.4** Hours of work and underemployment rate, by gender and sector of employment

		Male	Female
Formal	Median hours of work	48	45
	Under-employment	0.82%	0.79%
Informal	Median hours of work	41	30
	Under-employment	2.26%	0.76%

Source: Sakernas, 2007

**Women may prefer informal work for the flexibility it offers.**

Men who work in informality are 5 percentage points more dissatisfied than those in formal jobs. In comparison, women in informality are more content; they are only 1 percentage point more dissatisfied than their peers in the formal sector. This may be because women prefer the flexible working hours of an informal job, which allow them to work while still taking care of children and

elderly parents. Alternatively, women may have lower expectations of both formal and informal sector employment. Although women with formal jobs work almost as many hours per week as men, women in the informal sector work about 20 percent fewer hours. They are also more likely to be content working fewer hours. Women in formality are three time less likely to be looking for a new job or willing to accept a new job than men (Table 3.4).<sup>61</sup>

**Table 3.5** Annual transition rate to formal jobs, 2000-2007

	Self-employed agriculture	Self-employed non-ag	Unpaid family workers
All	1.4	3.8	1.9
Urban	2.6	4.3	3.3
Rural	1.3	3.2	1.4
Men	1.6	4.5	3.4
Women	1.0	3.1	1.3
Young	0.0	7.9	3.4
Adult	1.5	3.7	1.7

Source: IFLS 2007

**Is informality a stepping-stone or a trap?**

**Some jobs in the informal sector function as a stepping-stone into formality for those seeking to improve their earnings.**

Self-employed farmers and unpaid family workers are most likely to remain in informality. Self-employed workers in non-agricultural sectors, on the other hand, are almost twice as likely to move into formality (Table 3.5). Younger workers make the most of this route to upgrade their jobs: they are twice as likely to jump from self-employed non-farm jobs into formal employment as older adult workers. They typically choose to exit informality in search of higher wages. When asked why they had moved into formal jobs, many workers answered that

they were motivated by family reasons and failed businesses. However, the main reason seems to be more financially driven. Compared with informal workers who stayed in informality, those who moved into the formal sector between 2000 and 2007 received healthy wage increases of around 24 percent, regardless of the cited reason for transitioning and controlling for workers' characteristics.

61 Underemployment is defined as those who work 35 hours per week or less and are looking for job or willing to take a new one.

**Box 3.4 Climbing the Informal Ladder**

An informal job sometimes offers workers with an opportunity to improve their lives. They use an informal job to gain experience and build capital so that they can move into a better paying job. Some, like Heri Sianto, use their job as a stepping stone into better paying informal job. If successful, he may be able to eventually enter the formal sector by expanding and hiring employees.

Heri Sianto used to sell milk and tofu products in a local market, then moved to working for Bakmie Raos, a franchised company selling popular bakmie noodle from street carts across Indonesia. "When you work on commission, the company provides you with everything you need. They set the price of one bowl at Rp 6,000 (US\$0.66) and you get Rp 1,500 (US\$0.17) commission for every bowl you sell." Selling about 50 bowls of bakmie a day, he earns around Rp 1.65 million (US\$181.50) per month. "I'm one of the more successful vendors," says Heri.

"Just recently, I've moved over to the kemitraan (partnership or franchise scheme). You have to buy everything yourself: the supplies, the fuel, the cart, everything. You can make more money through the partnership scheme, but there's more risk." Heri can make up to Rp 2.75 million (US\$302.50) per month now.

"Since I started at Bakmie Raos, I've moved out of my parents [house] so I can be closer to work. Now that I'm doing okay, I reckon I'll look for a bigger room. I can afford it now. I'll stick with Bakmie Raos, at least until something better comes along."

Source: Mercy Corps. 2008

**Despite the lure of greater income security, less than 3 percent of informal workers transition into the formal sector annually.** Between 1993 and 2000, only 2.6 percent of informal workers transitioned into the formal sector per year, shrinking to only 2.2 percent per year in 2000-07 (Table 3.6). Slow growth of the formal sector limits job availability. The new entrants to the job market tend to be better educated and more urbanized than before. Informal workers who are young, urban and male are the most successful at breaking into the formal job market. It is more common for formal workers to move into informal jobs. From 2000 to 2007, an average of 4.4 percent of formal workers moved into informal jobs annually, higher than the level seen in 1993-2000. Formal workers in rural areas who are less educated are more likely to move into informality than those who live in urban areas and are more educated. Although women are more likely to be found in the informal sector, men are slightly more likely to move from formal to informal jobs.

**Table 3.6 Mobility from informality to formality**

	1993-2000		2000-2007	
	>7 years	per year	>7 years	per year
All	19.8	2.6	16.4	2.2
Urban	29.3	3.7	26.3	3.4
Rural	17.8	2.4	12.3	1.7
Male	20.0	2.6	19.0	2.5
Female	13.8	1.9	13.5	1.8
Young	23.3	3.0	24.8	3.2
Adult	16.7	2.2	16.1	2.2

Source: IFLS1, IFLS 3 & IFLS 4

**Moving into formality is not always the right choice.** Between 2000 and 2007 only 15.8 percent of informal workers earned higher wages by moving into formal jobs, a slight improvement on the previous period (Table 3.3). However, another 10 percent of informal workers moved into formality but would have



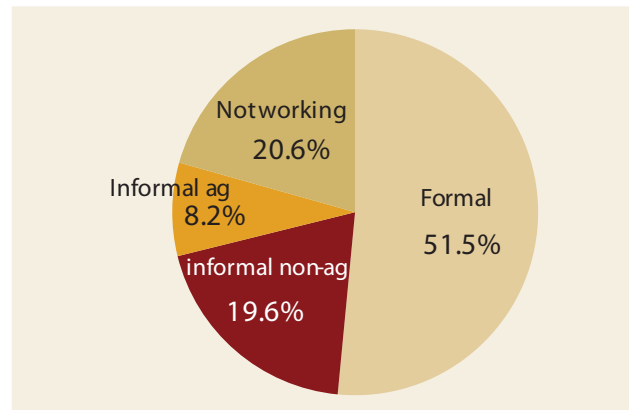
been better off had they stayed in their informal jobs (categorized as “unlucky” workers). The most common transition is for a worker with a formal job to fall into informality and suffer a drop in income, a trend that expanded to include over one fifth of all formal workers in 2000-07.

## Is informality a safety net for formal workers?

**While many people lost jobs during the crisis, many formal workers were buffered from the shock by moving into informal employment.** Over 3 out of every 10 male workers changed sectors between 1997 and 1998, and close to 4 out of every 10 female workers also changed sectors. Most of these workers were absorbed by the agricultural sector. For men there was an increase in self-employed work and, to a lesser extent, work on family farms. For women in both urban and rural areas there were major increases in the share of women who entered the workforce as unpaid workers in family businesses and on farms (3.8 percentage points), or who became self-employed (3.9 percentage points). The participation of poor women in the workforce jumped from 52 to 59 percent between 1997 and 1999. These women played a key role in supplementing family incomes that would otherwise have been severely reduced due to the fall in household incomes.

**Most employees who move out of the formal sector used informality as a safety net following a job loss.** Between 2000 and 2007, workers moved into informal jobs for a variety of reasons. Some cited family reasons (14 percent), others were looking for higher wages (14 percent), while some wanted to improve their working environment (4 percent). However, 43 percent of employees who moved from formal to informal jobs in this period had involuntarily lost their formal sector jobs.

**Figure 3.13** Current status of formal workers who were dismissed



Source: IFLS 4.

**Informality offers only partial security for workers exiting formal jobs.** Between 2000 and 2007, compared with formal workers who stayed in formality, those who moved into informality faced a 32 percent drop in wages, controlling for workers characteristics. Twenty-eight percent of formal workers who were dismissed resorted to taking an informal job (Figure 3.12). In doing so, they faced a 20 percent cut in wages. However, most dismissed formal sector workers tended to find replacement formal jobs. Indeed, most were successful in finding higher-paying jobs, earning on average 11 percent more than their old formal jobs.

## IV. Conclusion

**In a segmented workforce like Indonesia’s, policy makers must focus on accelerating creation of ‘better’ jobs while still protecting vulnerable workers.** Without increasing opportunities in the preferred formal and non-agricultural sectors, the majority of Indonesian workers will remain in informal jobs. Since informal workers tend to be poorer, stagnant formal employment growth will also slow-down the pace of poverty reduction in Indonesia. The challenge faced by the new government, therefore, is to identify and support policies that expand job opportunities in the formal sectors, while improving coverage for informal workers and contract-less employees.

**Extending social protection benefits can help reduce the vulnerabilities associated with informality.**

Because benefits such as healthcare and pension are often provided through employers, informal workers and contract-less employees are largely uncovered. Indonesia has already taken early steps towards extending medical coverage by launching *Askes*, a health insurance program, with plans to scale up further. Pension schemes, on the other hand, only cover formal sector employees and civil servants. Although the Social Security (SJSN) Law (No. 40/2004) outlines national aspirations to provide universal social security coverage, there is no clear plan for how to build a coherent and feasible national system. Much work remains to be done in developing a fiscally responsible second generation of social insurance programs. Policy makers must first assess the implications of broader coverage and clarify the institutional reforms needed to deliver social insurance programs. Reforms should then be gradually phased in to ensure that an extended social insurance system is clear, feasible and affordable.

**The main challenge faced by the government is to identify and support policies that will provide more opportunities for workers to find “better” jobs.** Expansion of the formal sector will provide more opportunities for workers to move into jobs that offer greater income security and better benefits coverage. Further work, however, is still needed to explore ways to boost job creation and link workers with prospective employers offering contract positions. Areas to focus on include:

- Understanding how to improve access to credit for micro-entrepreneurs and small- and medium-enterprises, and reducing bureaucratic barriers for these groups in order to stimulate job creation.
- Improve information flows so that informal workers can find better jobs, and explore matching strategies that connect informal workers and contract-less employees with prospective employers.
- Identifying training services that can improve the skills of informal and contract-less workers so that they are better qualified for jobs that require more specialized skills.

**At the same time, policy reform can help spur job creation in the formal sector.** In the current debate surrounding labor reform, labor unions have focused on improving workers’ welfare through the enforcement of hiring and firing regulations. Strengthening enforcement will provide greater income security for workers with permanent or temporary contracts who are already more likely to receive benefits such as severance pay and pension. Informal workers and contract-less employees, however, would benefit from policies that spur job creation in the formal and non-agricultural sectors. For example, employers could potentially hire more permanent contracted workers if labor reforms eased the costs of hiring or firing employees. Policy makers must balance the interests of the few with the interests of the many who have little voice in shaping labor market policies. The following chapters will provide further recommendations for how labor policies, institutions and programs can encourage job creation and better prepare disadvantaged workers to succeed in the labor market.



# Chapter 4



## Hiring & Firing Regulations

Balancing Job Creation and Employee Protection

## Chapter 4 Summary

**The Manpower Law (No. 13/2003) substantially increased the rigidity of Indonesia's labor regulations, which are now among the strictest in East Asia.** The law increased severance rates for workers with three or more years of service and added a 15 percent gratuity payment. With the increase, severance pay is estimated to be equivalent to a "hiring tax" of approximately one third of a worker's annual wage. No other country in the region has firing costs that are as high as those in Indonesia. While most Asian economies limit the use of fixed-term contracts (FTC) to certain activities and stipulate both the duration of the contract and the conditions for renewal, Indonesia falls into the group of countries with more restrictive regulations governing FTC work.

**Attempts to reform hiring and firing rules have been deadlocked, blocking Indonesia's ability to generate jobs in the formal sector.** The debate around reform of the labor law has been vigorous, focusing largely on the controversial hiring and firing regulations. Previous government attempts to improve the flexibility of the labor market by reforming these regulations, once in 2006 and again in 2007, failed. The stalemate is constraining Indonesia's ability to accelerate the pace of 'good' job creation. This, in turn, hampers progress towards reaching national targets for poverty reduction by limiting opportunities for the poor to earn their way out of poverty.

**The current stalemate traps workers and employers in a "lose-lose" situation that constrains job creation and leaves employees inadequately protected.** Indonesia's high de jure severance rates deter foreign investment and discourage entrepreneurs from creating new businesses. Complicated rules about severance calculations and the current "post-pay" system introduce additional problems by making it difficult for firms to predict their labor costs. High severance rates not only hurt employers, but employees too. The regulations have not been effective in protecting employees who are terminated and face unemployment. Only 34 percent of all eligible employees who were separated from a job in the last two years actually received severance pay. Of those employees who actually received severance pay, 78.4 percent collected less than the amount to which they were legally entitled. The burden of non-compliance falls disproportionately on workers who need more income protection: women, temporary staff and low-wage employees.

### Recommendations

**Move towards a "win-win" solution by negotiating a grand bargain – lowering severance rates in exchange for the introduction of unemployment benefits.** First, simplifying the legal complexities of current severance regulations and adjusting rates downward will bring Indonesia in-line with regional standards. This will improve labor market flexibility and global competitiveness. At the same time, introducing a complementary unemployment benefit system can improve the level of protection for terminated employees. Shifting towards a monthly contributory approach will improve the predictability of firms' labor costs, and decouple benefit payments from employers' hiring and firing decisions. It will also increase the level of compliance by employers, which will help reduce reliance on the Industrial Relations Courts that are backlogged with disputes concerning employment termination.

**The reform process can be kick-started by initiating the necessary analytical homework to identify which option best fits Indonesia.** Simulation studies are needed to assess the anticipated impact of the alternative systems and the institutional implications and demands associated with each reform option. Based on the best-suited model, a reform roadmap is needed to lay the foundations for the future system, which should be linked to the future National Social Security (NSS) system mandated by the Social Security Law (No. 41/2004).

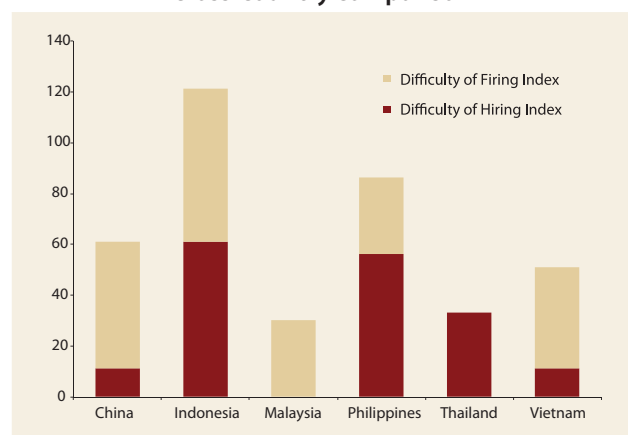
## I. Introduction

**Laws concerning the hiring and firing of workers in Indonesia were tightened in 2003 with the passage of the Manpower Law (No. 13/2003).** The law forms the core of employee protection legislation in Indonesia. It covers employment protection legislation that governs hiring and firing practices, and the setting of minimum wages. In addition, it also covers a range of other labor issues including equal



opportunity, training, labor placement and planning, basic guidelines for collective labor agreements, child labor and working conditions.<sup>62</sup> Through the law, legislators intended to improve employee protection by increasing severance rates for terminated employees and significantly restricting the use of fixed-term (i.e., temporary) contracts by employers.

**Figure 4.1** Index of hiring and firing difficulty, cross-country comparison



Source: World Bank. 2009a. Doing Business.<sup>65</sup>

**Indonesia's hiring and firing regulations are now among the most rigid in East Asia and the world.**

In a cross-country survey comparing labor regulation rigidity, Indonesia ranked 157 out of 181 countries in the world. In comparison with neighboring competitors in the East Asia and Pacific region, Indonesia ranked 23 out of 24 countries.<sup>63</sup> No other country in the region has firing costs that are as high as those in Indonesia (Figure 4.1). Severance rates are the highest in the region (Figure 4.2) and regulations for the use of temporary contracts are among the most restrictive. For these reasons, investment climate surveys have identified the labor regulatory rigidity as one of the most significant barrier to increasing investment in the country.<sup>64</sup>

**Attempts to reform hiring and firing rules have been deadlocked, blocking Indonesia's ability to generate jobs in the formal sector.** The debate around reform of the labor law has been vigorous, focusing largely on the controversial hiring and firing regulations. Previous government attempts to improve the flexibility of the labor market by reforming these regulations, once in 2006 and again in 2007, failed. As a result, Indonesia's labor regulations continue to be among the most rigid in the region. The stalemate is constraining Indonesia's ability to accelerate the pace of 'good' job creation. This, in turn, will hamper progress towards reaching national targets for poverty reduction by limiting opportunities for the poor to earn their way out of poverty.

**Chapter 4 examines the extent to which hiring and firing regulations provide real protection for employees and the effect on job creation.** Debate around hiring and firing regulations have not been informed by empirical evidence on how well these regulations protect workers and the impact on job creation. This has prevented any real progress from being made in breaking through the policy dialogue

62 The law consists of 18 chapters, 193 articles and around 500 clauses. In addition, numerous implementing regulations have been issued since the enactment of the law in 2003. The law stands alongside four labor-related laws that, together, govern the labor market in Indonesia: the Trade Union Law (No. 21/2004), the Industrial Dispute Settlement Law (No. 4/2004), the Migrant Worker Law (No. 39/2004) and the Social Security Law (No. 40/2004).

63 Doing Business, 2009a. The report, compiled by the World Bank, is based on survey findings that quantitatively measure regulations for employing workers across 181 economies.

64 Investment surveys include the "Investment Climate Survey" (Asia Development Bank and World Bank, 2005) and various surveys carried out by the Institute for Economic and Social Research, Faculty of Economics, University of Indonesia. The latter, consisting of three survey rounds for an investment climate monitoring project carried out between 2005-2007, reported that the percentage of firms reporting labor regulations as detrimental to their competitiveness has increased during this period from 30 to 35 percent. Only one third of surveyed firms perceived labor regulations as not being a serious obstacle.

65 The rigidity of employment index is the average of 3 sub-indices: a difficulty of hiring index, a rigidity of hours index and a difficulty of redundancy index. All the sub-indices take values between 0 and 100, with higher values indicating more rigid regulations. See [www.doingbusiness.org](http://www.doingbusiness.org) for more details.

stalemate. This chapter is intended to provide the government, unions and businesses with empirical evidence to re-start and inform tri-partite negotiations on labor law reforms. The chapter is divided into four sections:

- The first looks at the changes in Indonesia's hiring and firing regulation, as found in the Manpower Law.
- The second examines the effect of increasing rigidity on job creation in the formal sector.
- The third section looks at how well current hiring and firing regulations are in actually protecting employees.
- The final section provides recommendations for policy reforms that find a "win-win" solution to promote job creation in the formal sector while, at the same time, improving protection for employees.

## II. Rigidity in Hiring and Firing Regulations

**Severance pay rates in Indonesia, once low, have been increasing since the mid-1990s.** During most of the New Order era, hiring and firing costs – including severance pay – were relatively low by international standards. They remained low despite an increase of over 50 percent in 1996. Low rates and weak compliance resulted in a very flexible labor market. However, under the repressive political regime, this flexibility often came at the expense of workers' rights and conditions.<sup>66</sup> The situation changed after 1998 when a reform-minded government and increasingly assertive unions stepped up the pressure for firms to comply with the labor laws. Severance pay rates for workers with 10 or more years of service increased in 2000, along with long-service pay to all workers who voluntarily quit their jobs.

**Indonesia's current severance pay rates are high, both by international and regional standards.** The Manpower Law raised the rates further for workers with 3 or more years of service and added a gratuity amounting to 15 percent of all severance and long-service payments in compensation for the loss of housing and health care benefits.<sup>67</sup> With the increase, severance pay is estimated to be equivalent to a "hiring tax" of about 4.1 months worth of wages per employee or 34 percent of a worker's annual wage. This "hiring tax" is up from an average 2 months in 1996 and 3.4 months in 2000.<sup>68</sup> The maximum severance pay in case of dismissals for economic reasons is now close to 30 months of wages (Figure 4.2).<sup>69</sup> Following the increases, Indonesia's severance rates are high by international standards and are among the highest in East Asia (Figure 5.5).<sup>70</sup>

66 Manning 1998, Suryahadi, Widyanti and Sumarto 2003.

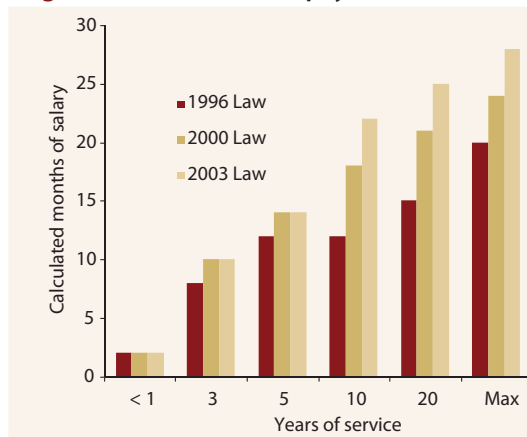
67 Annex IV.1. The relevant pieces of regulations covering the severance rates are: Ministerial Regulation in 4/ 1986, Ministerial Decree 3/1996, Ministerial Decision 150/2000, and Articles 156 – 172 of Manpower Law 13/2003 (LP3E FE UNPAD and GIAT, 2004).

68 LP3E FE UNPAD and GIAT, 2004. The hiring tax measures the discounted expected cost, at a time the worker is hired, of dismissing a worker in the future or if the worker quits. It shows the severance payment an employer expects to pay in the future if he or she hires a new worker. The calculation is based on probabilities the new worker leaves in a particular year and the cause of the separation, as different rates are applied to different separation causes (quits, dismissed for minor violations or economic cause). See also Alihsjhabana, 2007.

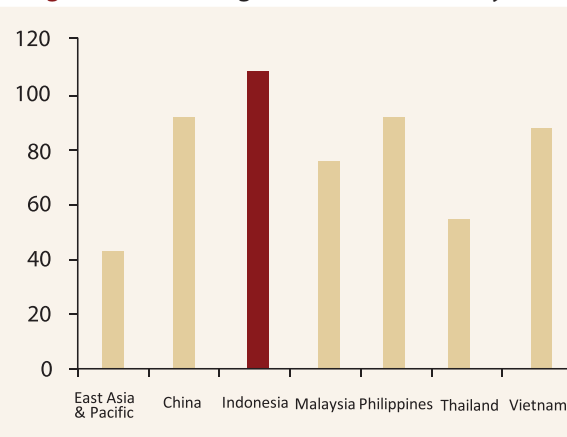
69 Maximum severance pay rates refer to severance pay handed out to workers with more than 24 years of service. The basic formula is two times severance pay plus long service pay.

70 Doing Business, 2009a. The report, compiled by the World Bank, uses a redundancy cost indicator that measures the cost of advance notice requirements, severance payments and penalties due when terminating a redundant worker who has worked for the company for 20 years. The OECD also ranks the restrictiveness of employment protection legislation using an ordinal scale that ranges from zero (the least restrictive rank) to 6 (the most restrictive rank). The EPL scale for severance pay is based on months of eligibility at three tenure levels: nine months, four years, and 20 years. The index for severance pay for Indonesia at 4.33 is similar to the indices for Bangladesh (4.67), Korea (4.00), Nepal (4.67), the Philippines (4.67), and the People's Republic of China (4.67).



**Figure 4.2** Severance pay rates, 1996-2003

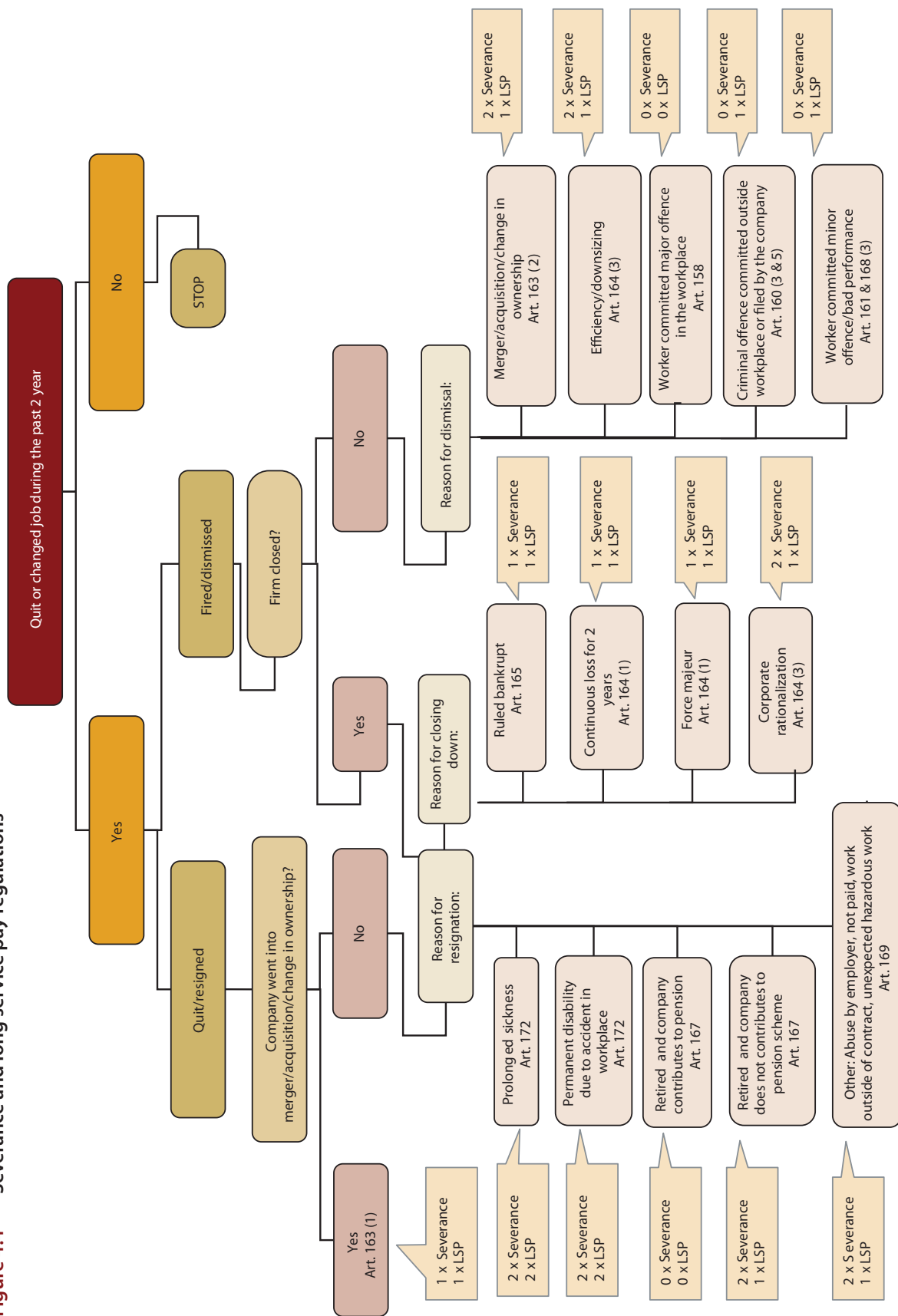
Source: LP3E, 2004.

**Figure 4.3** Firing costs (weeks of salary)

Source: Doing Business, 2009a..

**Complexities in determining severance and long service payments make the costs of employing workers in Indonesia unpredictable.** The Manpower Law introduced a complicated set of rules to determine whether terminated workers will receive compensation and how much they are entitled to, based on the reasons for termination (Figure 4.4). Variations in the total packages to which terminated workers are entitled make it difficult for employers to anticipate all staff costs. For instance, job separation due to an economic cause beyond the control of the employee is costly to the employer: the compensation package is twice the amount of severance pay based on years of service, in addition to the long service pay. These variations may affect employers' business decisions. If a firm is forced to reduce the number of staff during an economic downturn, it may be more cost effective to declare bankruptcy and close the firm rather than downsizing and pay double severance pay for each terminated worker. The employer is also obligated to provide additional payments for health, medical, and housing benefits, as well as other benefits referred to in the employees' contract.

**Figure 4.4** Severance and long service pay regulations



Source: Manpower Law (No. 13/2003). Note: LSP refers to long service pay. In addition to severance and/or LSP, workers are entitled to receive unused paid annual leave, transportation costs to place of recruitment, compensation for lost housing, medical and health care allowances, and other contractually stipulated compensations (Art. 156).

**Table 4.1** Fixed-term contract regulations in East Asian economies

	Country	Regulations
<b>Most flexible</b>	Japan	Limited duration (3 years; 5 years for highly specialized employees); several renewals are possible; exemptions exist for specified projects.
	Korea	Limited duration (2 years); exceptions exist for specified projects or tasks.
	Malaysia	No limit on duration; contract must be in writing if longer than one month.
	Thailand	No restrictions; regulations cover every establishment employing at least 20 employees.
<b>Moderate</b>	Singapore	Specified work or specified period of time.
	China	Overwhelming majority of employment relationships is permanent; contract for defined tasks must be in writing.
<b>Most restrictive</b>	Cambodia	Limited duration (2 years); defined tasks; contract must be in writing.
	Indonesia	Limited duration (3 years); no renewals; temporary work.
	Philippines	Specified projects; limited duration depending on the defined categories; no renewals.
	Vietnam	Limited duration (1-3 years); 36-month extension; specific or seasonal work.

Source: Based on ILO, 2007.<sup>71</sup>

**At the same time, the Manpower Law also introduced tighter restrictions on the use of temporary contracts.** Previously, temporary – or fixed-term contracts (FTCs) – were allowed for a maximum of five years. This changed with the passage of the law, which restricted employment arrangements and constrained hiring decisions.<sup>72</sup> FTCs, under the law, are only permitted for work that is: temporary, time-bound (i.e., work that can be completed within three years), seasonal or experimental work.<sup>73</sup> Ambiguities remain, however, about which positions fall into these categories. Similarly, outsourcing is limited non-core production activities of a firm.<sup>74</sup> In both cases, temporary contracts are limited to a maximum of three years.

**Indonesia's FTC regulations are restrictive in comparison to its regional neighbors.** Most Asian economies limit the use of FTC work to certain activities and stipulate both the duration of the contract and the conditions for renewal. Japan, Korea, Malaysia and Thailand have the most flexible FTC arrangements in the region. Indonesia falls into the group of countries with more restrictive regulations governing FTC work, alongside Cambodia, the Philippines, and Viet Nam (Table 4.1).

Regardless of any changes in outcomes, firms have not changed their perceptions of doing business in Indonesia. In fact, an index of Employment Protection Legislation (EPL) restrictiveness by the OECD showed no change in the ranking of Indonesia, despite a change in the maximum FTC duration from 72 to 36 months.<sup>75</sup>

71 Table 4.1 summarizes the country-specific regulations in Asian economies using the information from the ILO (LABORSTA on-line database, 2008) on the duration of temporary contracts and the conditions under which they are permitted.

72 FTCs are regulated under articles 59-60 of Manpower Law 13/2003 and Ministerial Decision 100/2004. The previous law is based on a Ministerial Regulation in 1993.

73 Alisjahbana, 2007.

74 Outsourcing or sub-contracting refers to three kinds of activities. First, a firm can outsource certain components of production. Second, a firm can hire specialized services such as catering or cleaning jobs. Third, outsourcing can cover labor outsourcing and the activities of placement agencies (Manning and Roesad, 2007).

75 The OECD utilizes the various EPL components to construct an ordinal scale that ranges from zero (the least restrictive rank) to 6 (the most restrictive rank). EPL, in this context, refers to all types of employment protection measures, whether grounded primarily in legislation, court rulings, collectively bargained conditions of employment, or customary practice (OECD, 1999: 50).

### III. Regulatory Rigidity and Job Creation

**High severance rates and rigid rules about the use of temporary contracts have sparked a debate about worker protection versus economic efficiency.** Employment protection legislation, including severance pay and temporary contract regulation, were introduced in order to protect employees by increasing their job security and maintain income stability for terminated employees and their families. Employment protection legislation, however, also entails economic costs. The additional burdens of rising hiring and firing costs could lead firms to limit the number of staff they hire, especially with permanent contracts. This tension between economic efficiency, job creation and employee protection have sparked a long-standing debate around the employment protection provisions in the labor law. This section assesses the extent to which hiring and firing regulations are providing real protection for workers or hampering job creation.

**Indonesia's high de jure severance rates deter foreign investment and discourage entrepreneurs from creating new businesses.** Employers are concerned about the high costs of doing business in Indonesia, which discourage firms from hiring workers on a permanent basis.<sup>76</sup> The business community in Indonesia has argued that excessively generous severance regulations stunt job creation by worsening the investment climate and discouraging the creation of new businesses, especially in labor-intensive sectors. High severance rates also influence lay-off decisions in response to the prevailing economic conditions, especially during downturns. Also, complicated rules about severance calculations and the current “post-pay” system introduce additional problems by making it difficult for firms to predict their labor costs.

**High severance rates discourage firms from hiring new employees on a permanent basis.** To avoid high firing costs for permanent employees, firms are increasingly relying on fixed-term contract arrangements, including temporary staff and outsourced employees who are significantly less likely to be eligible for both severance pay and employer-provided pensions. A 2004 survey of 86 firms in large urban areas reported, however, an 8 percent increase in FTC employment as part of their corporate restructuring efforts.<sup>77</sup> There are also strong perceptions among the public that temporary employment is prevalent in Indonesia and on the rise. This is part of a global trend of increasing reliance on temporary contracts, which represent a small but increasingly common proportion of employment relationships throughout the world. In the OECD, temporary arrangements have gradually increased in two-thirds of the member countries; the average has risen slightly, from 13.9 percent in 2000 to 14.6 percent in 2007.<sup>78</sup>

**Restrictions on the use of temporary contracts, however, may further limit job creation in the formal sector.** While high firing costs discourage firms from employing permanent staff, rigid FTC rules discourage them at the same time from hiring temporary staff. Businesses argue that restrictions on the usage of fixed-term contracts decrease their flexibility in the production process and prevent them from being able to respond to fluctuations in product demand. With increasingly rigid hiring arrangements, they may provide fewer formal employment opportunities for workers who might otherwise be employed without a contract or in the informal sector. They argue that the usage of FTC contracts may promote additional efficiency gains

76 LP3E FE UNPAD and GIAT, 2004. “Firms feel that in the current volatile and uncertain business environment, the excessively costly severance regulations have contributed to pressure [employers]... to rationalise their workforces and [have] discouraged some firms from hiring new workers on a permanent basis,” (p. viii).

77 LP3E FE UNPAD and GIAT, 2004. See Figure 5.5. Note that the majority of the firms participating in this study were engaged in manufacturing activities.

78 OECD.Stat, 2008. See <http://stats.oecd.org/wbos/default.aspx>. Little data on contract status is available for Indonesia or other developing economies in Asia.

by enabling better matches between workers and firms, and by giving temporary workers greater incentive to work hard while under contract.<sup>79</sup>

**Developing countries with rigid labor regulations face more difficulties in generating jobs, worsening labor market outcomes for workers.** Empirical evidence of the impact of increased rigidity of job creation is not available for Indonesia because data on severance payment and contract status has not been consistently collected. International research, however, consistently finds that developing countries with onerous labor regulations also experience lower rates of investment, productivity and investment in manufacturing.<sup>80</sup> Rigid labor regulations hamper job growth by limiting the benefits of trade openness and discouraging entrepreneurs from starting new businesses. This has a direct, negative impact on workers. Developing countries with rigid labor regulations are more likely to experience lower (male) participation in the labor force, lower employment rates, and high unemployment rates – especially among women and young people.<sup>81</sup> A study of 74 countries concluded that if Indonesia maximized the flexibility of its labor regulations, the unemployment rate would decrease by 2.1 percentage points and the youth unemployment rate by 5.8 percentage points.<sup>82</sup>

## IV. Employee Protection

**Unions argue that strong employment protection regulations need to be upheld to protect employees and ensure fair treatment.** Severance pay protects employees against arbitrary dismissal and provides income security to employees. Labor unions also argue that because permanent employment is the standard arrangement in the formal sector, employers should not use repeated temporary contracts as a loophole to avoid the costs associated with permanent employees. One of the overriding concerns, however, is that non-compliance by firms is high, undermining the original intent of the Manpower Law. This section examines whether current regulations are effective in protecting employees and maintaining their income security.

**Two-thirds of all eligible terminated employees report that they did not receive their severance pay.** Most firms are non-compliant with severance regulations. 14.6 percent of employees terminated from their jobs met criteria to receive severance payment. Of these eligible employees, 65.6 percent reported that they did not receive any severance pay from their employers (Figure 4.5).<sup>83</sup> Employees who are more vulnerable are more affected by non-compliance. 69.97 percent of eligible women fail to receive severance pay compared to 63.22 percent of eligible men (Figure 4.6). Similarly, young (i.e., under 25 years of age), short-tenure (i.e., less than 4 years) and low-wage employees (i.e., wages of less than Rp 1 million per month) are less likely to receive severance pay. Ironically, their severance costs are less than their tenured and higher-wage colleagues who are more likely to receive severance pay. Medium- and large-sized firms (i.e., employing more than 20 employees) are more likely to be compliant than small firms.

79 While basic economic theory focuses on the efficiency gains from FTC usage, more sophisticated theory recognizes potential efficiency losses. Economic efficiency can be compromised if firms make insufficient investment in training contractual workers, or if workers cannot accurately gauge the probability that they will be re-hired when deciding to take an FTC job.

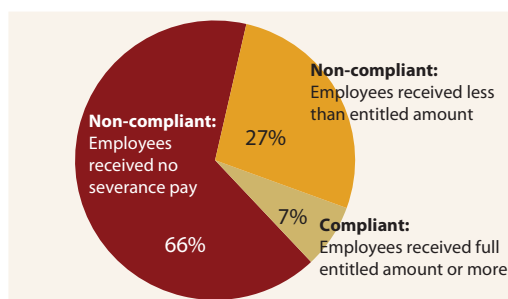
80 Djankov, Simeon and Rita Ramalho. 2008.

81 Ibid. Controversy remains on this issue. A summary of 24 empirical studies on the effects of employment protection legislation on employment and unemployment finds ambiguous or inconclusive results. The study is limited, however, only to developed member countries of the OECD and the more developed South American countries where severance programs are more common (Addison and Teixeira, 2001). Two other studies confirm that rigidity has a negative effect on the composition of employment. The studies find that job security regulations are associated with lower employment rates for young workers, women and unskilled workers (Pagés and Montenegro, 1999; Montenegro and Pagés, 2004).

82 Feldmann, 2008.

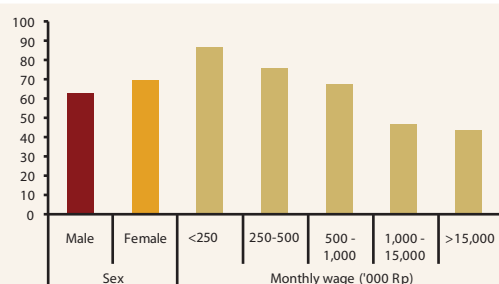
83 Annex IV.2. Note: all analysis on severance pay is based on Sakernas (2008) and IFLS (2007). This chapter presents the findings using only the Sakernas data regarding receipt of severance pay, which is based only on salaried workers who experienced job separation 2 years before the survey. Findings based on IFLS are generally consistent with Sakernas.

**Figure 4.5** Receipt of severance pay, as reported by terminated workers



Source: Sakernas, 2008.

**Figure 4.6** Eligible workers who report not receiving severance pay (percent)



Source: Sakernas, 2008.

**Most terminated employees who receive severance pay report that they collected less than the amount to which they are entitled.** 78.4 percent of employees who collected severance pay report that they did not receive the full amount to which they were legally entitled.<sup>84</sup> Employers who give severance pay provide, on average, only 69.6 percent of the amount to which employees are entitled.<sup>85</sup> Women receive a higher proportion of their entitled amounts even though they are less likely than men to receive payment at all. Although low-wage employees are less likely to receive severance pay at all, they are more likely to receive their entitled amount in the event that their employers pay. Partially compliant medium- and large-sized firms pay, on average, 61.7 and 87.7 percent of the entitled amounts respectively. Compliance is a more significant problem among small firms that pay, on average, only 23.2 percent of the entitled amount, if they pay at all.

**The predominance of non-compliance potentially explains why increases in severance pay have not led to increased job rigidity.** Trends in unemployment and job separation rates – both indicators of employment rigidity – appear to be unaffected by the significant increases in severance pay that were introduced in 2000 and again in 2003. The effect of changes in severance pay may have been minimal because few people were affected, or because the legislated changes were not implemented on the ground.

**Current severance regulations do not protect the workers who face the greatest degree of income insecurity.** Approximately 8 percent of Indonesia's workforce reported ever having been separated from their jobs in the previous two years.<sup>86</sup> Slightly more than one-quarter (27.9 percent) of these workers experience involuntary separations due to lay-offs and business failure. They are the workers that most need a basic level of income protection until they find new work. Of those who experienced job separation, however, only 47.1 percent were wage and salaried workers (i.e., formal employees). The large majority of terminated workers – 64.2 percent – works without a formal contract in place and are the most vulnerable workers in the formal sector.<sup>87</sup>

**Employees report that some firms are not complying with restrictions about the usage of fixed-term contracts.** In response to high firing costs, employers are shifting towards hiring more temporary (or outsourced) staff. Some firms, however, may be taking advantage of lax enforcement of regulations and employ staff with fixed-term contracts on a long-term basis to avoid paying workers what they are entitled to. Approximately 15 percent of temporary employees have been in their position longer than 3 years, the maximum FTC contract length stipulated by the law (Figure 4.7).<sup>88</sup>

84 Annex IV.2.

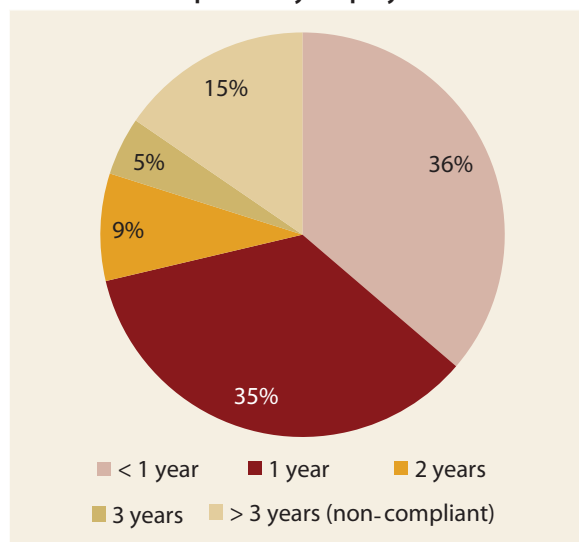
85 Annex IV.2.

86 Sakernas, 2008.

87 See Chapter 3.

88 Data on contract status was collected for the first time in Indonesia on a large scale in 2007. The IFLS asked respondents about their contract status for the first time in 2007. While this is insufficient to analyze trends in contract status, findings can offer insights into the use of contracts – temporary and otherwise – in Indonesia.

**Figure 4.7** Duration of fixed-term contracts, as reported by employees



Source: IFLS, 2007.

**Complexities and ambiguities in the Manpower Law may contribute to non-compliance and make it difficult for employees to know what benefits they are entitled to.** The complexities of the Manpower Law in determining the amount of severance and long-service benefits make it difficult for employees to understand what they are entitled to. When asked to identify benefits offered by their employer, only 14.8 percent of government and private sector employees stated that severance pay is one of the benefits offered by their employer.<sup>89</sup> This may also be exacerbated by the fact that many formal contracts do not explicitly state the terms and conditions of employment. Similarly, there are ambiguities about what types of jobs are non-core and can be outsourced or staffed with a temporary contract, and what jobs are considered core and must be staffed with a permanent contract.

## V. Recommendations

**The current impasse in reforming severance regulations reflects objections from both employers and employees.** Recent negotiations around severance pay have either collapsed or ended in stalemates. Unions and employees will not support lowering severance rates since they will lose their only source of income protection during times of unemployment. Without flexibility, however, firms argue that they are less able to respond to market fluctuations and lose efficiency. Instead, firms may opt to hire fewer employees or shift from permanent to fixed-term contracts. In many cases they do not provide terminated employees their entitled severance pay, which further lowers the income security of workers.

**Reform efforts need to focus on finding a win-win solution for firms and unions, while ensuring that vulnerable workers are better protected.** There is scope to find a win-win solution that works both for employers and employees. This section presents reform options that may be considered in an effort to reach conciliatory agreement between employers and employees. The reform options are presented not only with the interests of employers and unions in mind, but also consider the voice of vulnerable workers who have been excluded from the debate. Although poor and low-income workers – especially those working in small-sized firms – are among the most vulnerable to unemployment shocks, they are the least likely to be protected through the current system. Employer associations and unions represent their members around the negotiating table, but not necessarily informal workers and contract-less employees who would benefit from policies that expend job creation in the formal sector.

**By negotiating a grand bargain – lowering severance rates in exchange for introducing unemployment benefits – the government can improve labor market flexibility while increasing protection for employees.** First, simplifying the legal complexities of current severance regulations and adjusting rates

89 Sakernas, 2008.



downward will bring Indonesia in-line with regional standards. This will not only improve labor market flexibility but it will also improve Indonesia's investment climate and global competitiveness. At the same time, efforts should be made to simplify severance calculations in order to make it easier for employees to understand what they are entitled to and easier for firms to know what they are responsible for paying. Complementary new programs are needed, however, to provide effective protection for unemployed formal sector workers in compensation for reduced severance rates.

**There are a range of unemployment benefit systems that should be considered and assessed for inclusion in the future National Social Security system.** Indonesia is ready to begin following the lead of other middle-income countries that have adopted unemployment benefit systems. There is a range of reform options that can improve the predictability of labor costs and compensate workers for lowered severance rates. The options include a pooled fund from which terminated employees can draw payments, an individual account severance system, or a flat-benefit unemployment assistance program. Eventually, Indonesia may someday move towards a full-fledged unemployment insurance program as found in developed economies. Each option has its respective advantages and disadvantages, and varies in terms of the level of institutional complexity to manage the program (Table 4.2). The design of the unemployment benefits system can take into account the considerations listed below.<sup>90</sup>

- **A “layoff benefit” can provide greater income protection than an employer-based lump sum severance payment.** A proposal to lower severance rates may be desirable if a new system is established to improve income security for employees. Maintaining high severance rates in the current system may not be desirable if compliance remains low and few employees are provided with income security. Estonia provides an example of how a flat-benefit unemployment assistance program was able to provide income security for more workers (Box 4.1).

#### **Box 4.1 Unemployment Assistance in Estonia**

Unemployment was one of the main problems faced by Estonia, after it gained independence from the Soviet Union in 1991. The average unemployment during the 1990s was 10.6 percent; registered unemployment averaged between 25 and 72% of total unemployment, as estimated by the labor force survey.

Between 1991 and 2002, Estonia adopted a flat benefit unemployment compensation system. To be eligible for the benefit, claimants had to register at local employment offices and had to have worked no less than six of the past twelve months. Applicants also had to provide evidence that their job was terminated for a non-disqualifying reason (i.e., that they did not quit or were discharged for misconduct).

Although the flat-benefit system paid modest benefits, it served a significant share of the country's unemployed. The system paid a low amount to eligible unemployed workers for up to six months. On average, between 1994 and 2002, the benefit was equivalent to 6-10 percent of workers' monthly salaries over a period of 4.2 and 5 months. Approximately 29 percent of all unemployed received the benefit. The cost of benefit payments, financed through the general budget, averaged 0.25 percent of covered payroll.

The flat-benefit system can be modified to target vulnerable low-paid workers. Eligibility can be conditional on family income but requires accurate targeting capacity by unemployment offices. Alternatively, by keeping the flat benefit low, applicants can decide for themselves whether to apply for benefits or not.

*Source: Vroman, 2007.*

90 Recommendations adapted from Revenga and Rigolini, 2007; and Vroman, 2007.

**Table 4.2** Severance pay reform options<sup>91</sup>

Reform Option		Advantages	Disadvantages
<b>Reduce severance levels:</b> Keep the current system of employer-financed severance payments, but reduce the rates, which are high by regional (but not high by international standards).		<ul style="list-style-type: none"> <li>▪ <b>More investment:</b> By lowering severance rates, more investors may be lured to Indonesia.</li> <li>▪ <b>Improved productivity:</b> With more flexibility to adjust workforces, firms can improve productivity.</li> <li>▪ <b>Higher compliance:</b> Companies without liquidity constraints may be more likely to pay if rates lower.</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Weak enforcement:</b> Unless the government also improves enforcement, there is little incentive for firms to comply, even if rates are lower.</li> <li>▪ <b>Risk of non-compliance:</b> Payment depends on the willingness and ability of firms to pay severance. Liquidity constrained firms are still unlikely to pay.</li> </ul>
<b>Pooled fund:</b> Modify a provident fund or create a severance fund that collects payments from firms and disburses to workers upon layoff.	<b>Modify Jamsostek:</b> Expand the provisions for early withdrawal in the case of unemployment (currently limited to workers with a five-year history of contributions and more than six months of unemployment).	<ul style="list-style-type: none"> <li>▪ <b>Institutional convenience:</b> No need to create new institutions since <i>Jamsostek</i> already exists.<sup>3</sup> Only modifications needed.</li> <li>▪ <b>Regional precedents:</b> Provident funds in Singapore, Sri Lanka and Thailand have provisions for early withdrawal that can be used in times of unemployment.</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Low coverage:</b> 60 percent of wage and salary workers do not actively contribute to <i>Jamsostek</i>.</li> <li>▪ <b>Weak income security:</b> Combined employer/employee contribution rate was 5.7 percent in Indonesia during 2000-04, well below the other regional countries that range from 20.0 to 33.8 percent.</li> <li>▪ <b>Moral hazard/fraud:</b> There is a need to verify unemployment otherwise risk that contributors draw from the fund for other reasons.</li> </ul>
	<b>Create a severance fund:</b> Firms make regular severance payments to a pooled fund that is administered by a central government agency or private firm(s).	<ul style="list-style-type: none"> <li>▪ <b>Improved efficiency:</b> Firms' decisions to layoff are decoupled from paying severance.</li> <li>▪ <b>Higher compliance:</b> Incentive for firms to avoid payment is reduced since payment is not lump-sum and firms are not responsible for disbursement.</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Institutional demands:</b> Unless contracted out to a private firm(s), requires the creation of a new agency.</li> <li>▪ <b>Risk of low compliance:</b> Still reliant on firm compliance to regularly send severance payments to the administering agency/firm.</li> <li>▪ <b>Underfunding:</b> Firms are likely to lay-off workers more easily, leading to possible under-funding. May require government co-financing.</li> </ul>
<b>Unemployment assistance :</b> Create a fund that eligible workers can draw from when unemployed. Funds are managed and disbursed by an appointed agency, not the employer. Unemployed workers receive a low benefit from a common fund for a specified period of time. Eligibility is based on active job search and availability of suitable work. Possible to make benefit contingent on means-tested family income.		<ul style="list-style-type: none"> <li>▪ <b>Pro-poor targeting:</b> Eligibility conditions and low-level benefits can increase the coverage of poor and low-wage workers.</li> <li>▪ <b>Improved income security:</b> Not reliant on firms to finance lay-offs because the UA fund would be responsible for disbursing the severance payment.</li> <li>▪ <b>Increased firm efficiency:</b> Since firms have already paid, impinges less on the actual firing decision.</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>High administrative costs:</b> As a result of high turnover and high volume of decisions per case, the cost per dollar of benefit payment is higher than pension-based systems.</li> <li>▪ <b>Financing challenges:</b> Requires financing from general tax revenue, a dedicated payroll tax, or a combination of the two.</li> <li>▪ <b>Institutional demands:</b> Requires functioning employment offices that can monitor job search activities and benefit payments.</li> </ul>
<b>Individual accounts:</b> Employer and employees regularly deposit contributions into individual accounts managed and disbursed by a central agency. Unemployed contributors draw from their own accounts.		<ul style="list-style-type: none"> <li>▪ <b>Improved income security:</b> Not reliant on firms to finance lay-offs; fund responsible for disbursing the severance payment.</li> <li>▪ <b>More transparency:</b> Each worker knows exactly how much he/she has contributed and what they can expect to receive.</li> <li>▪ <b>Self-financing:</b> Fully funded by employer and employee contributions; not susceptible to under-funding since payments are made before termination.</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>High administrative costs:</b> Higher than the current individual account pension system.</li> <li>▪ <b>Institutional complexities:</b> Managing agency must have the capability to track individual contributions, account balances and benefits payments at the micro-level.</li> <li>▪ <b>Low coverage:</b> Based on <i>Jamsostek</i> experience, contribution rates would most likely be low, leaving many wage and salary workers unprotected.</li> </ul>
<b>Unemployment insurance :</b> Provides support payments to persons who want to work but cannot secure unemployment. Payments are linked to the level of pre-unemployment earnings.		<ul style="list-style-type: none"> <li>▪ <b>Income security:</b> Since payments are linked to earning levels, provides the most income security for participants.</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Institutionally complex:</b> Salaries must be tracked in order to link to payments.</li> <li>▪ <b>Resource intensive:</b> Costly scheme and not suitable for Indonesia's level of economic development.</li> </ul>

<sup>91</sup> Based on Revenga and Rigolini, 2007, and Vroman, 2007.

- **Shift towards a monthly contributory approach** where firms make monthly contributions to an account that is managed centrally with government oversight. Transferring the responsibility for paying out severance from the employer to a central agency can increase the likelihood that workers receive their entitlement upon layoff. Payment is more likely if firms are responsible for making regular severance contributions, not the full lump sum payment. If firms make regular payments into a fund (in effect a delayed decision), then it will not impinge on their actual firing decisions and can improve the predictability of firms' operating costs. However, it can also lead to increased firing, even over-firing, and higher liabilities. This could be addressed by instituting a small "layoff tax" or an increase in the amount that firms are expected to pay to a severance fund. Better compliance by employers will also help reduce reliance on the Industrial Relations Courts that are backlogged with disputes concerning employment termination.<sup>92</sup> This will be a relief to both employees and employers who find the dispute resolution process costly and time-consuming.
- **Ensure more protection for vulnerable workers, without excluding high-paid workers.** Vulnerable workers – female, young, short-term and low-paid – are being excluded from the benefits of the current system and are most affected by loss of income due to termination. Increasing firing taxes can lead to further exclusion. Similarly, any scheme that excludes high-paid workers can inadvertently lead to negative effects by increasing the costs of low-paid workers, which can lead to decreased formal employment.
- **Prepare transition strategies carefully and phase in reforms gradually.** There will be gaps between the current system and a future, reformed system, especially concerning responsibility for cumulated past severance liabilities and increases in turnover that could result in under-financing of an income security scheme. Given Indonesia's small formal sector and high unemployment and informal employment rates, any system of income support is likely to incur high costs and needs to be phased in gradually.
- **Pilot programs could be introduced and evaluated.** Any pilot of unemployment assistance programs, as recommended above, should be carefully monitored and evaluated for program efficiency and effectiveness. In addition, lessons learned from countries with similar institutions and level of development can assist in designing a system that best fits the Indonesian context. The experiences of other countries, such as Barbados, provide examples of how pooled funds collect payments from employees and distribute severance payments to workers.

**The reform process can be kick-started by initiating the necessary analytical homework to identify which option best fits Indonesia.** Simulation studies are needed to assess the anticipated impact of the alternative systems and the institutional implications and demands associated with each reform option. Based on the best-suited model, a reform roadmap is needed to lay the foundations for the future system, which should be linked to the future social security system mandated by the Social Security Law (No. 41/2004).

**At the same time, encourage the use of formal contracts to help ensure that employees are aware of entitlements and receive severance and unemployment benefits.** Contract-less employees are the most vulnerable formal sector workers, and are predominantly found working in firms with fewer than 20 employees. Formalizing their working arrangements can lead to immediate improvements if accompanied by increased knowledge about employee entitlements under the Manpower Law. Local Manpower (Disnaker) offices and relevant stakeholders can cooperate together to provide SMEs with tools – such as contract templates for staff – to promote usage of contracts. At the same time, Disnaker and other stakeholders may

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<sup>92</sup> Nugroho, 2008.

consider jointly launching a media campaign, especially targeting SME employees, about contracts, their benefits, and how to request support in formalizing working arrangements in the absence of a plant-level union.

**Further data collection and research is needed to assess the impact of severance pay, future unemployment assistance programs and the use of temporary contracts.** The data available on severance pay and usage of temporary contracts in Indonesia is limited. The IFLS collected data on severance pay for the first time in 2007, while the National Labor Force Survey (Sakernas) collected data for the first time in 2008. Since data has not been systematically collected after 2007, analysis of the trend or impact of severance pay is not possible. Similarly, survey data on contract status was collected for the first time in Indonesia through the IFLS. Although employers are required to report on staffing and contract types to Disnaker through regular employment planning reports, questions concerning contract status have not been incorporated into Sakernas. Severance pay and contract status questions should be incorporated into the regular labor market surveys so that researchers have the data necessary for further empirical research on these issues. With such analysis, policymakers will be in a stronger position to understand the trade-offs in the labor reform debate and identify the policies that maximize job creation without sacrificing employee protection.

**Easing the rigidity of current regulations can spur job creation in the formal sector, but complementary strategies are still needed.** Even with major labor regulation reforms, many workers will still remain employed without a formal contract or in the informal sector for the foreseeable future. For this reason, while regulatory reform is necessary, it is not sufficient to improve the prospects for most Indonesian workers. Additional strategies are therefore needed to empower and protect Indonesia's excluded and vulnerable workers. The next three chapters examine the supply of workers in Indonesia and how to improve their skills so that they can access better jobs and improve their income security.





# Chapter 5



## Minimum Wages

The Labor Market Effects of Raising the Bar

## Chapter 5 Summary & Recommendations

Internationally, there are three main approaches to minimum wage policies. The first is to use minimum wages as a safety net to protect vulnerable workers. A second approach is to link floor wages to other social protection benefits. The third approach is to use minimum wages as a wage-setting mechanism to improve the welfare of all workers where there are few other channels to negotiate. Relatively high minimum wages indicate that Indonesia tends towards the third approach.

Minimum wage trends broadly fall into four distinctive periods, shaped by prevalent institutions and political contexts. Relatively low real minimum wages began to increase during the New Order due to economic growth and political pressure, but collapsed during the financial crisis. With democratization and union proliferation, minimum wages grew strongly from 1999 to 2003. Following reforms in 2003, real minimum wages have leveled off and are now on the decline.

Employee wages increase when minimum wages are set at higher levels. Increasing rates of non-compliance, however, accompany rises in minimum wages and erode the expected benefit. While minimum wage increases appear to have no effect on overall employment rates, they affect the decisions of employers in the formal sector to hire more workers. Rising minimum wages leads to a large delayed reallocation of workers from industrial to agricultural employment, especially for women. Rising minimum wages also lead to increased informal sector employment for all workers.

The poor tend to work informally or for non-compliant employers and, therefore, tend to be excluded from the benefits of minimum wage increases. Minimum wage increases are associated with large wage increases for both high and low-wage workers, suggesting that minimum wages are used as a wage-setting mechanism in Indonesia, not as a social safety net.

Minimum wages should be maintained as a pure safety net for low-wage earners. Firms and unions should rely on negotiations at the plant level to set wages for workers, rather than relying on minimum wage increases as the wage-setting mechanism. Wage councils should continue to exercise caution in increasing minimum wages to avoid the symptoms associated with high minimum wage policies. The enforcement of existing minimum wages must be strengthened to improve the income security of low-wage earners.

## I. Introduction

**The minimum wage is a contentious issue because it requires policymakers to find a balance between equity and efficiency objectives.** The debate around minimum wage policies mirrors the debate surrounding hiring and firing regulations.<sup>93</sup> Unions argue that policy makers should use the minimum wage as an instrument to increase wages and improve the welfare of workers in the formal sector. The main priority of firms is their bottom line, which can suffer if labor costs rise. Policymakers, however, need to be concerned about how minimum wages affect both equity and efficiency for all citizens. Efficiency becomes an important concern if minimum wage increases drive worker's wages substantially above the market rate, and firms respond by hiring fewer workers. This not only reduces firm profits, but also may harm unskilled and informal workers by adding an additional barrier to their entry into the formal sector. The government faces the challenge of striking the right balance between the interests of salaried employees and informal sector workers, and the goal of sustaining economic growth.

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93 See Chapter 4 for a discussion on hiring and firing regulations.



**The effects of higher minimum wages on equity and efficiency outcomes in Indonesia are not fully understood.** A better understanding how minimum wage increases affect labor market outcomes, as well as the types of households that benefit from minimum wage increases, can help guide policymakers in finding the right balance between equity and efficiency. There is a substantial body of existing research on the effects of minimum wages in Indonesia. These studies, however, differ in their data sources and methodological approaches. As a result, existing research does not provide clear answers to fundamental questions, such as the effect of minimum wage increases on employment and types of employment.

**Chapter 5 considers changes in minimum wage rates and assesses the effects these changes have had on labor market outcomes.** Who benefits and who loses from increases in minimum wages? Debates surrounding this question frequently focus on the respective interests of employers and unions. This chapter places special attention on the interests of informal and poor workers who tend to be excluded from the debate on minimum wage policies, but who are nevertheless affected by policy changes. The chapter is divided into four sections.

- The first section highlights the rationale of minimum wage policies from both theoretical and international perspectives.
- The second examines minimum wage trends within the Indonesian policy context.
- The third assesses the effects of minimum wage policies on wages and employment.
- The fourth and final section concludes with recommendations concerning minimum wage policy and wage-setting processes.

## II. International approaches to minimum wages

**Some developing countries use minimum wage policies to establish a low floor wage to protect vulnerable workers.** With this approach, a very low minimum wage serves as a social safety net wage. The objective is to protect the most vulnerable groups – such as unskilled workers, old age pensioners or the disabled – and guaranteeing a basic level of income.

**An alternative approach, linking floor minimum wages with social protection benefits, can have adverse fiscal effects.** In some countries, the minimum wage is linked to benefits – such as family allowances, unemployment benefits, seniority allowance and medical benefits – that are paid out as a percentage of the prevailing low minimum wage.<sup>94</sup> Many Latin American countries adopted this practice in the 1980s and 1990s. Based on this model, some countries indexed public sector wages and benefits to minimum wages, which exerted fiscal pressure on the state budget during times of high inflation. Due to fiscal constraints, the level of the minimum wage had to be kept extremely low. In Uruguay, for instance, the minimum wage was set at a relatively low level – only 21 percent of the average wage in 2003. Reforms have consequently focused on breaking these linkages and re-establishing the minimum wage as a pure safety net to protect the most vulnerable workers. Consequently, the coverage of other social protection benefits was left to a separate social security system using different baseline calculations.<sup>95</sup>

**Another approach is to use the minimum wage as the primary wage-setting mechanism between unions and businesses.** In countries where the collective bargaining system is weak, policymakers and unions see minimum wage policy as one of the few available channels to improve the welfare of all workers. High minimum wages (relative to the average wage) are negotiated to cover as many formal sector workers

94 Saget, 2008.

95 Ibid.

as possible, not only low-wage earners. Increases are uniformly applied across all workers, regardless of their wage levels. For instance, the Philippines set the minimum wage close to the average wage.<sup>96</sup> High minimum wages, however, risk increasing non-compliance as employers become more reluctant to pay out mandated minimum wages. In addition, the policy may introduce inefficiencies by crowding out informal workers who want to enter the formal sector at lower wages, but cannot because firms are unable or unwilling to pay workers higher legislated minimum wages.

**Relatively high minimum wages indicate that minimum wages in Indonesia are used more as a mechanism for wage-setting than for protecting the most vulnerable.** One way to compare minimum wage levels across countries is to examine ratios of minimum wages to GDP per capita. Using this method to rank low- and high-minimum wage countries, Indonesia is counted among those countries with a relatively high minimum wage/GDP per capita ratio in Asia (Table 5.1), which is indicative of using minimum wages as a wage-setting mechanism for all employees.<sup>97</sup> It is not, however, out of line with countries that have a similar GDP per capita level.

**Table 5.1** Minimum wage and per capita GDP in US\$ PPP (2002/2004)<sup>98</sup>

Country	Monthly minimum wages	GDP per capita per month	Ratio
<b>Indonesia</b>	<b>184.42</b>	<b>280.37</b>	<b>0.66</b>
<b>Regional neighbors</b>			
Malaysia	103.40	808.00	0.13
Thailand	259.95	631.69	0.41
China	227.50	416.27	0.55
Vietnam	153.14	207.49	0.74
Philippines	322.45	360.09	0.90
<b>Countries with similar levels of GDP per capita</b>			
Honduras	55.07	221.52	0.25
Sri Lanka	89.84	314.71	0.29
Ecuador	173.36	306.96	0.56
Bolivia	136.43	212.21	0.64
Egypt	227.94	329.15	0.69
India	177.06	242.41	0.73
Morocco	392.82	334.32	1.17
Lesotho	386.88	220.45	1.75

Source: Saget, 2008.

### III. Minimum wage trends and policy changes

**Although policymakers showed restraint in using the minimum wage as a major policy tool before the 1997-1998 economic crisis, minimum wages increased in line with economic growth.** Before the 1990s, minimum wage policies, although legislated, were rarely implemented. As a result, they were very

<sup>96</sup> Ibid.

<sup>97</sup> GDP per capita is compared on a purchasing power parity (PPP) basis. The analysis also uses GDP per worker and average wage for minimum wage comparisons. For the pros and cons of all three indicators, see Saget (2008): p28.

<sup>98</sup> Note: Minimum wages in US\$ PPP. GDP per capita at US\$ PPP in 2003 from World Bank Indicators.

low and fell below market clearing levels.<sup>99</sup> The government did not intervene in wage policies; union pressures were limited since only one labor union was legally allowed to operate. In the early 1990s, the government began to respond to domestic and international pressures to allow for more participation of the labor movement and to raise minimum wages in order to increase the living standards of workers. From 1990-1996, alongside strong economic growth, real minimum wages increased by an average rate of 20 percent per year (Figure 5.1). Average wages followed suit, at a less rapid rate.

**Figure 5.1** Average monthly minimum wage and average salaried wage (2007 Rp)



Source: World Bank estimates based on Sakernas.

**During the crisis years, 1997-99, economic collapse and soaring inflation led to a crash in real minimum wages.** The Asian financial crisis struck Indonesia hard, resulting in the collapse of economic growth and soaring inflation. This was spurred by the collapse of the Rupiah and capital injections to support failing banks. Rapid inflation led to the collapse of both real minimum wages and real wages, which both declined by approximately 30 percent. The fall in real wages, together with a reallocation of workers into agriculture, allowed total employment to remain relatively stable.

**Minimum wages recovered and grew quickly during 1999-2003 with the restoration of democracy and the subsequent proliferation of unions.** From 1999 to 2003, real minimum wages grew at an average rate of 9.6 percent per year. This reflected democratic reforms and recognition of the freedom of association led to the rapid spread of labor unions, which increased political pressure to substantially raise minimum wage levels.<sup>100</sup> As the bargaining power of unions increased, so did real minimum wages. Wage demands also reflected the efforts of workers to regain their pre-crisis wage levels, which was achieved in 2002. Minimum wages continued to increase, at a rate slightly higher than average wages, until 2005.

**Increases in minimum wages began to level off following the passage of the Manpower Law (No. 13/2003), and, since 2005, have grown more slowly than average wages.** In 2003, the Government of Indonesia overhauled the minimum wages setting process in the Manpower Law (see Box 5.1). This was followed by a slowing down of real minimum wages growth to an average of 1.9 percent per year during 2004-2007. The slow-down may not be entirely related to the introduction of the new law. Wage councils, instituted already in 2001, possibly played a greater role limiting the growth of real minimum wages by negotiating nominal minimum wage increases on the basis of price surveys rather than negotiations. In addition, tripartite level discussions may have benefitted from learning through experience, as parties engaged in more constructive minimum wage negotiations and took economy-wide considerations into account.

<sup>99</sup> Rama, 1996.

<sup>100</sup> See Chapter 6 for more discussion on the expansion in number of unions during democratization in Indonesia.

### Box 5.1 Key legal developments of minimum wage policies

**Before 1998, provincial wage councils advised provincial governors on the recommended minimum wage.**

Governors recommended provincial minimum wages to the Minister of Manpower, who had the final word in setting the minimum wage for each province. Before 1995, the basis for these recommendations was the *Kebutuhan Fisik Minimum* (KFM), a consumption bundle based on a list of food and non-food items identified by the Ministry of Manpower (Decree No. 81/1995) and considered essential for the livelihood of a single worker. A regulation from the Minister of Manpower (No. 1/1999) expanded the list and renamed it the *Kebutuhan Hidup Minimum* (KHM).

**In 2000, minimum wage setting was decentralized to the provincial level.** The Minister of Manpower issued a decision (No. 226/2000) that gave governors, mayors and heads of districts (*Bupati*) the power to set minimum wage levels. Their decisions were to be based on recommendations from local and provincial tripartite forums and wage councils.

**The Manpower Law (No. 13/2003) was the first law to establish a comprehensive framework for setting minimum wages.** The law incorporated most of the substance and policy direction of previous decrees and regulations, but also added general guiding principles. The main elements of the minimum wage setting process are:

- Provinces and districts set minimum wages on an annual basis. Governors set the minimum wage after considering the recommendations from provincial and district wage councils (Regulation No. 107/2004), heads of districts and mayors. Minimum wages can also be sector-based.
- Wage councils base their recommendation on the minimum wage level on the value of a decent living standard or *Kebutuhan Hidup Layak* (KHL). The KHL, mandated by a ministerial decision (No. 17/2005), is largely determined by surveys carried out by the tripartite wage councils in traditional markets on prices of the 49 items included in the basket. Wage councils also include representatives from the local offices of the Central Statistics Agency (BPS).
- Minimum wages act as a floor wage, i.e. district or municipal minimum wages cannot be lower than the stipulated provincial level. Contrarily, a subsequent ministerial decision (No. 231/103 under Article 90) implicitly acknowledges that the minimum wage is not a floor wage, as it allows firms who cannot immediately afford the minimum wage to postpone full payment for a certain period of time and/or adjust wages to KHL standards by following certain procedures.

**Current debates focus on both institutional and technical aspects of the framework for setting minimum wages.** On the technical level, the measurement of the decent living standard index has become a focal point for discussions between unions and business associations. Unions are concerned that the level of minimum wages should, at least, meet the existing decent living criteria (KHL) and match inflation. Employers argue that policymakers implement minimum wages not as a floor wage or social safety net, but more as a wage-setting process that sets relatively high entry-level wages in large firms, which does not represent costs for all workers. Employers argue that the KHL measurements and surveys overestimate the food and non-food prices that underlie wage negotiations.<sup>101</sup>

**The most recent policy intervention aims to give local governments more room to cap minimum wages to counter the expected fall in demand in the wake of the global economic crisis.** In October 2008, the Ministries of Home Affairs, Trade, Industry and Manpower issued a joint Ministerial Decree urging local and provincial governments to restrain minimum wage increases to avoid undermining the financial

101 For instance, Bappenas carried out a survey in 2005 among firms, employer associations, unions and workers in Banten, East Java and West Java. They found that around 70 percent of firms believed that the prevailing minimum wages of Rp 500,000 – 700,000 per month in the selected provinces were sufficient. Around the same percentage of workers responded that these wages insufficient. Similarly, a majority of firms argued that the KHL was not an appropriate measure to set the minimum wages, whereas most unions and workers argued otherwise (Bappenas, 2006).

capabilities of firms and to keep increases in-line with the national economic growth rate. In addition, the decree urges national and regional tri-partite forums and wage councils to issue minimum wage increases by taking the difficult overall economic conditions into account. Several worker demonstrations protested the decree and demanded that minimum wage increases follow the KHL guidelines and at least fall in-line with the inflation rate.<sup>102</sup>

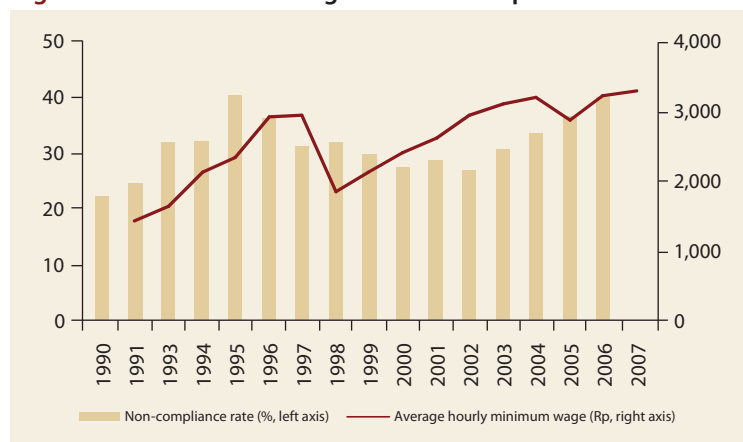
**These policy debates, however, have not shed light on the winners and losers of minimum wage policies.** Although recent debates have focused on the technical aspects of the minimum wage determination process, fundamental differences in the approach to minimum wages still remain. The main issue revolves around who are the winners and losers when minimum wages increase. While unions and business associations are able to represent their own interests, poor and informal workers that have little political voice and are not represented in the current debate. The next section looks at empirical evidence of the effects of minimum wages on workers, with a particular emphasis on poor and informal workers.

## IV. Labor market effects of minimum wages

### Wage effects of the minimum wage

**Employee wages increase when minimum wages are set at higher levels.** Minimum wages have a positive but limited association with employee wages. Regression analysis, based on variation in provincial minimum wage changes, shows that a 10 percent increase in the minimum wage is associated with a 3 percent increase in average wages in the same year.<sup>103</sup> The effect continues to remain positive for at least two years following the increase. The direction of causality, however, is not clear. Employee wages may be buoyed by strong economic growth that, in turn, triggers subsequent increases in legislated minimum wages.

**Figure 5.2 Minimum wage and non-compliance**



Source: World Bank estimates based on Sakernas.

**Employees only partially benefit from legislated minimum wage increases due to an increasing trend in non-compliance.** Non-compliance (defined as the percentage of workers who report earning less than the prevailing minimum wage) has been increasing in Indonesia. In 1991 the non-compliance rate was 22 percent, but reached 40 percent by 2007. It appears that trends in non-

102 See Joint Ministerial Decree On Safeguarding the Momentum of National Economic Growth Anticipating the Global Economic Development, issued on October 27, 2008

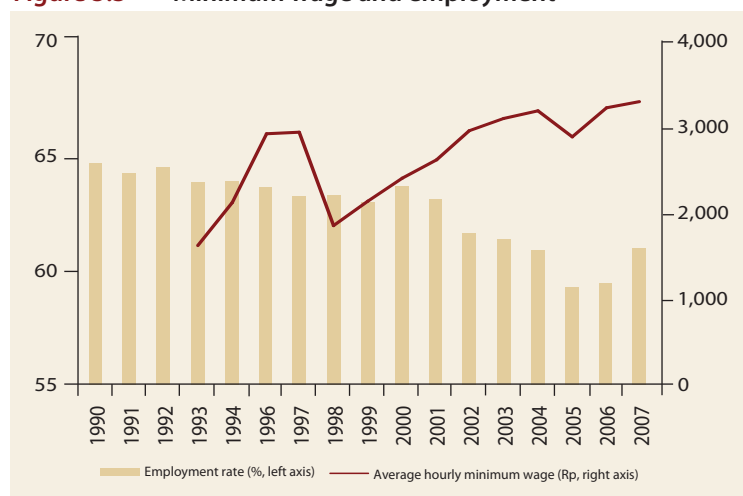
103 See Annex V.1. Regressions control both for lagged district characteristics and predetermined worker characteristics. Lagged district characteristics include: Lagged district characteristics include provincial minimum wage, the share of persons in the bottom two quintiles of predicted consumption, and district averages of the following labor market indicators: Employee wage, percentage of employment in agriculture and industry, percentage of employment in job type, and the employment and unemployment rates. Predetermined worker characteristics include: Sex; age and its square, educational attainment level, vocational school attendance, location (urban/rural), and year.

compliance follow minimum wage patterns, but the effects are lagged (Figure 5.2). Regression analysis based on data covering the period from 1991 to 1997, shows that a 10 percent increase is associated with an increased non-compliance rate of 2.6 percent in the following year.

## Employment effects of the minimum wage

**Past research on the effect of minimum wage comes to mixed conclusions on employment, but suggests a negative effect on formal employment.** Two papers examined the effect of minimum wage increases during the 1990s on employment in medium and large manufacturing firms.<sup>104</sup> Each found that a 10 percent increase in minimum wage reduced employment by about 1.5 percent, although the estimates are not always robust. These firm-based studies found somewhat larger effects on smaller firms and unskilled production workers. Several other papers have used household data to examine the relationship between provincial employment outcomes and minimum wages. Early research showed small negative effects on urban wage employment, with elasticities ranging from 0 to -0.07.<sup>105</sup> Another study found a larger effect, particularly for young, unskilled and female workers in both pre- and post-crisis periods.<sup>106</sup> More recent research has found smaller effects on employment.<sup>107</sup> Much of this literature also considers the effect of minimum wages on formal employment, with similarly mixed results. One study failed to find significant negative impacts of minimum wages on formal employment.<sup>108</sup> Three later studies, however, found that minimum wage increases are associated with increased informality.<sup>109</sup> Annex V.4 reviews the data sources and conclusions of most of these studies.

**Figure 5.3 Minimum wage and employment**



Source: World Bank estimates based on Sakernas.

**This report presents new estimates of minimum wage effects that may improve on previous studies.** Any estimate of how minimum wages affect labor market outcomes must wrestle with the fundamental problem of disentangling the influence of minimum wage increases from the influence of local economic conditions that can lead to minimum wage increases. This difficulty stems from difficulties in identifying the factors that provincial wage councils and district leaders use when negotiating minimum wages. For example, provinces may be more

likely to increase minimum wages during periods of economic growth. Strong economic growth, therefore, could mask the negative employment effect of minimum wages. Because of this problem, as well as the mixed conclusions of previous studies, we re-estimate the labor market effects of minimum wages increases. While the methodology used in the Jobs Report fails in isolating the effect of minimum wage increases from

104 Alatas and Cameron, 2003, and Harrison and Scorse, 2004.

105 Rama, 1996.

106 Suryahadi et al, 2003.

107 Pratomo, 2008.

108 Islam and Nazara, 2000.

109 Bird and Manning, 2002, Comola and de Mello, 2008, and Pratomo, 2008.

the effect of local economic conditions, it incorporates two innovations that may mitigate the problem. First, the effects of provincial minimum wage increases are examined at the level of the individual rather than the province, while controlling for individual characteristics such as education and age. Second, estimates examine the effect of minimum wage increases on labor market outcomes in the following year. This may better capture the effects of minimum wage increases if firms adjust their hiring practices over several months.

### Minimum wage increases have no apparent effect on overall employment or unemployment rates.

Comparing trends in minimum wages and aggregate employment rates since 1999 indicates that minimum wage increases may lower employment (Figure 5.3). However, this is not supported by regression analysis based on variations in minimum wage increases across provinces. The increase in minimum wages in one year has no discernible effect on employment outcomes in the following year, although the estimates are imprecise and cannot rule out substantial effects.<sup>110</sup> Higher minimum wages is in some cases associated with a small decline in the unemployment rate one or two years later. This effect, however, is not statistically significant, and the estimated effect is relatively small, as a 10 percentage point increase in real minimum wages is associated with a 0.2 percentage point reduction in unemployment two years later. This holds true for all workers, regardless of sex, level of education or location.<sup>111</sup>

**Figure 5.4 Minimum wage and industrial employment**



Source: World Bank calculations based on Sakernas 2006

### Minimum wage increases are associated with a substantial shift out of industrial employment and into agricultural employment.

Chapter 2 of this report identified rapid increases in wage levels as a potentially important factor contributing to jobless growth (i.e., economic growth that is not accompanied by non-agricultural or formal sector employment growth) in Indonesia during the 1999-2003 period. A comparison of the trends between minimum wages and the labor structure does not show an obvious relationship between minimum

wages and industrial employment (Figure 5.4). Looking at the effects of provincial variation in minimum wage increases, in a regression framework, tells a different story. Those estimates indicate that a 10 percent increase in minimum wages during the previous year is associated with a 1-percentage point decline in industrial employment and a 0.6 percentage point increase in agriculture. These effects are not apparent when looking at the same year as the increase in minimum wages, but become apparent when looking at the following year.

**Minimum wage increases appear more likely to push women into agriculture and skilled workers out of industry.** Relative to men, minimum wages have a slightly larger effect on women's prospects of industrial employment. Also, women are more likely to switch into agriculture following minimum wage hikes. For women, a 10 percent increase in the minimum wage appears to lead to a 1.2 percentage point

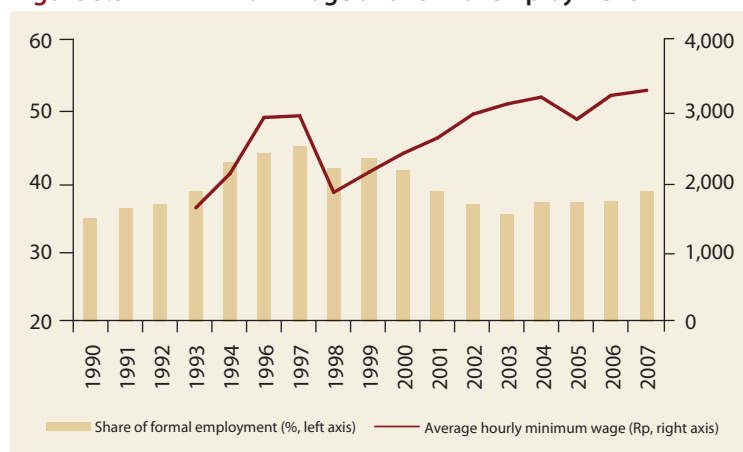
110 See Annex V.2.

111 No sub-group of worker – categorized by education, gender or rural/urban – experiences reduced employment or increased unemployment after minimum wage increases. The control variables are the same as listed in annex V.1 and footnote 9.



in decline industrial employment by the following year and a 1 percentage point increase in agricultural employment.<sup>112</sup> In contrast, the same increase leads to a 0.9 percentage point decline in industrial employment for men and only a 0.5 percentage point increase in agriculture. Similarly, a 10 percent increase in minimum wage increases the probability of entering agriculture by 1 percentage point for skilled workers but only by half that for unskilled workers. The fact that minimum wage reduces industrial employment more for skilled than unskilled workers may reflect the role of the minimum wage as a wage setting mechanism throughout the wage distribution.

**Figure 5.5 Minimum wage and formal employment**



Source: World Bank calculations based on Sakernas

**Changes in the labor structure due to minimum wage increases result in an expansion of the informal sector.** Trends suggest that minimum wages and informality rates are linked. As real minimum wages increased, especially from 1999 to 2003, the share of workers employed in the formal sector contracted (Figure 5.5). Regression results confirm this showing that, on average, a 10 percent increase in minimum wages leads to a 1 percent decline in both formal and industrial jobs in the following year. The effect is expected, since the shift out of the

industrial sector into agriculture is typically a shift from formal into informal work. Again, similarly to the effect on agricultural and industrial sector employment, these effects are only felt in the year following the increase in minimum wages.

#### **Minimum wage increases do not have disproportionate effects on youth, urban, or poor workers.**

While young, urban, and poor workers are sometimes thought to be most vulnerable to minimum wage increases, the estimated effect of minimum wage increase on both sector of work and formality are no different for these workers than for all workers. Moreover, minimum wage increases reduce the probability of formal employment by a similar amount for all different types of workers, including women and skilled workers.

**The effects of minimum wage increases on type of employment are very strong after one year, but much weaker after two years.** A 10 percentage point increase in minimum wage is associated with an estimated 1 percentage point decline in industrial and formal employment, and a 0.6 percentage point increase in agriculture in the following year. Table 5.2 compares these amounts to changes experienced by Indonesia during the worst of the financial crisis, from 1997 and 1998. The effects of a ten percentage point increase in the minimum wage on labor structure are sizeable, ranging from 15 to 35 percent of the change experienced during the crisis. These minimum wage effects, however, are much weaker after two years. The effect of minimum wages on sectoral employment disappears entirely after two years, and the effect on formality is reduced by half. One possible explanation for this is that minimum wage increases tend to occur in provinces with stronger medium-term growth prospects. Stronger medium-term growth could erase, after two years, the temporary negative effects of the minimum wage increase.

112 Annex V.3.

**Table 5.2** Comparisons of minimum wage employment effects with crisis changes

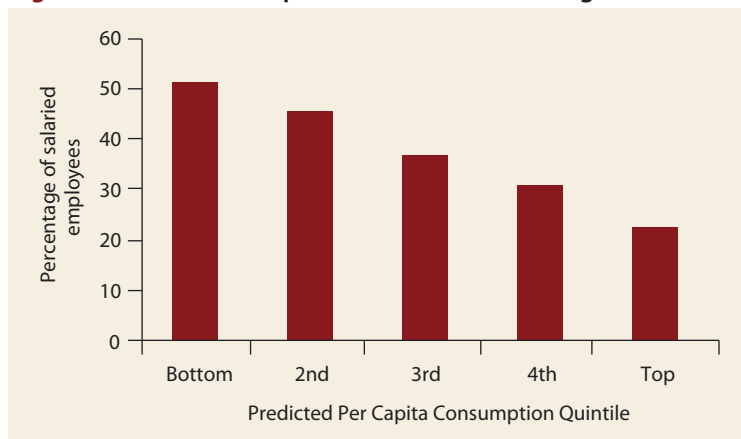
Change in employment share (percentage points)	Crisis year (1997-1998)	10 percent minimum wage increase	
		Following year	Two years later
Formal	-3.3	-1.0	-0.5
Agriculture	4.2	0.6	0.0
Industrial	-2.8	-1.0	-0.2

Source: Sakernas

## Distributional effects of minimum wages

**Poorer households benefit relatively little from minimum wage increases.** This is for two reasons:

- First, most poor workers are not in salaried and wage jobs and therefore do not benefit from legislated minimum wages. Of all salaried workers, only 22 percent belong to the bottom two consumption expenditure quintiles, whereas almost 62 percent are in the upper quintiles.
- Second, the majority of poor workers that are in salaried jobs are in jobs that pay below minimum wage. Nearly 55 percent of waged and salaried workers from the poorest quintile of predicted per capita consumption report earning less than the minimum wage (Figure 5.6). Because many poor workers work in non-compliant jobs, it makes up a large part of these households' earnings. Of the wage income earned by poor households, slightly over half comes from jobs that are non-compliant. In contrast, the earnings above the minimum wage (100-150 percent of the minimum wage) only account for around 26 percent of total household earnings of the poor in 2006.

**Figure 5.6** Non-compliance with minimum wage

Source: Sakernas, 2006

**Minimum wages in Indonesia appear to be used more as a wage-setting mechanism than a social safety net.** Minimum wages are not an effective safety net for poor and low-wage workers, who tend to be excluded from the benefits of policy changes. Minimum wages levels are close to the average wage of employees, indicating the minimum wage policies are used as wage-setting mechanisms by signaling to expected wage levels for all formal sector workers. This is supported by other symptoms associated with using minimum wages as a wage-setting

mechanism: declining compliance rates, slower expansion of formal sector jobs and limited beneficial wage effects for poorer workers. Minimum wage increases are especially problematic in wage-setting contexts, because it does not only increase wages for the lowest paid but for all workers along the wage spectrum, causing employers to hire fewer workers.

## V. Recommendations

### **Use minimum wages as a pure safety net for low-wage earners, not as a wage-setting mechanism.**

Collective bargaining should continue to focus more on inflation (the consumer price index, CPI) as the main reference point for wage negotiations, and shift away from mandated minimum wages as the main reference point for salary negotiations. A stronger collective bargaining system could utilize, besides the CPI, information on the wages of comparable workers, and transparent information about firm profits. This will help allow each worker's wage increase to reflect the change in the value of their work, rather than a technical committee's estimate of the increase in the minimum living standard.

### **Bipartite negotiations at the plant level should be the mechanism of choice for wage setting.**

Improving bargaining coordination between employers and workers should focus on bipartite negotiation mechanisms, not on regional or provincial level based on minimum wages. In order to have strong bipartite wage negotiations, there needs to be strong links to firms. Current bi-partite talks on labor and dispute settlement issues between employer associations and unions could be a first step in this direction.

**Continue to exercise caution when increasing minimum wages in order to avoid the symptoms associated with high minimum wage policies.** Some of these symptoms are already visible in Indonesia: non-compliance rates appear to be high, formal job expansion has been slow when minimum wages have increased, and poorer workers remain mainly engaged in the informal economy. Provincial wage councils appear to have been exercising caution since 2003 to increase the minimum wage at a moderate rate. Minimum wage increases that exceed the CPI inflation rate should continue to be avoided for the following reasons:

- Informal workers earn roughly thirty percent less than formal workers, and increase their wages by the same amount when they switch to a formal job.<sup>113</sup> The most likely explanation for this is that the minimum wage is set above the market wage rate, harming informal workers who are shut out of the formal sector.
- Most wage employees who earn wages at or just above the minimum wage are not poor, both because wage employees tend not to be poor, and because non-compliance with existing minimum wages is high.
- Minimum wage increases appear to be associated with a sizeable, albeit temporary, reallocation from industry to agriculture and a more lasting decline in formality.
- Responding to economic downturns through lower wages, as Indonesia did in 1998, rather than lower employment helps spread the pain and preserve efficiency. Indonesia's relatively rapid recovery, at least along social indicators, suggests that the effect of the drastic fall in wages in 1998 was not debilitating in the long run.
- Finally, if increases in minimum wages are restrained, additional economic growth will raise average wages and cause minimum wages to be act more like a floor wage. This will not only improve compliance mechanically, but also may entice additional firms to comply who would not have at a higher minimum wage rate.

**Strengthen enforcement of existing minimum wages through improved monitoring by local Manpower (Disnaker) offices and relevant stakeholders.** Low-earnings workers would benefit from stronger enforcement of existing minimum wages rather than an additional increase in minimum wages. This can be done by improving the collective bargaining system and increasing resources for Disnaker to monitor and enforce compliance.

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113 See Chapter 3.





## Collective Bargaining & Dispute Resolution

Labor Unions and Industrial Relations Courts

## Chapter 6 Summary

Following the re-democratization of Indonesia and the recognition of the freedom to organize, the number of unions at both the plant and national levels has grown. Unions now represent one-tenth of all employees, a high rate when compared to regional standards. Union members tend to work for large firms and come from richer households. They enjoy a wage premium of 18 percent and are more likely to have non-wage benefits than non-members.

The vast majority of firms in Indonesia fail to document the terms and conditions of employment through either company regulations or collective agreements as required by the Manpower Law. Compliant firms tend to rely more on unilaterally issuing company regulations than negotiating collective labor agreements with unions. This is most likely due to limited union coverage, weak negotiation skills of plant-level unions, and firm preferences.

Indonesia reformed its system for resolving industrial disputes in 2004. Tripartite negotiations are still required when bipartite negotiations fail to produce an agreeable settlement, but continue to be largely ineffective in resolving disputes. Disputes – mostly concerning employment termination – are most often referred to the newly created industrial relations courts (IRC).

An early assessment of a sample of cases from the IRCs based in Jakarta indicates that delays and backlogs slow the dispute resolution process, creating uncertainties for both employers and employees. This is most likely the result of capacity limitations and human resource constraints of the court system. Although there is no evidence of a systematic bias in the courts, workers face challenges in affording the litigation process and understanding the complexities of the legal system.

### Recommendations:

- Strengthen collective bargaining and bipartite dispute resolution at the plant-level to avoid lengthy and costly resolution through the IRC. A code of conduct or standardized collective bargaining tools may be useful starting points.
- Improve the legal awareness of workers and the negotiating and legal skills of unions.
- Monitor the performance and effectiveness of unions and the IRC through better data collection and analysis. Use this information to support continuous improvement in the industrial relations courts.

## I. Introduction

**Labor institutions play a key role in ensuring that working arrangements between employers and employees uphold legislated standards.** These institutions include labor unions, which monitor compliance with labor regulations such as the rules governing hiring and firing and compliance with minimum wages. Unions, however, also play a broader role in intervening with employers on behalf of their membership in order to negotiate wages and benefits above minimum, legislated thresholds. If the minimum wage becomes, as recommended in Chapter 5, a safety net for the lowest-paid rather than a wage-setting mechanism for all employees, then it is critical to improve the effectiveness of bipartite negotiations between plant-level unions and firms.

**Intermediary institutions are needed when minimum labor standards are not upheld and bipartite negotiations fail to resolve disputes.** In Indonesia, the main institutions responsible for resolving labor disputes are the local Manpower (Disnaker) offices and the Industrial Relations Courts (IRCs). Both institutions have gone through major changes in the last decade. Disnaker offices have been decentralized and now no longer report directly to the national Ministry of Manpower and Transmigration (Depnaker). Labor courts, newly established in 2004, have replaced the former Depnaker-controlled dispute resolution process.



**Chapter 6 examines how employer-employee relationships are managed through these two intermediary labor institutions: unions and labor courts.** The chapter is divided into three sections.

- The first looks at union coverage in Indonesia and provides a profile of union membership.
- The second discusses collective bargaining in Indonesia and premiums enjoyed by union members relative to employees who do not belong to unions.
- The third describes the previous and current dispute resolution mechanisms, and presents findings from an early assessment of the labor courts in Jakarta.
- The fourth and final section provides some general recommendations to strengthen employer-employee relations by improving collective bargaining and dispute resolution.

## II. Unions

**Workers are enjoying higher levels of freedom to organize since the re-democratization of Indonesia.**

Despite ratification of ILO Convention No. 98 on the Right to Organize and Collective Bargaining in 1956, the freedom to organize in Indonesia during the 1990s existed only on paper, not in practice. During the New Order, the government controlled the single labor union that was allowed to exist. The state and its military apparatus intervened in all aspects of industrial relations and dispute resolution leaving no scope for open collective bargaining between firms and workers. This changed with the fall of the New Order and the subsequent introduction of democracy, which paved the way for industrial relations reform. The Government ratified ILO Convention No. 87 on the Freedom of Association and Protection of the Right to Organize. This was later followed by the passing of three key laws governing industrial relations: Law No. 21/2000 on Trade Unions, the Manpower Law (No. 13/2003), and Law No. 2/2004 on Industrial Dispute Settlements.

**The Trade Union Law defines the role of unions and sets the rules for their formation.** According to the Law No. 21/2000, unions represent member workers in three main roles: voicing workers' interests, drafting collective agreements and resolving industrial disputes, including organizing strikes. There are three levels of unions:

- Plant-level unions can be formed with a minimum of ten workers in a firm. Their role is to share members concerns to management and represent members in bipartite negotiations.<sup>114</sup>
- A union federation can be established with at least five unions. Federations are usually formed on the basis of sector or types of occupations (e.g., the Federation of Metal Workers, or the Federations of State-Owned Enterprise Workers), but sometimes on the basis of ideology or political interests (e.g., Islamic Brotherhood Workers' Federation). They may also provide legal or other kinds of assistance to their plant-level union members.
- A union confederation can be formed by a minimum of three federations.<sup>115</sup> Their primary role is representing members in regional and national tripartite forums and negotiations.

**The number of unions, at both plant and national levels, has grown strongly since democratization.**

With the introduction of the freedom of association in 1998, ten new national-level unions quickly formed, working alongside the single union that existed under the New Order. Union growth, at both the national and plant levels, grew rapidly through 2001, and then more moderately until 2005 (Figure 6.1). There was a sharp decline in the number of plant-level unions in 2006, possibly related to the increase in employment

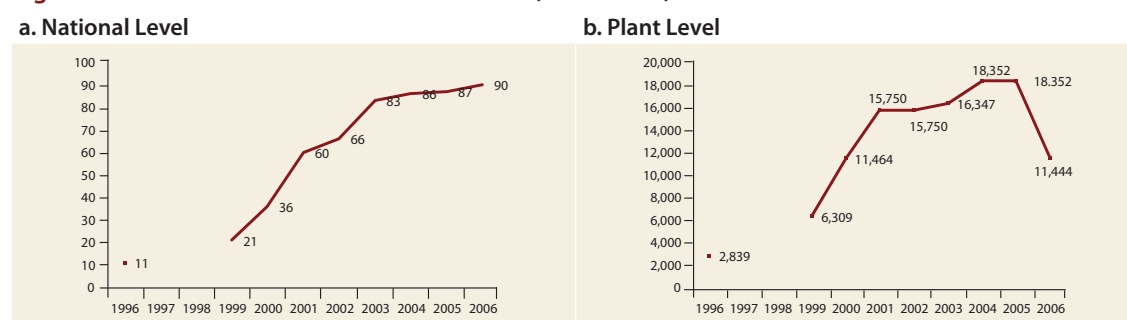
<sup>114</sup> Simanjuntak, 2004.

<sup>115</sup> There are currently three confederations representing workers in the national tripartite forum: *Serikat Buruh Sejahtera Indonesia* (SBSI), *Konfederasi Serikat Pekerja Seluruh Indonesia* (KSPSI) and *Federasi Serikat Pekerja Seluruh Indonesia* (FSPSI).

termination cases that occurred during 2005-2006.<sup>116</sup> Union fragmentation at the plant level is rarely a problem in Indonesia.<sup>117</sup>

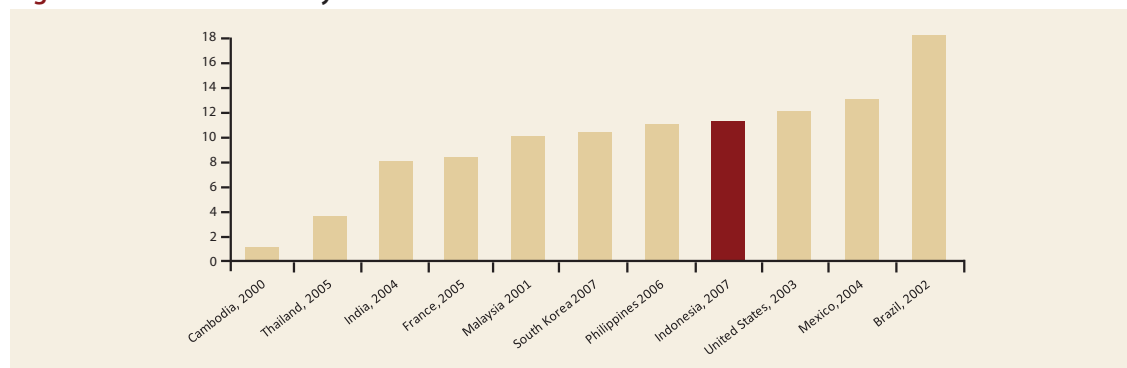
**Unions represent approximately one-tenth of all employees in Indonesia, which is high in comparison to regional neighbors.** Despite the rapid increase in the number of unions, only 3.2 million employees identified themselves as members of labor unions in 2007, representing 11.2 percent of all employees.<sup>118</sup> This is lower than union claims or 'self-verified' membership, totaling 8.2 million workers in 2002 (more than 30 percent of all employees), which is the official figure published by the Ministry of Manpower and Transmigration. Indonesia's union membership rate is moderate by international standards but high in the region (Figure 6.2). Due to a lack of survey-based data, it is not possible to confirm trends in union membership over time. There are concerns, however, that union membership rates may be declining due to increased reliance on fixed-term and outsourced workers.<sup>119</sup>

**Figure 6.1** Number of unions in Indonesia (1996-2006)



Source: ILO, 2006

**Figure 6.2** Union density in select countries



Source: World Economic Forum, Global Competitiveness Index, 2008.

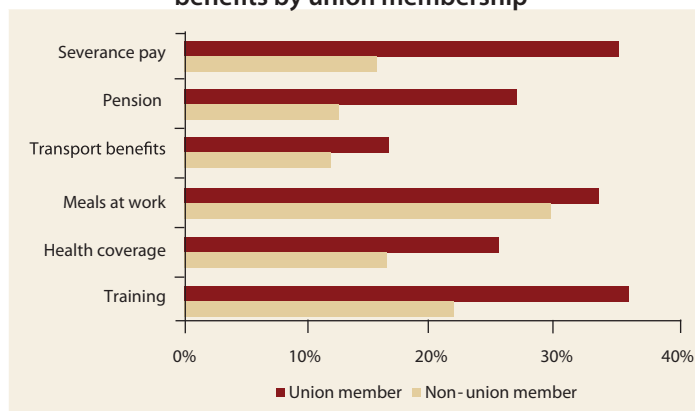
<sup>116</sup> Nugroho, 2008.

<sup>117</sup> Union fragmentation refers to the presence of more than one union in a given firm. APINDO representatives state that multiple unions only exist in around 9,000 companies out of more than 110,000 (based on interviews with World Bank). Other research reports that from 47 enterprises studied in greater Jakarta areas, 39 had unions and only 3 reported the existence of more than one union (Rahayu and Sumarto, 2003).

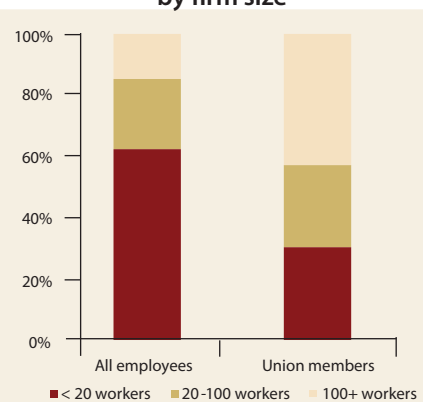
<sup>118</sup> Sakernas, 2007. Employees are defined as wage and salary workers employed by either private firms or the government. This is slightly slower than the estimate from the 2007 IFLS (16 percent of all employees) or the 2005 World Economic Forum's Global Competitiveness Report (14 percent).

<sup>119</sup> The August 2007 survey asked the respondents identified as wage and salary workers whether they are members of a workers' union. This was the first time the survey asked a question concerning union membership. Since subsequent Sakernas surveys have not repeated the question, historical trends in union membership are not available for Indonesia.



**Figure 6.3** Number of workers receiving non-wage benefits by union membership

Source: IFLS, 2007.

**Figure 6.4** Distribution of workers by firm size

Source: IFLS, 2007.

**Unions have been successful in negotiating higher wages and other benefits for their members.**

Unionized employees earn higher wages than workers who do not belong to a union. Members receive, on average, a wage premium of 18 percent over non-members.<sup>120</sup> Members also have higher probability of receiving non-wage benefits such as severance pay, training, pension, and health benefits compared to non-members (Figure 6.3). They are also slightly more likely to receive transportation and meal benefits.

**Unions tend to represent workers at large firms; employees working for small businesses and coming from poor households are most likely not to be union members.<sup>121</sup>**

Union members are disproportionately concentrated in large firms. While 43 percent of all union members work in large enterprises (i.e., firms with more than 100 workers), they constitute less than 15 percent of non-government employees. The law on trade unions (No. 21/2000), which requires of a minimum of 10 workers to form a union, automatically excludes 26 percent of all employees from forming a union because they are working in small businesses that employ too few staff to meet the requirement (Figure 6.4). Employees from poor households are also less likely to join a union. While 34 percent of all employees come from households on the bottom two quintiles, only 26 percent of union members belong to this category.<sup>122</sup> This is mostly because poorer workers tend to work for smaller firms.

### III. Collective Bargaining

**The terms and conditions of employment are laid out in company regulations (CR) or collective labor agreements (CLA).** According to the Manpower Law, each company with at least ten workers should stipulate the terms and conditions of employment, including the rights and obligations of employers and workers, through either CRs or CLAs. Both outline similar terms and conditions that typically include pay, holidays, pension provision, working hours, weekend and weekday overtime. They differ, however, in the process through which each is drafted. Employers usually create CRs unilaterally, although the Manpower

<sup>120</sup> Based on a log hourly wage regression using IFLS 4 data and controlling for individual characteristics, firm size, sector, past wages and previous labor market activities. See Annex VI.2. As a comparison, the coefficient for union wage premium in Brazil ranges from 15 to 20 percent between 1986 and 1999 (World Bank, 2002).

<sup>121</sup> Based on the IFLS 2007 data. (Note: this should be IFLS 2007)

<sup>122</sup> See Annex VI.1 for regression on determinants of union membership, and Annex VI.2 for distribution of union members by characteristics.

Law advises them to take workers' recommendations into account. CLAs, on the other hand, are the product of an agreement between employers and labor unions, and are time-bound to two- or three-years periods. Only one CLA per enterprise is permitted and must be negotiated by a union representing the majority of workers or supported by over 50 percent of all member and non-member employees.

**Firms tend to rely more on issuing company regulations than negotiating collective labor agreements.**

The vast majority of firms does not comply with the Manpower Law and fail to issue CRs or negotiate CLAs.<sup>123</sup> A small number of firms issue CRs; approximately 36,000 were registered each year between 2001 and 2006 (Table 6.1). The number of firms that negotiate collective agreements with unions is even smaller. Only around 9,000 companies negotiate CLAs with unions each year. Although the number of CLAs has been increasing since 2001, associated with the growing number of labor unions, the use of CRs is growing at a faster pace.<sup>124</sup>

**Collective bargaining at the plant-level is weak due to limited union coverage, weak negotiation skills and firm preferences.**

There are three reasons why compliant firms may issue CRs rather than negotiate collective agreements with unions. First, since coverage is limited, there are not enough unions to negotiate agreements across all medium- and large-firms. In 2006, for example, unions existed in less than 20,000 out of more than 166,000 enterprises.<sup>125</sup> Second, the negotiating power of plant-level unions may be limited due to weak negotiation skills or power asymmetries. An earlier study shows that CLAs often only replicate the benefits already stipulated in labor laws, underscoring weak negotiations with firms.<sup>126</sup> Third, many employers prefer to unilaterally issue CRs rather than entering into negotiations with unions. Company regulations are often prepared in advance and simply submitted to workers' representatives for their signature. Unions express concerns about their employers' commitments to negotiating collective agreements in good faith.<sup>127</sup>

**Table 6.1 Number of Company Regulations and Collective Labor Agreements**

Year	Company Regulations	Collective Labor Agreements
2001	36,030	8,997
2002	36,152	9,081
2003	36,174	9,102
2004	36,339	9,131
2005	36,483	9,154
2006	36,710	9,168

Source: Ministry of Manpower and Transmigration, 2007, reproduced from Palmer, 2008.

123 In 2006 only 45,878 CRs and CLAs were registered and reported to the MoMT. However, during this same year 166,000 companies with more than 20 employees were included in the 2006 Economic Census, each of which is legally obligated to produce CRs or CLAs. The actual number of non-compliant firms is higher given that each company with more than 10 employees must comply.

124 Nugroho (2008)

125 Economic Census, 2006; Sakernas, 2007. The total number of enterprises refers to companies with more than 20 employees.

126 Quinn, 2003. His study analyzed a sample of 109 CLAs collected from five provinces. The analysis compared the CLAs with the basic legal standard on six topics: pay, holiday, *Jamsostek*, working hours, weekend and weekday overtime. For each topic except *Jamsostek*, more than half of CLAs contained the same provisions as the legal standard. Approximately 60 percent of CLAs contain provisions on transport and meals allowances, which are not prescribed by the law but are often covered in negotiations.

127 Palmer, 2008.

## IV. Dispute Resolution and the Labor Courts

**Disputes become a problem when firms and workers are unable to reach mutually acceptable solutions through bipartite processes.** Low union coverage and weak negotiating skills at the plant-level restrict the ability to resolve disputes through collective bargaining processes and bipartite negotiations. This is seen in the number of reported labor disputes, which has especially increased during 2001-07 (Table 6.2), in conjunction with a decrease in the number of plant-level unions. Most labor disputes reported to MoMT revolve around employment termination cases. When bipartite mechanisms fail to resolve these types of conflicts, there is a risk that organized workers may strike (see Box 6.1). Otherwise, employers and employees have recourse to the intermediary institutions created to resolve industrial disputes.

**Industrial Dispute Committees used to be the main institutions responsible for resolving labor disputes.** The committees existed both at the district and national levels (P4D and P4P, respectively). The system, however, was widely criticized for two main reasons. First, the process was not efficient in resolving disputes in a timely manner. Second, the process was not considered impartial since the committees were part of the government bureaucracy, and answerable to the local and national Manpower offices. Critics argued that the government could unfairly intervene in the dispute resolution process.<sup>128</sup>

**National parliament introduced a new mechanism in 2004 to settle industrial disputes, featuring the creation of an industrial relations court system.** The law on industrial dispute settlement (No. 2/2004) was designed to improve the institutions and mechanisms resolving employer-employee disputes. The centerpiece of the reform was the creation of an independent industrial relations court falling under the judicial branch. Trade unions were concerned that a court-based dispute resolution mechanism would be difficult to access, more prone to corruption judicial system, and lacking in capacity to deal with a backlog of cases. Employer associations, on the other hand, considered the new system to be more reliable and felt that it provided greater certainty in resolving industrial disputes. The following three sections will look more closely at the IRC and its performance in resolving disputes between employers and employees.

**Table 6.2 Labor dispute and employment termination cases, 2001 – 2006<sup>129</sup>**

Year	Employment termination cases		Other labor disputes
	Number of cases	Number of workers	
2001	2,160	85,989	81
2002	2,445	114,933	101
2003	2,394	128,191	105
2004	2,386	123,929	63
2005*	1,784	66,604	92
2006	5,615	67,782	188
2007	3,252	28,317	190

Source: ILO and Ministry of Manpower and Transmigration  
Note: \*As for Oct 2005

<sup>128</sup> Palmer, 2008.

<sup>129</sup> Note that the classification of data is officially made by the Ministry of Manpower and Transmigration following the classification in Act No.2/2004. The act categorizes job termination as a specific dispute different from other labor disputes (that includes disputes over rights, disputes over interest, and disputes between unions).

### Box 6.1 Labor strikes

Strikes continue to be one of the ways in which workers attempt to change working conditions and terms, or the unfair actions of their employers. There was a gradual downward trend in the number of strikes in Indonesia from 2000 to 2005. The declining trend may indicate some improvements in the institutionalization of conflict resolution through collective bargaining following the development of trade unionism.<sup>130</sup> However, the strike tactic can be readily called into use again when needed. Strike incidents jumped in 2006, for example, reaching their highest level in 10 years in response to the government's plan to revise the Manpower Law.<sup>131</sup>



## V. P4D/P4P System

**In the previous system, the Manpower Office would attempt to resolve conflicts through arbitration and mediation after bipartite negotiations failed.** In the old dispute resolution process (Figure 6.5), one or both of the disputing parties could file a case with Disnaker if bipartite negotiations failed.<sup>132</sup> This would trigger the tripartite mechanism in which Disnaker would first offer an arbitration option, using a licensed third party arbitrator who would deliver a final and legally binding decision. If one or both of the parties disagreed to enter arbitration, they would default to mediation.<sup>133</sup> The mediator, an appointed Disnaker official, would help to find a mutually agreeable solution and provide a non-binding recommendation. If both parties accept the decision, the recommendations would be reflected in a collective agreement.

**If the tripartite mechanism failed, the case would be referred to the Regional Labor Dispute Settlement Committee (P4D).** Cases unresolved by mediation or appealed by one of the parties to be sent to the P4D, which were located in Disnaker offices at the district or municipality level. The P4D's decision was legally binding, but either party could appeal to the Central Labor Disputes Settlement Committee (P4P) in Jakarta. In cases when more than nine persons were involved, or the company is located in more than one region, the case could be brought directly to the P4P. The system did not specify the maximum number of days in which cases were to be resolved.

130 The growth of collective bargaining institutions is also related to the growth of trade unions. Unionization and collective labor agreements, indicators of improvements in collective bargaining, experienced a sharp rise with the freedom to associate under Law No. 21/2000.

131 The drastic rise of strikes in 2006 was stimulated by the reaction towards the increasing employment termination, the use of outsourcing and contract workers, and the reaction towards the planned revision of Law no. 13 of 2003. This mostly occurred in April and May of that year. (Kompas, 6 April 2006; 27 April 2006; Kompas, 2 Mei 2006; 4 Mei 2006; Nugroho, 2007).

132 Based on laws No. 22/1957 and No. 12/1964

133 Simanjuntak, 2004.

**The P4D/P system was often criticized for being inefficient.** It could take months or even years to resolve a dispute through the P4D/P system since there were no defined time limits for each stage of process.<sup>134</sup> Negotiations generally required at least three weekly meetings. However, when the employers were uncooperative or the Disnaker office did not perform optimally, negotiations could take much longer. Although P4D/P decisions were to be legally binding and executable within 14 days, the process could continue far longer, especially when P4D or P4P decisions were appealed to the Administrative Court. The system included a degree of legal uncertainty because the Minister could ultimately veto committee decisions.<sup>135</sup>

## VI. The Reformed Dispute Resolution System

**The reformed dispute settlement process still starts with established tripartite mechanisms. In the reformed system** (Figure 6.5), disputing parties are referred to one of two initial tripartite mechanisms: a) third-party arbitration that results in legally binding decisions, or b) a newly created third-party conciliation step that issues non-binding recommendations. The choice of mechanism partly depends on the type of labor dispute brought forward. If one or both of the parties refuse to enter arbitration or conciliation, they enter the mediation process by default. The mediator, a Disnaker officer with a special mandate for dispute mediation, can handle any type of dispute but, as with the conciliator, recommendations are non-binding.

**Cases unresolved through tripartite mechanisms are referred to the newly created industrial relations courts.** The executive no longer has exclusive control of the dispute resolution process. After the tripartite negotiations, disputing parties are no longer referred to the P4D or P4P committees (which have been dismantled) but are instead handed over to the IRC. This newly established institution, located in each provincial capital, consists of special courts that apply the same procedures as the civil court. Disputing parties present evidence in accordance with administrative procedures before a panel of judges who deliver a verdict. Each party is supported by legal counsel, who can be a lawyer or union representative, responsible for assisting in the registration and defense of the claim.<sup>136</sup> Either party can ultimately appeal for cassation to the Supreme Court.<sup>137</sup> The new law, in contrast to the previous system, sets clear time limits for each stage of the entire dispute resolution process.

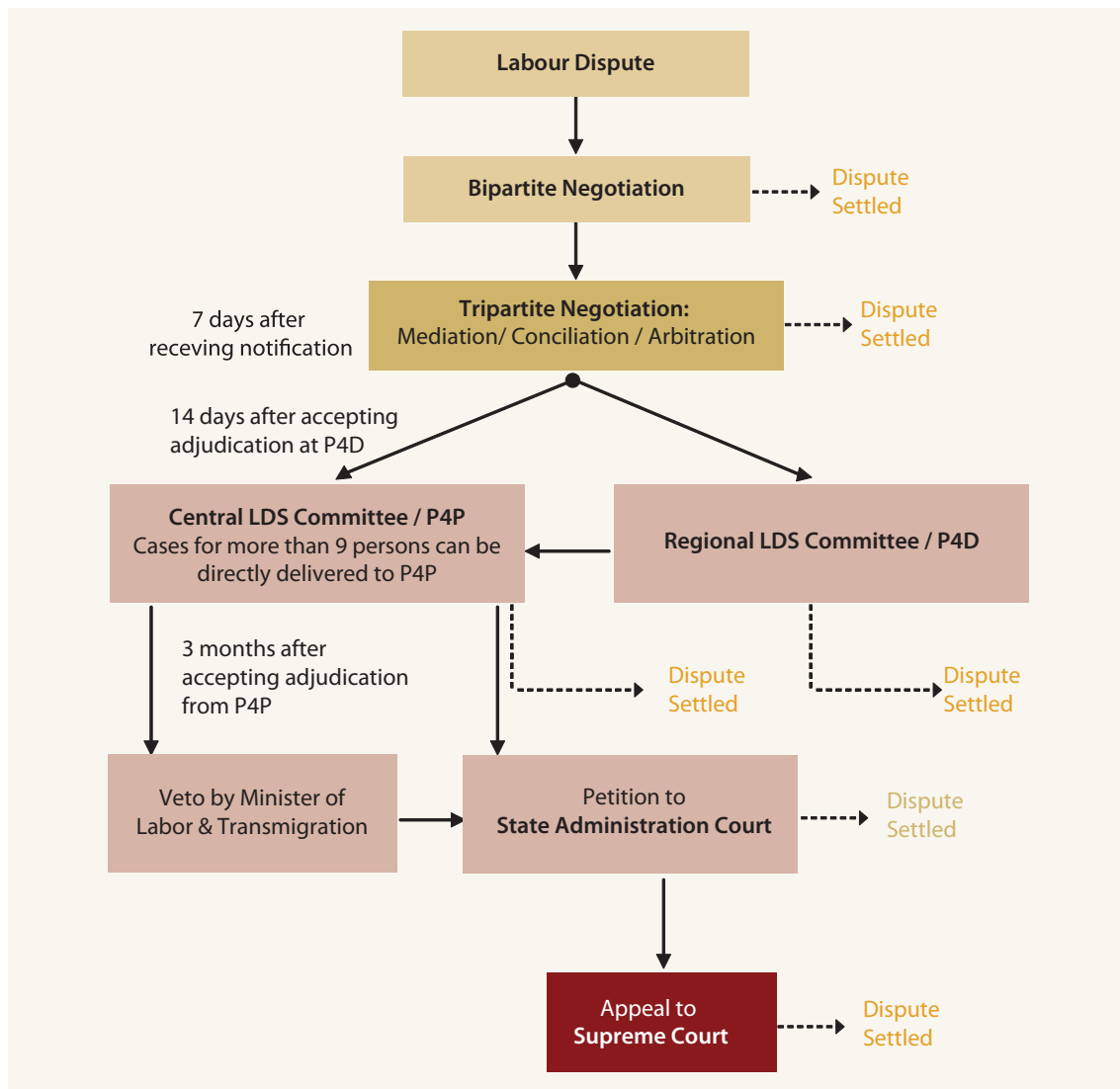
<sup>134</sup> Nugroho, 2008, based on interviews with labor and employers' representatives.

<sup>135</sup> The regulation enables the Minister of Manpower to postpone or cancel a decision for "reasons relating to the maintenance of public order or the protection of the interests of the State" (Quinn, 2003:21).

<sup>136</sup> The legislation also states that trade unions can also act as legal counsel.

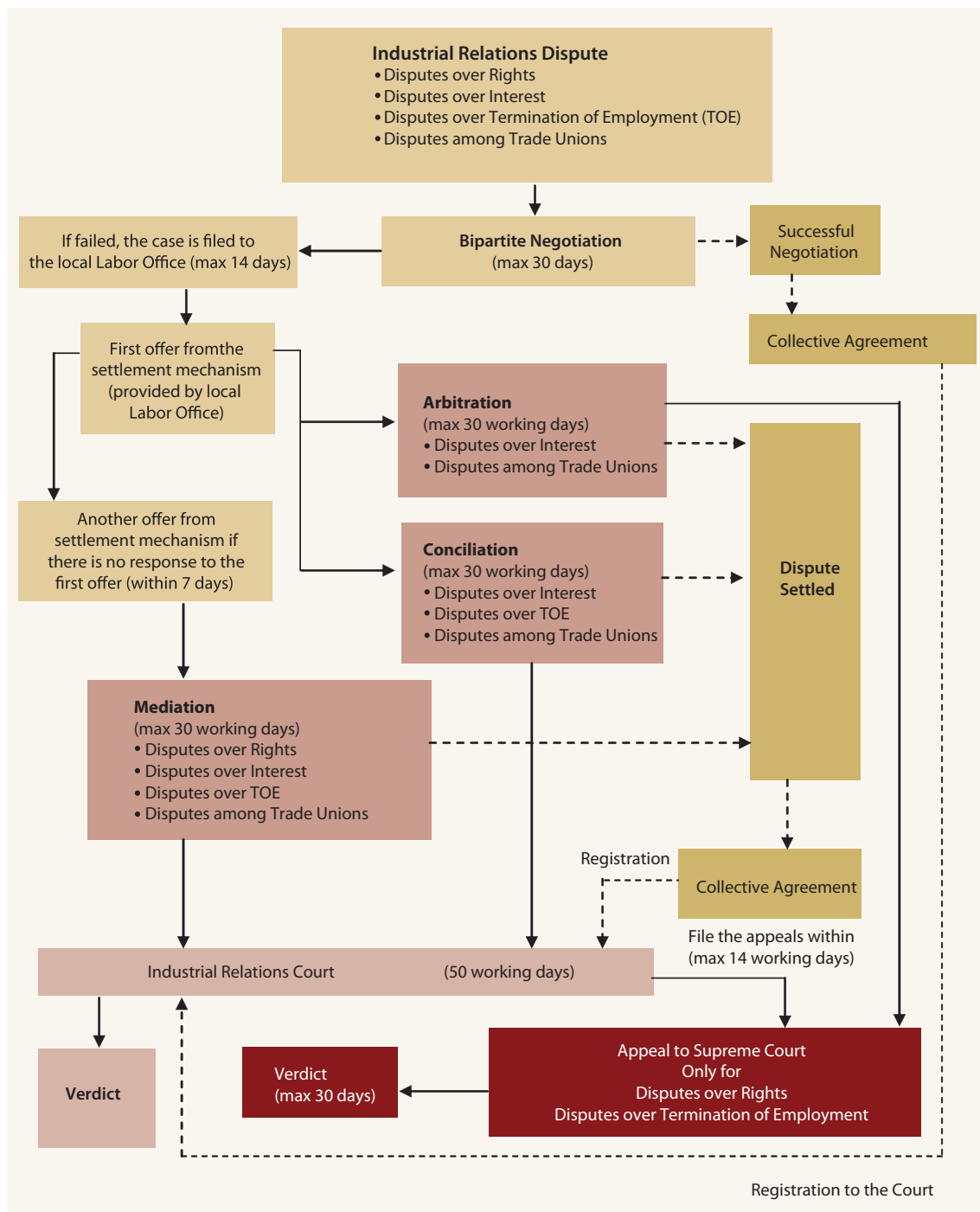
<sup>137</sup> Cassation is the abrogation or annulment of a court decision by a higher court.

**Figure 6.5** P4D/P4P Labor Dispute Settlement (LDS) Mechanism  
Based on Act No. 22 of 1957 and Act No. 12 of 1964



Source: Nugroho, 2008

**Figure 6.6** Reformed Industrial Relations Dispute Settlement Mechanism  
Based on Act No. 2 of 2004



Source: Nugroho, 2008



**Most cases filed with the Industrial Relations Court concern employment termination.** In a sample of cases from the labor courts in Jakarta, 84 percent of filed cases dealt with employment termination (Table 6.3). Regional courts show the same tendency. The West Java Industrial Relations Court in 2007 handled a total of 196 cases, 88.8 percent of which were employment termination cases.<sup>138</sup> Since termination is often the result of underlying disputes, many of these cases may originate from concerns regarding freedom of association or rights abuses.

**Table 6.3** Composition of cases handled by the Jakarta Industrial Relations Courts

Types of cases	Number	%
<b>Rights disputes:</b> Disputes arising from non-fulfillment of basic rights as set by law due to differences in the implementation or interpretation of legislations, work agreements, corporation regulations or joint work agreements.	21	5.55
<b>Employment termination:</b> Disputes arising from lack of agreement on employment termination by one of the parties.	318	84.13
Combination of rights dispute and employment termination	5	1.32
<b>Disputes over interests:</b> Disputes arising in labor relations from lack of agreement in the creation and/or alterations to the work rules as set in work agreements, corporate regulations or joint work agreements.	16	4.24
<b>Other types of disputes</b>	18	4.76
<b>Total</b>	<b>378</b>	<b>100.0</b>

Source: Nugroho, 2008.

## VII. Assessing the Reformed Dispute Resolution System

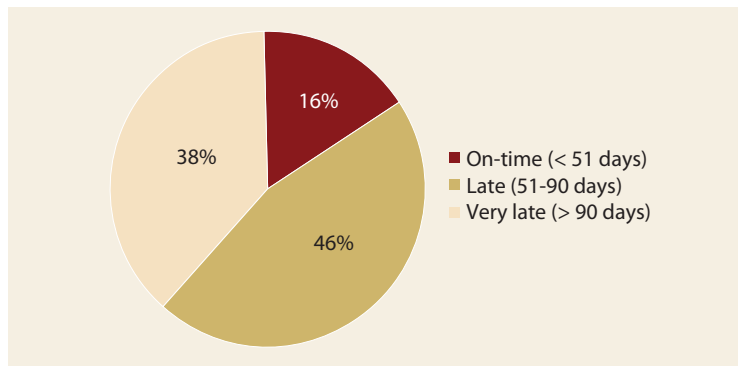
**The third-party tripartite mechanisms of arbitration and conciliation are rarely used.** When a case is filed at a Disnaker office, disputing parties are offered an option to settle the dispute through arbitration and conciliation. The option is rarely exercised. In Central Jakarta and Serang (West Java), for example, none of the cases filed at the Disnaker office in 2007 were referred to arbitrators or conciliators.<sup>139</sup> This may simply reflect a lack of agreement by the disputing parties, in which case mediation becomes the default option. In addition, disputing parties may have little information about these alternative options to mediation or lack faith in their ability to find mutually acceptable solutions.

**Similarly, the tripartite mediation mechanism is not successful in resolving disputes at the pre-court stage.** In the Central Jakarta labor office, for example, 20-30 cases were handled each month during 2008. This caseload consists of both new cases and those carried over from the previous month. Mediators delivered recommendations for around half of the cases each month. But in no more than three cases each month are the recommendations accepted; sometimes none at all.<sup>140</sup> The low rate of successful mediation may not necessarily be attributed to the capacity of the mediator, or in this case the labor office. Interviews with representatives of worker's union confederation as well as employers' association indicate that, in most cases, disputing parties see the tripartite stage as merely a formality that must be undergone in order to file the case at the IRC.

<sup>138</sup> West Java Industrial Relations Court, 2007, as quoted in Nugroho, 2008.

<sup>139</sup> Based on World Bank interviews with the labor officers in Central Jakarta and Serang.

<sup>140</sup> If both parties accept the recommendations, it may or may not be written as a Collective Labor Agreement.

**Figure 6.7** Length of Time of Court Process at the Jakarta IRC (n=100)<sup>140</sup>

Source: the Jakarta IRC (2007), quoted from Nugroho (2008).

**The IRC was set up to provide timely, just, appropriate and cost-effective legal services.**

These four dimensions define the quality of legal services that the courts intend to offer. Without clear indicators or systematic data collection, however, it is not possible to assess the performance of the courts. Research on a sample of 100 cases from five labor courts across Jakarta provides an early assessment of the courts' performance. Findings do not represent the performance of courts outside of the capital.

**The IRC is not timely and, on average, requires more than two months to deliver a verdict.** According to the law, a verdict is to be delivered in no more than fifty days. In practice, however, verdicts are infrequently pronounced on time. Based on the Jakarta sample, the court required an average of 77 days to finalize a case (Figure 6.7).<sup>142</sup> Only 16 percent of cases were concluded on time with the majority of cases were settled between 51 and 90 days. Over a third needed more than three months to come to a verdict. Most of delays were caused by the lengthy litigation process, which requires detailed documentation and complicated procedures that pose difficulties especially for workers and unions, who tend to be less familiar with legal proceedings than the legal counsel of the employers.<sup>143</sup> Some complain that the process is slowed further by administrative delays in issuing verdict letters.<sup>144</sup>

**A backlog of appealed cases in Supreme Court adds uncertainty and costs.** For cases regarding disputes over rights and termination of employment, either party can appeal the verdict to the Supreme Court. This rarely happens. In the Jakarta sample, about 8 percent of all IRC adjudications were appealed to the Supreme Court in 2007.<sup>145</sup> The appeal process in the Supreme Court has resulted in complaints regarding the lengthy and indecisive process.<sup>146</sup> For the employer, this causes uncertainty in the production plan, especially when involving large numbers of workers. For workers, delays can cause uncertainty concerning employment status, income stability, and mounting legal costs.

**Dispute resolution through the IRC is reportedly costly, especially for workers.** The litigation process places greater emphasis on provision of legal evidence such as contracts or payrolls. All submitted evidence must be stamped, a process that requires payment. For workers who lack financial support, such as low-paid workers or those who have already been terminated, these costs may be substantial. Transportation

<sup>141</sup> The length of time refers to the period of the date of appealing the claim to the date of final verdict.

<sup>142</sup> Length of time of the court process only refers to the period between submission of claims and final verdict. There is a subsequent step: the issuance of the verdict letter and delivery of the letter to the disputing parties. The guidelines for this process are not detailed in the law. Unions noted concerns that it can take months for parties to receive the letter, especially if the company is located in remote areas.

<sup>143</sup> Jakarta Industrial Relations Court in 2007 handled 271 dispute cases involving 4834 workers and 84.13% of which are employment termination cases (see Tables 6.3 and 6.4).

<sup>144</sup> No data exists, however, to confirm or deny these reports.

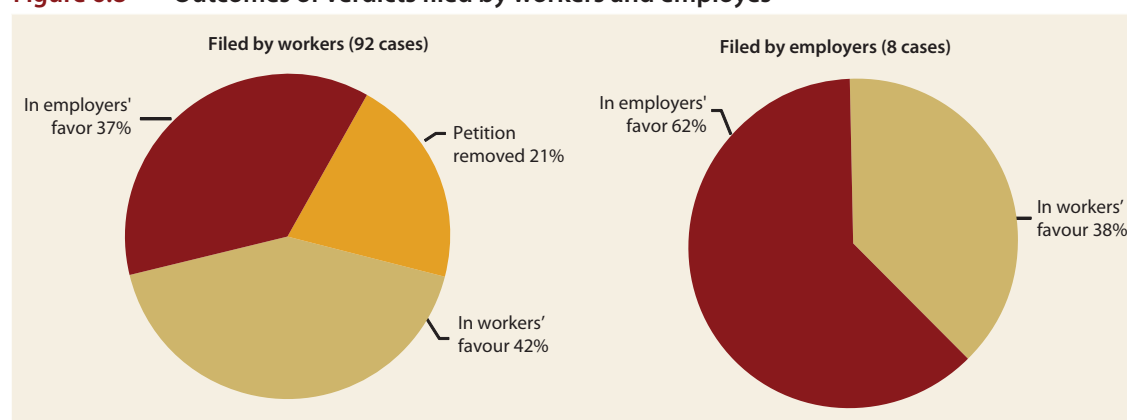
<sup>145</sup> Nugroho, 2008.

<sup>146</sup> Pangaribuan, 2008. Also, World Bank interview with judges two ad hoc judges May 13, 2008 & May 27, 2008, with OPSI official and with SPKEP Bekasi, 16 April 2008.

incurs additional expenses that workers need to bear. While the P4D/P system was based in nearby district and municipal offices, the courts are located in the provincial capital, which may be far away from the site of the dispute. Transportation can become considerable for workers from distant cities. Delays in the process – due to unprepared parties or the absence of the employers’ representative or judges – can raise the transportation costs even higher.<sup>147</sup> The process is also costly for employers, although mainly this is associated with the cost for hiring lawyers, which increases significantly for complicated cases and those that deal with mass employment termination.

**Verdict outcomes indicate no systematic bias towards either party, but may work against workers with weak legal representation.** Looking at the composition of cases by party filing the case and the verdict, there is no systematic pattern of bias towards or against either employers or employees (Figure 6.8).<sup>148</sup> Most of the petitions submitted by workers in the Jakarta ended with the verdicts that were in their favor. One-fifth of the reported cases, however, were removed because of successful negotiations or incomplete evidence. This may be indicative of a difficulty faced by workers in the IRC: the judicial system may be biased against parties who do not have access (or cannot afford) legal counsel or are not familiar with how to collect legal evidence and present their case convincingly in court. If the unions that represent workers do not have members with legal training and/or experience, the workers’ case may be less successful against the professional lawyers hired by employers.

**Figure 6.8 Outcomes of verdicts filed by workers and employees**



Source : The Jakarta IRC (2007), quoted from Nugroho (2008).

**Delays and other problems may be a result of problems concerning the capacity and supply of IRC human resources.** Three judges serve at each IRC court; one career judge and two *ad hoc* judges representing and nominated by the employers’ association and labor unions. Career judges are experienced in serving in general court, but they are not necessarily familiar with industrial dispute cases. The supply of judges is also a problem. For example, only four career judges in the Jakarta IRC are responsible for dealing with a massive backlog of industrial dispute cases but are still required to perform other duties in the general court. *Ad hoc* judges, not career judges, therefore, assume a strategic role in the process by examining the

<sup>147</sup> The cost of dispute settlement in the labor court is basically inexpensive compared to the P4 system. It becomes more expensive if the process is prolonged or the filing of claim involves many workers (Nugroho, 2008, from an interview with ad hoc judge on May 27, 2008).

<sup>148</sup> Employees, not employers, submitted most cases. There are some possible reasons for this. The first, the number of labor law violations by the employers is still high as indicated in previous chapters regarding low compliance rates for payment of severance pay and minimum wages. Second, employers are still reluctant to use the labor courts to settle dispute, due to the cost and the complicated process of the settlement system, and prefer bipartite negotiations (Nugroho, 2008, from an interview with the ad hoc judges proposed by the employer associations, May 13 and 27, 2008).

substance of the cases. In addition, some judges claim that the 50-day limit of processing a single case is considered as somewhat problematic for judges because it does not provide enough time to collect objective and valid information in order to deliver objective and fair verdicts.<sup>149</sup> In the P4D/P4P system, the panel had more time to raise questions and collected the necessary information and evidence needed to deliver a verdict.

### Box 6.2 *Justica do Trabalho: The Labor Court in Brazil*

The *Justica do Trabalho* is the labor court system in Brazil. The Brazilian court provides conciliation, arbitration and legal judgments, unlike in Indonesia where the local Manpower offices and the IRC divide these roles. Most cases concern contested rights – most frequently overtime payment, 13<sup>th</sup> salary payment, and severance pay following an employment termination. Workers may make more than one claim, and usually do so, and can file a case up to five years after termination.

Because of the relatively low cost for workers to bring a dispute to the court, the *Justica do Trabalho* is one of the busiest labor courts in the world. Every year, workers across the country file about 2 million lawsuits against current or former employers. Around 6 percent of all salaried employees go to court each year. Over the last decade, labor-related lawsuits have increased by 60 percent. On average, workers receive 40 percent of their claims.

Frequent litigation has induced workers and employers to engage in strategic behavior. Since the cost for workers is relatively small, workers have an incentive to litigate more often and inflate claims, knowing that they will receive part of the amount claimed. On the other hand, employers have an incentive to hold payment of workers' rights upon dismissal and wait until the court order them to pay.

Workers and employers end up in a suboptimal equilibrium. Employers are cautious about hiring new workers because of the uncertain costs for future pay, fines and legal fees. Employers will then increase screening efforts to avoid employing workers that will be more likely to litigate against them. Although no systematic evidence is available, some consider this as the reason for increasing unemployment, informality and informal contract arrangements.

Source: World Bank (2002), "Brazil Jobs Report – Volume I and II" (Report No. 24408-BR), Washington, D.C.

## IV. Recommendations

### Find ways to strengthen collective bargaining and bipartite dispute resolution at the plant-level.

Stronger negotiations between employers and employees in individual firms are necessary to avoid reliance on wage-setting minimum wages (see Chapter 5) and avoid lengthy and costly dispute resolution through the IRC.<sup>150</sup> The following are some ideas that can be followed up in discussions between the government, firms, and unions:

- **Code of conduct.** The foundation for collective bargaining is mutual trust. Some unions have introduced the idea of a voluntary code of conduct to help build a culture of trust between the employers and workers.

149 World Bank interview with ad hoc judge on May 27, 2008.

150 For a good lessons from the Brazilian Labor Court, see World Bank (2002: vol. I:27-8, 37-8; vol. II:120-30).

- **Standardized CLA tools.** This can be a direct way to help workers and employers avoid prolonged negotiations over CLA clauses. This could be a helpful tool especially for newly formed unions or unions who have never negotiated CLA with their employers before.

### **Work together to promote the legal awareness of workers and the capacity of plant-level unions.**

Improving the quality of bipartite negotiations and the fairness of dispute resolution through the IRC requires better information and stronger skills.

- **Workers need more information about their entitlements and options for dispute resolution.** Given the limited reach of unions, it is necessary to improve general access to information for all workers. Most workers are vulnerable and disadvantaged during dispute resolution processes because they do not have contracts and are not represented by unions. These workers need more information about their entitlements so that they can monitor and report non-compliance. They need to understand the necessary requirements of the IRC, and how to access and maintain documents, in order to strengthen their position in the event of litigation. NGOs may be in the best position to deliver information services, as workers may be reluctant to deal directly with government and donors. Disnaker offices can offer training and information to NGOs that work closely with unrepresented workers.
- **Capacity building of plant-level unions.** Improving capacity can help bring the negotiation process to a more equal playing field, not only in the early dispute resolution stages but especially in the IRC. Areas where skills are needed include: negotiation techniques, basic understanding of legal and corporate languages, and organization skills.

### **Begin monitoring and assessing the Industrial Relations Court in order to improve its performance.**

It is difficult to assess due to poor data management, but it is also too early to assess the effectiveness as the system and its stakeholders are still in a transition period. It currently deals with many cases with limited resources, and is therefore backlogged and taking more time to settle cases than stipulated in the law. Monitoring court performance can identify bottlenecks that can be eased to improve speed of settlement and responsiveness to the needs of workers and employers.

**Improve data collection in areas concerning collective bargaining and dispute resolution.** Little data exists on either of these topics, limiting the depth and scope of analysis. Three immediate steps can help to remedy this:

- Nationally, BPS should continue to collect information regarding union membership from Sakernas survey respondents. This will help improve our understanding of trends in both the level and effects of union participation. Additional data should also be collected from mandatory reports as required by the Compulsory Workforce Report Act (No. 7/1981) and the Trade Union Law (No. 21/2000).
- Locally, data is needed to track the scale of bipartite plant-level negotiations and their outcomes. This requires both quantitative and qualitative research examining models of effective bipartite negotiations. Requiring employers to report the results of bipartite negotiations to local Disnaker offices is a first step.
- Industrial relations courts require computerized systems for data collection. It is impossible to carry out proper assessments on the effectiveness and efficiency of the courts without data on the number of cases, types of cases, verdict outcomes, costs, and processing time. Good data collection and management systems are essential if court performance is a serious concern of the Supreme Court.

# Chapter 7



## **The Skills Market**

Supply and Demand Trends for Educated Workers



## Chapter 7 Summary

Indonesia's working-age population will grow in size by about 20 million over the next decade, or about 2 million per year. To make the most of its remaining demographic window of opportunity Indonesia will need to ensure that workers are equipped to succeed in the labor market.

With increasing public investments over the past three decades, Indonesia's education system now has more schools with higher enrollment rates. The resulting expansion in the pool of educated adults has contributed to the building of a more-educated workforce. Gains in workers' education levels have been highest in rural areas and among women. Although Indonesia's share of workers with senior secondary diplomas and tertiary degrees has steadily increased, it still lags behind regional neighbors. Much work remains to be done in continuing to improve the education levels of the overall workforce.

More-educated workers – those with at least a senior secondary diploma – earned, on average, 66 percent more than workers with lower levels of education. Premiums for workers with tertiary qualifications are especially high at 105 percent.

Despite increasing supply, the wage premium for more-educated workers increased from 2003 to 2007. Demand for more-educated workers is expanding, especially in the service sector where stronger demand for higher skills is driving up wage premiums. A strong supply, however, was restrained by an increase in the percentage of more-educated workers, especially men, who are exiting the workforce to stay at home or return to school.

Although the quantity of more-educated workers is growing in Indonesia, concerns still remain about the quality of their education. Educational quality standards have not noticeably improved, in comparison with other countries, and may be responsible for increasing the wage inequality among more-educated workers. Demand for workers that are not only more educated but also better educated appears to be growing.

Mismatch – the problem of finding a job in one's area of training – continues to be an issue for educated workers, creating inefficiencies in the skills market. Mismatch, however, is on the decline and there are increasingly more channels through which employers can find workers with the right training and skills they are looking for.

### Recommendations:

- Since demand for educated workers remains high there is room for further expansion of supply so that firms can find the skills they need and more workers can benefit from high wage premiums. This can be accomplished by continuing the on-going expansion of formal education, especially at the senior-secondary and tertiary levels.
- Undertake research to identify the causes of mismatch and identify how workers can be more efficiently matched with prospective employers. Explore strategies to that encourage the mobility of job-seekers and provide them with information about jobs available according to their area of expertise and experience.
- Place additional focus on educational quality to improve Indonesia's regional competitiveness, especially in services and manufacturing.

## I. Introduction

**The labor market in Indonesia depends on its workers and the skills they bring to the marketplace.**

The previous chapters examined Indonesia's labor policies and institutions, and how to balance economic efficiency with social protection for workers. The next three chapters focus on workers themselves – the backbone of the labor market. Indonesia's working-age population will grow in size by about 20 million over



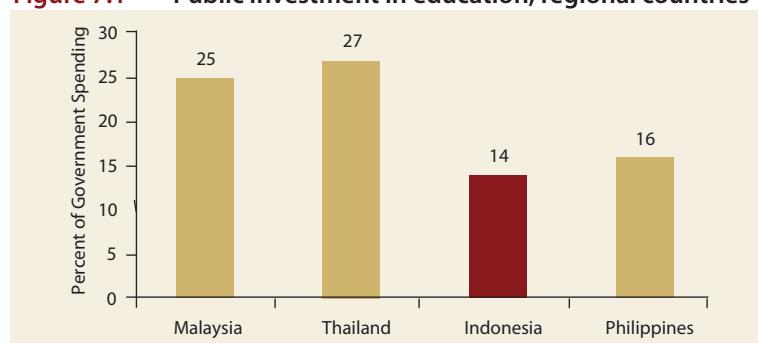
the next decade, or about 2 million per year.<sup>151</sup> To make the most of its remaining demographic window of opportunity Indonesia will need to ensure that workers are equipped to succeed in the labor market. Workers' education levels and skills have been on the rise in Indonesia after a decade of public investments. Understanding how these improvements have affected labor outcomes for workers will help steer formal and non-formal education policies in the future so that more workers can access better jobs and employers find the skills that they are looking for.

**This chapter provides an overview of the market for skilled workers by examining trends in both the supply and demand for educated workers.** The chapter is divided into four sections.

- The first examines how investments in the education sector have contributed to improving the education levels of Indonesia's workforce.
- The second tracks the trends in wage premiums for more-educated workers in comparison to their less-educated counterparts.<sup>152</sup>
- The third attempts to understand the reasons why the wage premium grew for more-educated workers during 2003-2007, despite an increasing influx of educated workers.
- The fourth and final section, considers how the changing economy has created more demand for high-quality education.

## II. Expanding the Pool of More-Educated Workers

**Figure 7.1 Public investment in education, regional countries**



Source: EdStats. The figures are all for 2003, except Thailand, which is for 2005

**Higher investments in education have increased the supply of public schools, especially in urban areas.** The focus on improving education attainment levels began in the late 1970s, when the Government of Indonesia launched a major program resulting in the construction of more than 60,000 primary schools. Expanding and improving education outcomes remains a major aim of the government's development

strategy. The national parliament enacted an education law in 2003 requiring education spending to account for at least 20 percent of total public expenditures at both the central and local levels.<sup>153</sup> This was followed by an increase in real national spending on education from Rp 42 trillion in 2001 to Rp 78 trillion in 2007. Spending levels, however, continue to trail those in neighboring countries (Figure 7.1).<sup>154</sup> Nevertheless, the

151 World Bank. 2009c. "Weathering the Storm," Indonesian Economic Quarterly. June 2009.

152 In the Indonesian education system, the primary level (*Sekolah Dasar*, SD) covers the first to sixth grades. The junior secondary level (*Sekolah Menengah Pertama*, SMP) covers the seventh to ninth grades, while the senior secondary level (*Sekolah Menengah Atas*, SMA) covers tenth to twelfth grades. This chapter will refer to these three levels of schools using the acronyms SD, SMP and SMA, respectively. "More-educated" is the term used in this report to refer to adults with at least an educational attainment level of senior secondary high school. "Less-educated" refers to adults with an educational attainment level below SMA.

153 See World Bank (2007) for a discussion on the 20 percent rule.

154 Globally, however, Indonesia's performance is improving. In a broader cross-country comparison of 23 developing countries, Indonesia's rank improved from 13th place in 2003 to 5th place in 2008 as education expenditures expressed as a share of total government spending increased from 16 to 20 percent. This is assuming that the other 22 developing countries have kept their education-to-total-expenditure share at 2003 levels. See World Bank, 2007 (p.11, Figure 2.2) for the full list of developing countries included in the comparison.

increase in education spending has increased the number of public schools. Between 2000 and 2005, the number of public junior secondary schools (SMP) has increased by 35.4 percent and senior secondary schools (SMA) by 66.6 percent.<sup>155</sup> The expansion is more concentrated in urban areas.

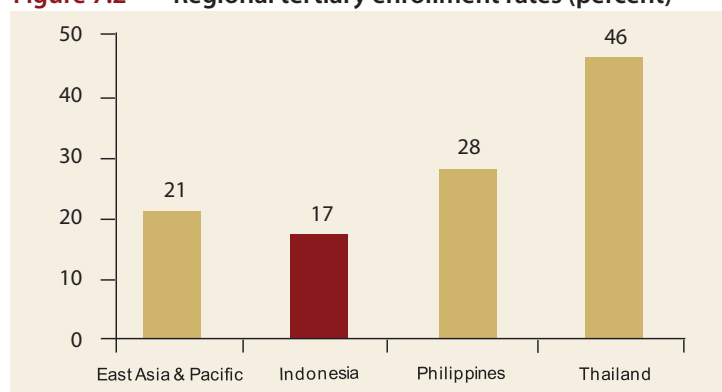
**The expansion in school coverage has improved enrollment rates, particularly for girls and youth living in rural areas.** Between 1995 and 2005, SMP net enrolment rates increased from 51 to 63 percent, SMA net enrollment rates rose more gradually from 33 to 41 percent, and tertiary rates increased from 6 to 8 percent. Even though school construction was concentrated in urban areas, the jump in school participation was much higher in rural areas. Rural SMP enrollment increased five times faster than in urban areas and rural SMA enrollment was three times higher (Table 7.1). Similarly, enrollment rates for girls have increased faster than for boys. In 1995, SMP net enrollment rates of both girls and boys was approximately 51 percent. By 2005, girls' net enrollment rate was up to 64 percent, while remaining at 61 percent for boys. Similarly, in 1995 boys' net enrollment rate in SMAs had been higher than girls', 34 to 32 percent. In 2005, the rates were the same at 41 percent.<sup>156</sup>

**Table 7.1 School net enrollment rates (percent)**

	SMP		SMA		Tertiary	
	1995	2005	1995	2005	1995	2005
Urban	66.5	70.1	50.0	52.8	13.1	13.3
Rural	42.7	57.5	20.8	30.8	1.3	2.4
Female	51.2	64.1	31.7	40.6	5.9	7.9
Male	50.7	61.3	33.5	40.7	6.7	7.5
<b>Total</b>	<b>51.0</b>	<b>62.7</b>	<b>32.6</b>	<b>40.7</b>	<b>6.3</b>	<b>7.7</b>

Source: Bank staff estimates, based on Susenas.

**Figure 7.2 Regional tertiary enrollment rates (percent)**

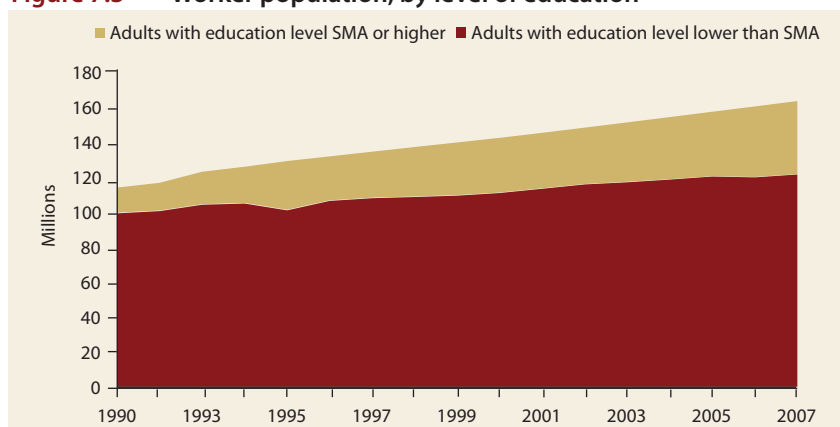


Source: EdStats, 2006.

**Indonesia's combined secondary net enrolment rate, however, continues to lag behind other countries in the region.** Indonesia's overall net secondary enrollment rate was 59 percent in 2006, compared to 60 percent in the Philippines in 2006, 61 percent in Vietnam in 2000, 69 percent in Malaysia in 2005, and 71 percent in Thailand in 2006. Similarly, tertiary enrollment is low by regional standards and lags far behind the Philippines and Thailand (Figure 7.2).

<sup>155</sup> Source: Podes, various years. See Annex VII.1.

<sup>156</sup> In addition to an increase in participation rates, the SMP to SMA transition rate has also increased. About 30 percent of the cohort who entered first grade in 1986/1987 graduated from the junior secondary level in the 1994/1995 school year (MoNE, 2007). Only about 25 percent of the cohort, however, enrolled at the senior secondary level, indicating that around 83 percent of those who graduated from the junior secondary level continued to the senior secondary level. According to Susenas, (those who entered first grade in 1997/1998), the continuation rate from junior to senior secondary levels in the current cohort is 94 percent.

**Figure 7.3** Worker population, by level of education

Source: Sakernas, 1990-2007

While higher enrollment rates have led to impressive and consistent increases in the pool of more-educated adults, there is still much room for improvement. Improved school enrollment has helped increase the rate of students completing higher levels of education. The growth in low-educated adults has been stable and low over the past 17 years,

averaging an increase of 1 percentage point per year during 2003-07 (Figure 7.3). The supply of more-educated adults, on the other hand, has seen strong growth and increased an average of 7 percentage points per year during the same period. Even so, the composition of the workforce continues to be dominated by workers with education levels below senior secondary school. Much work remains to be done to reverse this ratio.

#### Strong supply has resulted in a more-educated workforce, especially for women and rural workers.

The share of workers with SMP, SMA and tertiary qualifications has strongly increased since 1990. Workers with senior secondary diplomas doubled from 12.3 percent in 1990 to 24.7 percent in 2007 (Table 7.2). Although still low, the share of workers with tertiary qualifications tripled from 2.1 percent in 1990 to 6.2 percent in 2007.<sup>157</sup> The increase of educated workers has been especially dramatic in rural areas where the share of workers with SMA and SMP qualifications almost doubled between 1990 and 2007. Meanwhile, the increase in tertiary-educated workers is even more striking – jumping fivefold in the same period. The increase is more apparent among females, especially at the tertiary level. The share of male workers with tertiary qualification increased from 2 to 6 percent, while it leapt more than fivefold among females, from 1.4 to 7.2 percent.

**Table 7.2** Highest level of education attainment among workers (percent)

	SMP		SMA		Tertiary	
	1990	2007	1990	2007	1990	2007
Urban	15.79	21.23	27.44	33.53	5.99	11.27
Rural	8.12	20.13	6.03	11.80	0.58	2.71
Female	6.86	18.38	8.84	17.65	1.50	7.21
Male	12.13	21.86	13.19	22.55	2.26	5.67
<b>Total</b>	<b>10.08</b>	<b>20.59</b>	<b>11.50</b>	<b>20.75</b>	<b>1.97</b>	<b>6.23</b>

Source: Bank staff estimates, based on Sakernas.

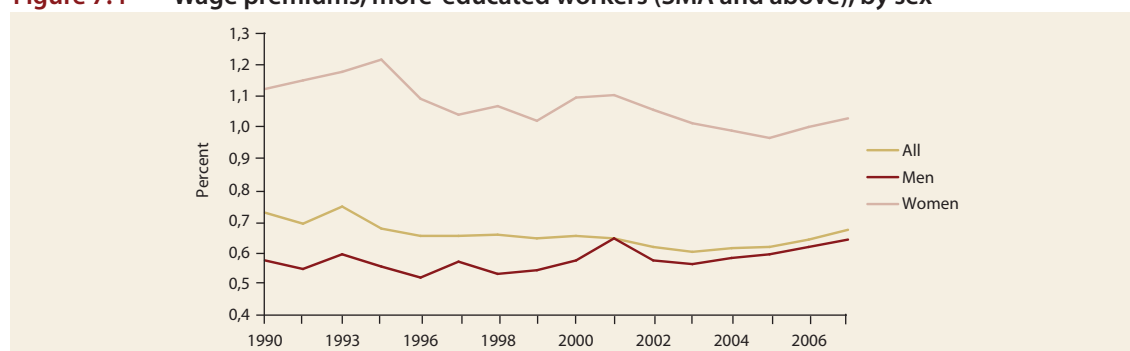
157 Source: Sakernas.

### III. Wage Premiums for Educated Workers

**The wage premium for more-educated workers is high and started growing after 2003.**<sup>158</sup> The level of a worker's education has a strong impact on what he/she can expect to earn in the future. Workers with at least a senior secondary level of education have commanded consistently higher wages than those who only have low levels of education. In 2007, for example, workers with at least a senior secondary diploma, on average, earn 67 percent more than workers with less education.<sup>159</sup> These premiums declined slightly during 1990-2003 with the increase in supply of more-educated workers. Surprisingly, however, the wage premium increased 2 percentage points per year during 2003-07 despite an on-going increase in the supply of more-educated workers.

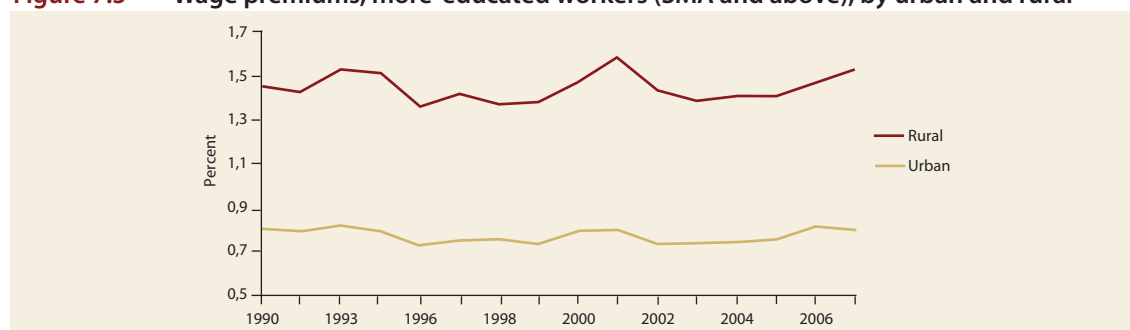
**The premium is higher for more-educated women and urban workers.** Female workers who have at least completed senior secondary school enjoy the highest wage premiums. On average, during 1990-2007, they earned a premium equal to the wage of less-educated women, while the premium for more-educated men was only 57 percent on average. Premiums for more-educated men, however, grew at 1.9 percentage points per year during 2003-2007 – more than four times the rate of women's premiums, which grew at 0.4 percentage points per year (Figure 7.4). Similarly, over 1990-2007 urban workers had an average premium of 75 percent, compared to 67 percent for rural workers, although the premium is growing slightly faster for the latter group (Figure 7.5).

**Figure 7.4 Wage premiums, more-educated workers (SMA and above), by sex**



Source: Bank staff estimates, based on Sakernas.

**Figure 7.5 Wage premiums, more-educated workers (SMA and above), by urban and rural**



Source: Bank staff estimates, based on Sakernas.

<sup>158</sup> The wage premium for more-educated workers is a measure of how much a worker with at least an SMA level of education earns relative to a worker with a level of education below SMA, holding all other characteristics constant.

<sup>159</sup> Source: Bank staff estimates based on Sakernas, 2007. See Annex VII.2.

**The recent growth in wage premiums has been particularly strong for tertiary graduates.** In 2003, workers with a senior secondary (SMA) diploma earned 47 percent more than less-educated workers. By 2007, their premium remained strong but did not increase. In contrast, the premium for workers with a tertiary degree grew from 97 percent to an even stronger 105 percent of the wage of low-educated workers.

## IV. Understanding Persistently High Premiums

**The increase in the skill premium between 2003 and 2007 is puzzling.** In general, changes in the wage and employment prospects of more-educated workers should reflect changes in the interaction between supply and demand for skilled workers. The supply of educated workers – the percentage of adults with at least a senior secondary level of education – has continued to increase rapidly. This larger pool of educated workers should push down the skill premium, while increasing the total number of skilled workers employed. Instead, the skill premium in Indonesia has increased from 60 percent in 2003 to 67 percent in 2007. This section attempts to uncover both the supply and demand-side factors that have contributed to the upward trend in the wage premium for workers with a higher level of education.

### Supply of More-Educated Workers

**An increase in the percentage of educated workers not working has mitigated the effects of increasing supply.** Between 2003 and 2007, the number of educated adults continued to increase at a rapid rate. The percentage of more-educated adults whose primary activity was working, however, actually declined (Table 7.3). This decline resulted from an increase in more-educated workers engaged in housework and attending school. Surprisingly, the decline in participation was especially notable for skilled men. The fall in the employment ratio of skilled men (from 74 to 40 percent) outpaced that of unskilled men (from 76.6 to 74.9 percent) or skilled women (from 38.8 to 37.4 percent). The percentage of more-educated men whose primary activity was housework jumped from 1.5 to 3.5 percent – by far the highest it has been over the 1990-2007 period.

**Table 7.3** Adult population employment status, by level of education

		SMA and above		SMP and below	
		2003	2007	2003	2007
Labor force	Working	61.9	58.5	61.1	61.7
	Not working & looking for work	9.1	10.9	2.2	3.0
	Discouraged workers	1.8	0.6	2.3	0.8
	Other	0.5	0.4	0.6	0.2
Non-labor force	Schooling	8.4	10.0	7.4	7.9
	Housework	14.9	16.1	21.0	20.7
	Other	3.5	3.5	5.3	5.7
<b>Total</b>		<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

**It appears that more-educated men are not excluded from the workforce but are voluntarily withdrawing.** Declining employment ratios for more-skilled men raises concerns that they may be excluded from the workforce because of a decline in jobs available at current wages. Uniform reductions in the rate

of discouraged workers, however, suggest that this was not the case.<sup>160</sup> Between 2003 and 2007, the rate of discouraged workers declined from 2.2 percent to 0.8 percent.<sup>161</sup> The decline for skilled men, from 1.7 to 0.8 percent, was only slightly less suggesting that skilled men, like others, were attracted back to the labor force by increasing job availability. In contrast to the decline in discouraged workers, the core unemployment rate has increased.<sup>162</sup> But, like the discouraged worker rate, the increase has been as large for skilled men as it has been for others.

## Demand for More-Educated Workers

**The demand for more-educated workers is still increasing.** A restrained increase in the supply of more-educated adults in the workforce, however, does not explain persistently high wage premiums. It appears that the demand for workers with higher levels of education and skills is now outpacing supply and, therefore, maintaining the wage premiums enjoyed by more-educated workers.

**Skill requirements for workers have been rising, especially in services, and the trend is expected to continue.** Employers in the manufacturing sector and, especially, the service sector are hiring more workers with higher skills levels now than they did before. (Figure 7.6) and report that their skills requirements have increased over the past two years (Figure 7.7).<sup>163</sup> 82 percent of firms recently surveyed claimed that workers' skills requirements for their firms are increasing because quality standards for products and services are rising higher. 76 percent say that skill requirements are climbing due to a more competitive business environment.<sup>164</sup> This trend is likely to continue. 80 percent of surveyed firms expect that the trend of rising skills requirements will continue across both manufacturing and service sectors (Figure 7.8).

**Figure 7.6** Number of educated workers (SMA and above), by sector (in millions)



Source: Sakernas.

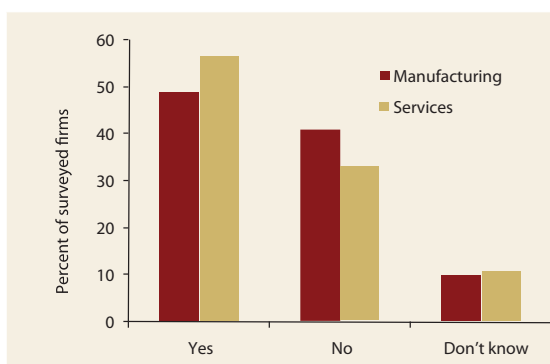
<sup>160</sup> Discouraged workers are defined as those who are not working and have given up hope of finding a job.

<sup>161</sup> Source: Sakernas.

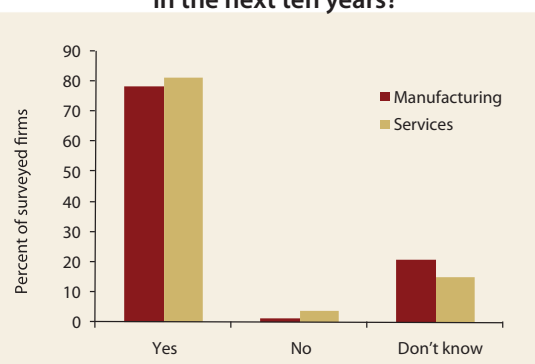
<sup>162</sup> The core unemployment rate is defined as the percentage of those in the labor force that are out of a job and actively looking for work.

<sup>163</sup> World Bank, Employer Skill Survey, 2008. The survey was undertaken by the Human Development unit of the World Bank on 500 medium- and large-sized firms and 200 employees in the manufacturing and service sectors in Indonesia with the purpose of ascertaining trends in demand for skills at the employer and employee level and their drivers. The survey focused on five provinces where economic development is concentrated and, within these five provinces, on representative samples (at the 5% significance level) of manufacturing and service firms.

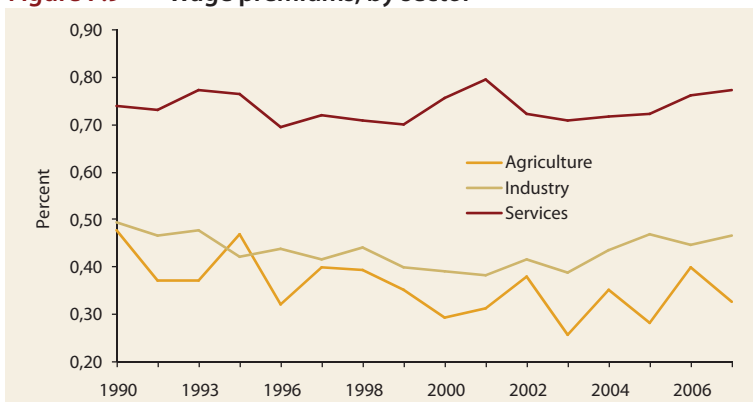
<sup>164</sup> Annex VII.3.

**Figure 7.7** Have skill requirements increased in your firm over the last 2 years?

Source: Indonesia Skills Survey (Forthcoming)

**Figure 7.8** Do you think skill requirements in your firm will continue increasing in the next ten years?

Source: Indonesia Skills Survey (Forthcoming)

**Figure 7.9** Wage premiums, by sector

Source: World Bank staff calculation, based on Sakernas.

**Rising skill requirements are maintaining the high wage premiums demanded by more-educated workers, especially in the service sector.** In terms of wage premiums, more-educated workers in the services sectors are outperforming those in the industrial or agricultural sectors. During 2003-07, the average wage premium for more-educated workers in the agricultural and industrial sectors was 32.4 percent and 44.1 percent, respectively (Figure 7.9). The premium in the service sector, in contrast, was 73.6 percent.

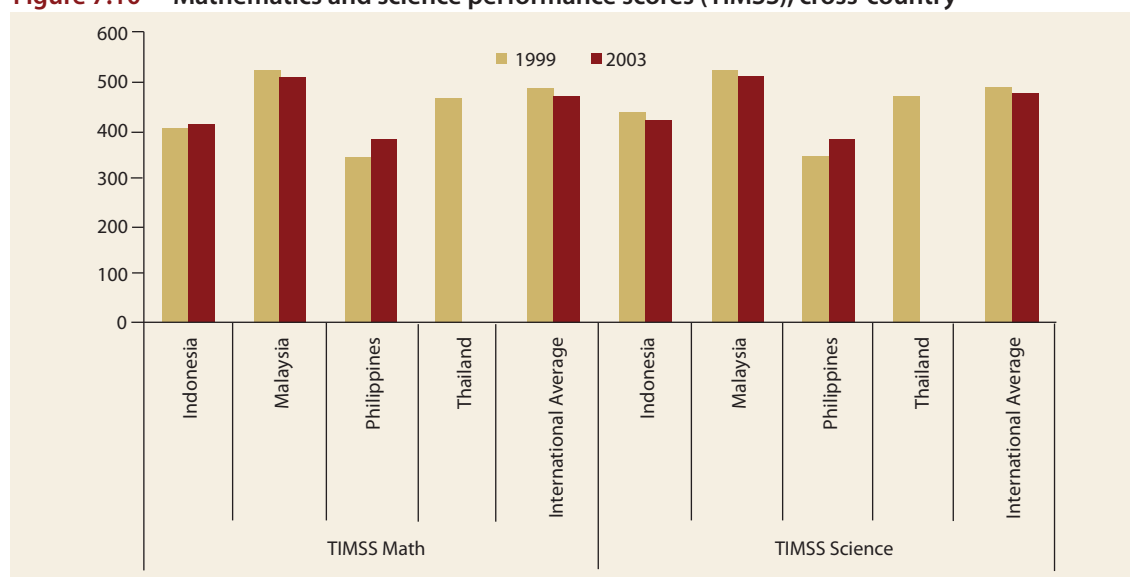
## V. Education Quality & Mismatch Concerns

**Successes in expanding the pool of more-educated adults have not been matched by a deepening in quality.** Educational quality standards still lag behind neighboring countries. Out of 38 and 45 countries that participated in an international comparative assessment in 1999 and 2003 respectively, Indonesia was ranked 34<sup>th</sup> in both years.<sup>165</sup> Although results in mathematics improved, Indonesia's performance in science slipped two places between 1999 and 2003, from 32 to 34.

<sup>165</sup> The Trends in International Mathematics and Science Study (TIMSS) is an international assessment of mathematics and science performance of fourth- and eighth-grade students around the world. TIMSS is developed by the International Association for the Evaluation of Educational Achievement (IEA).



**Figure 7.10 Mathematics and science performance scores (TIMSS), cross-country**



Source: International Association for the Evaluation of Educational Assessment

**The importance of education quality may be reflected in increasing wage inequality of more-educated workers.** One indication that education quality is becoming more important is the increase in earnings inequality, which is especially pronounced among skilled workers. For less-educated workers, wages at the top of the distribution declined slightly (by 0.3 percent per year) while those at the bottom of the distribution fell by 5.6 percent.<sup>166</sup> But wages diverged even more for better-educated workers, as wages at the top of the distribution rose slightly, by 1.6 percent. Meanwhile, educated workers at the bottom of the wage distribution experienced a significant decline of 6.1 percent per year.

**The increase in wage inequality of better-educated workers may be partly due to variations in the quality of education.** Since 2003, Indonesia's business environment has become more competitive; the economy is increasingly driven by the service sector and more dependent on technology. Each of these factors may drive increasing returns so that high-earners now receive more than they used to. It may also be possible, however, that the growing differences in return are due to variations in education quality: some educated workers are receiving better salaries because they graduated from better schools, leaving other students behind. Distinguishing between these two explanations is a challenge, however, given the difficulty of observing educational quality directly.

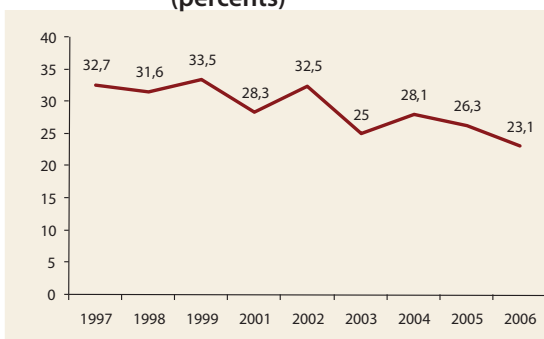
**The demand for high-quality and more-educated students is growing.** All students in Indonesia take national tests after graduating from elementary and junior high school. Students are classified as high-performing if their junior high test score falls in the top 3rd of that year, average if they are in the second third, and low-performing if they fall in the bottom third. Since 2000, the wage premium earned by high-performing students when they are more-educated has increased, from 53 to 75 percent. Meanwhile, the wage premium earned by average students has declined from 57 to 42 percent while the wage premium for low-performing students has remained constant. This increase in the education premium since 2000 was the same for high-performing university graduates and for high-performing high school graduates.

<sup>166</sup> World Bank staff calculations.

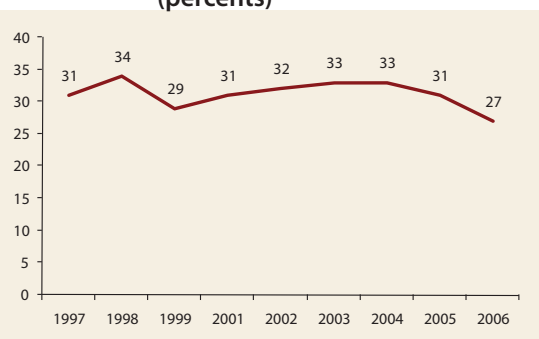
**Beyond the quality of education, challenges remain in matching tertiary graduates with employers looking for the skills they offer.** Jobs mismatch is defined as an incongruity between a worker's education background and their job specifications. Mismatch indicates a problem for firms who face difficulties in finding workers with the skills that they need. It is also a problem for recent graduates who would have a comparative advantage if they were able to find a job in their area of expertise. Recent research indicates that the problem of mismatch for workers with tertiary degrees remains high, especially for men.<sup>167</sup> Graduates with vocational diplomas are affected slightly more than those with university degrees (Figure 7.11a and b).<sup>168</sup>

**The problem of mismatch is on the decline, improving expected wages.** The number of tertiary graduates who are employed in a mismatched job has declined from 32.7 percent in 1997 to 23.1 percent in 2006.<sup>169</sup> This may be due to increasing job opportunities, or innovations in the way that educators and employers are trying to find the right graduates for the right jobs. This trend works to the benefit of employers looking for specific skills. It also benefits graduates who are looking for suitable jobs in their field of study. Although mismatched graduates received higher nominal wages than matched graduates from 1999-2006, recent matched graduates are now earning higher nominal wages in almost every business sector.<sup>170</sup>

**Figure 7.11a Mismatch, vocational graduates (percents)**



**Figure 7.11b Mismatch, vocational graduates (percents)**



Source: Alisjahbana 2008, based on Sakernas.

167 Based on "Education and Skills Mismatch," a report prepared by Armida Alisjahbana (2008a). The research constructed a mismatch indicator using a matrix showing nine categories of majors for workers with university degrees and vocational diplomas, and 63 categories crossing business sector with occupation type. A mismatch is identified when both the occupation type and the business sector do not match major of study in university of vocational diploma education.

168 Alisjahbana, 2008a.

169 Ibid.

170 Ibid. The author reports an exception to this among graduates with majors in education, math and computer, for whom nominal wages for mismatched workers were growing at a faster pace than those with matched job placements.

## Box 7.1 Innovations in Overcoming Mismatch

### Companies Reaching out to Students: PT Astra International

Established in 1957, PT Astra International (Astra) has developed a track record of introducing Japanese and Western organizational and management practices, and training up a cadre of professional managers. As a result, it is often cited as one of Indonesia's most well-managed companies.<sup>171</sup> These innovative policies have allowed Astra to grow from a small trading business into a diversified group with six core businesses: automotive, financial services, heavy equipment, agribusiness, information technology, and infrastructure. The diversified group now has more than 130 subsidiaries employing around 120,000 staff.

The group absorbs around 1,000 new graduates annually through the Recruitment and Career Development, tasked with managing recruitment and human development policies. The program is called **Astra goes to Campus (AGTC)** and uses a range of recruitment strategies that help to reduce mismatch.

- **Exhibitions/Job Fairs:** Astra both participates in job fairs organized by universities and organizes its own university job fairs, called "Astra Days". Astra Days allow the company to reach its target job-seeking audience of undergraduate and graduate university students. Astra's campus activities are the most important of its recruitment strategies, producing 39 percent of new recruits in 2008.
- **Astra Workshop Program (AWP):** This workshop program is designed to develop the skill sets of students, who are chosen from selected universities based on merit. The three-day workshops consist of soft skills development, such as teamwork and leadership, coaching and counseling activities. Successful participants can later (after graduation) go into fast-track recruitment by Astra.
- **Internship:** The program comprises three types of internships that give final-year students hands-on working experience. (i) At the corporate level, university students are given internships for specific positions. (ii) University students are given general internships to gain experience in using their knowledge in a real working environment. (iii) Internships are given to vocational school students, usually by manufacturing subsidiaries such as PT. Astra Honda Motor and PT. Toyota Astra Motor. These vocational internships occur more frequently and involve larger groups (30-50 students per cohort).

At the same time, Astra provides inputs and signals to education providers on the quality and skill-sets of graduates needed. These activities include:

- **Lecturer workshops:** Workshops for lecturers is aimed at enriching lecture materials given by university lecturers. Lecturers are invited to participate from several top universities and learn about the technical or management aspects of production. They are also provided with materials for later use in their lectures.
- **Guest lecturing:** Intended as an out-reach program, Astra staff give lectures at universities on topics ranging from management practices to recruitment processes.
- **Company visits:** These visits familiarize students with Astra operations. The program is customized to match the visit itinerary with the various degree majors. Depending on the focus, students may visit factories to learn about machinery, or have discussions with senior managers about management best practice.

171 For example, The Wall Street Journal, 9-11 May, 2008.

**Box 7.1**      **next****University Career Service: Connecting Job-seekers with Employers**

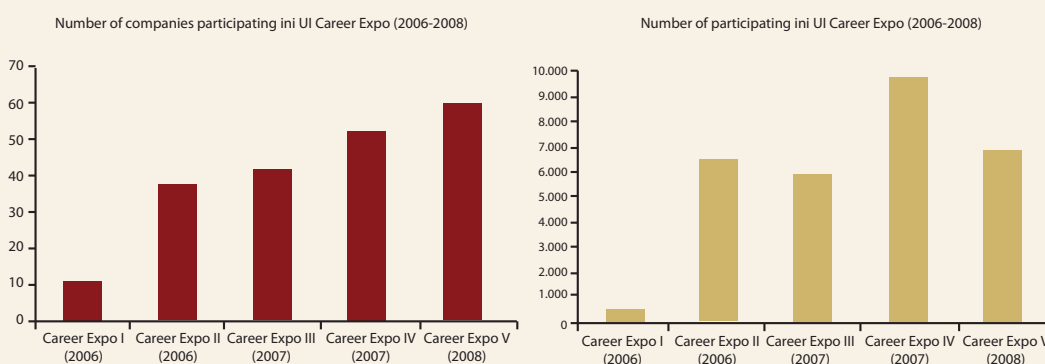
The University of Indonesia (UI) is one of the country's most prestigious universities, with 12 faculties producing up to 2,000 graduates annually. The university established a Career Development Center (CDC UI) in 2005 to mediate between employment-providers and undergraduate and graduate job-seekers, assisting students to succeed in an increasingly competitive jobs market.

Previously, an informal institution, the Job Opportunity Center (*Pusat Peluang Karya*, or PPK), filled this mediating role, with PPK later merging with CDC UI. In addition to the central CDC UI, several faculties have their own independent CDCs. Although there is cooperation between the central and faculty CDCs, the latter focus on the employment market specific to their faculty. Currently with about 4,000 members, university undergraduates and graduates pay Rp 50,000 (US\$5.40) to join CDC UI for one semester and benefit from its three core services:

**Organizing UI Career Expositions:** The CDC invites prospective employers to participate in a biannual expo where they set up booths on the campus. These firms rent a booth space to participate in order to find fresh graduates to fill available positions. The popularity of the event is increasing, attracting more employers and students. The first expo, hosted in 2006, included 10 companies and 500 student job seekers. By 2008, participation increased to 58 companies and 6,500 job seekers. According to the CDC, 20-30 percent of students attending the event were successful in finding a job.

**Conducting the Recruitment Process:** Company recruitment processes are conducted at least monthly, depending on demand from partner companies. Depending on the type of cooperation, CDC UI may conduct initial filtering of candidates and, if required, also arrange interviews.

**Organizing Seminars/Training:** Seminars and training are conducted at least twice a month and are aimed at helping UI graduates to compete more effectively in labor markets. With 50-100 participants attending each seminar/training, the focus depends on a variety of skills highlighted by companies as often lacking in job-seekers. The emphasis of training is often on soft skills such as teamwork and leadership. In some cases, companies conduct the training as part of their recruitment process, leading to recruitment of qualified and successful participants. Most training is free for CDC UI members, although non-members may also participate for a fee.



## VI. Recommendations

**Continue allocating resources for the on-going expansion of senior secondary high schools and tertiary institutions.** Since the premium for workers with senior secondary graduates is still high, the market can absorb many more workers who have graduated from secondary and tertiary levels of education. Continued expansion of SMA schools will continue to satisfy the demand for more-educated workers. Premiums, however, are high and still climbing for workers with tertiary qualifications. Investments in expanding tertiary institutions will share the benefits more widely and feed the rising demand for highly skilled workers.

**Undertake research to identify the causes of mismatch and identify how workers can be more efficiently matched with prospective employers.** Efforts by employers and universities to match recent graduates with prospective employers are encouraging and should be expanded further. There are many remaining barriers, however, that make it difficult for workers to find suitable jobs in their area of expertise or for dismissed workers to be re-matched with employers. Explore strategies to that encourage the mobility of job-seekers and provide them with information about jobs available according to their area of expertise and experience.

**Simultaneously, take measures to improve the quality of education at all levels.** The market for workers is demanding a higher level of skills in response to a more competitive business environment. Improving educational quality can also be accompanied by measures to improve worker skills levels through public training programs, a topic that will be addressed in Chapter 9.

**These recommendations raise the question: how should the government expand the supply of educated and skilled workers to meet rising demand from employers?** There are different types of senior secondary high schools and tertiary institutions that can be promoted in education expansion reforms. The next chapter will examine the current policy debate over whether general or vocational senior secondary schools will ensure that the future workforce will be in the best position to take advantage of the demand for more-educated workers.

# Chapter 8



## Building A Skilled Workforce (Part I)

Equipping Future Workers through Formal Education



## Chapter 8 Summary & Recommendations

Indonesia's senior secondary education system is divided into four types of schools: public general, public vocational, private general and private vocational. The increase in enrollment rates has been driven by an expansion in public general schools. This changed with the launching of a vocational expansion policy by the Ministry of National Education that aims to reverse the ratio of vocational to general senior secondary schools to reach the target of 70:30 by 2015. There is a moratorium on building more general schools; vocational schools, on the other hand, are rapidly expanding and absorbing more students. By 2007, approximately one-quarter of all students were enrolled in vocational schools, falling short of quota targets.

Looking at the performance of generations of graduates, vocational and general education tracks have led to the same labor market outcomes with the exception of higher formality rates for men. Success depends more on whether graduates have a public school diploma than whether they attended vocational or general schools. The performance of male graduates from vocational schools, however, has deteriorated over time and they now face stiff wage penalties. This may be because men tend to choose technical and industrial majors that are becoming less relevant in a jobs market that is increasingly shifting towards the service sector. Women, on the other hand, choose service-oriented majors and are emerging with better outcomes.

Students with higher academic abilities will be most affected by implementation of the "70:30" policy. With shrinking access to public general schools, more students will be forced into attending vocational schools. Male students who are high test-scorers face large wage penalties if they graduate from vocational schools instead of public general schools. Vocational schools, however, are effective in helping male students who are academically weaker enter the labor market.

Without clearly improving labor market outcomes or reducing unemployment rates, the "70:30" policy does not justify the higher costs of vocational education that will be paid by the government as well as parents who face higher "out-of-pocket" costs. Removing the moratorium on public general schools will help to cost-effectively meet the demand for educated workers.

Vocational schools still have a role in educating future workers, but there is a need to improve the quality and relevance of skills taught. This can be done by fostering stronger linkages with prospective employers, and adopting and implementing minimum service standards. The "right mix" of schools can be determined by following the demand for skills in the labor market rather than setting pre-determined targets.

## I. Introduction

### **Workers with higher levels of education and job-related skills are in high demand by employers.**

Strong demand has buoyed persistently high wage premiums for educated workers, even though the pool of these workers has rapidly expanded. While enrollment in primary education is near universal in Indonesia, the share of the workforce with higher levels of education remains very low. In 2007, about one-fifth of the workers had graduated from senior secondary school and only approximately 6 percent have attained a tertiary degree.<sup>172</sup> To meet the demands of the labor market, therefore, it is critical to expand the pool of educated workers. Educating the workers of the future begins with expanding access to formal education, particularly to junior and senior secondary schools.

**The challenge facing today's policy makers is identifying the best ways to increase the supply of skilled workers for the future.** The attention of policy makers has focused predominantly on expanding opportunities to attend senior secondary school. Planning expansion is complicated, however, given that there are different types of secondary schools in Indonesia: general and vocational, public and private,

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172 Sakernas. See Chapter 7, Table 7.2.



secular and religious. The response of the Ministry of National Education (MoNE) has been to prioritize the expansion of vocational senior secondary schools to equip future workers with job-specific skills. This policy has generated a lively debate about what kind of senior secondary education best prepares students for succeeding in today's labor market.

**Chapter 8 examines which types of senior secondary schools best prepares graduates for succeeding in the labor market.** The policy debate around the expansion of senior secondary education has largely taken place in the absence of rigorous analysis. Recent research on the effects of school types on labor market outcomes, presented in this chapter, can help support evidence-based policy making and foster policies that help future graduates to succeed in the labor market. The chapter is divided into four sections:

- The first describes the senior secondary education system in Indonesia.
- The second describes the government's recent policy to promote vocational senior secondary education and the impact on student enrollment.
- The third examines the labor market outcomes of senior secondary graduates to assess which type of school gives students the best chance of succeeding in finding a job.
- The fourth and final section offers recommendations for expanding senior secondary education and improving the quality of education.

## II. Senior Secondary Education in Indonesia

**The senior secondary education system in Indonesia, both public and private, is divided into general and vocational tracks.** The secondary education system in Indonesia is divided into junior and senior high school, each taking three years to complete. The country has two different school systems, secular and Islamic, although less than one-tenth of school-aged children attend the latter.<sup>173</sup> In the secular school system, children graduating from junior secondary school must choose whether to enroll in a vocational senior secondary school (*Sekolah Menengah Kejuruan*, or SMK) or a general senior secondary school (*Sekolah Menengah Atas*, or SMA).<sup>174</sup> Schools are further categorized on the basis of whether they belong to the private or public systems.

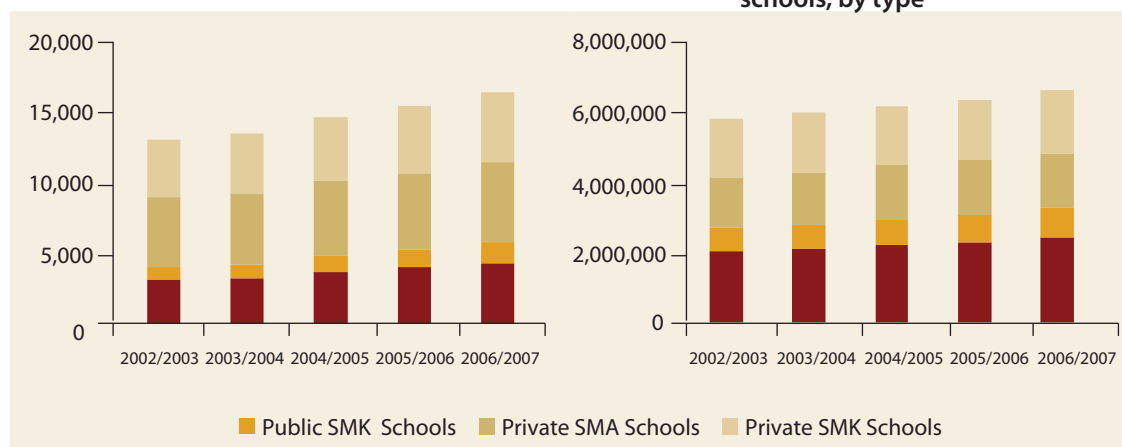
**There is little overlap between the vocational and general education tracks.** The curricula of these two types of senior secondary schools are almost completely separate, with only some overlap on the subjects of English and Indonesian language. General high schools typically do not offer vocational subjects, such as carpentry or machinery. Vocational schools focus almost exclusively on job skills. The schools are specialized according to majors that include: business management; technical, which includes machinery and information technology; agriculture and forestry; community welfare; tourism; arts and handicraft; health and marine. In addition, there are some very specialized vocational senior secondary schools that focus on aviation and shipbuilding. Business management and technical/industry SMKs are the most popular, accounting for approximately 88 percent of all vocational schools.<sup>175</sup>

173 Newhouse and Suryadarma, 2009. In 2007, *Susenas* shows that only 8.4% school-age children are enrolled in the Islamic system. For this reason, the discussion and analysis for Chapter 8 only considers the secular school system.

174 This chapter uses the terms SMK and SMA when referring to vocational and general senior secondary schools, respectively. A third school type at the senior secondary level, the Islamic schools (*Madrasah Aaliyah*), is not included in the analysis for this chapter. The number of senior secondary students enrolled in Islamic schools, however, is very small compared to SMK or SMA. Only 8.4 percent of school-aged children were enrolled in the Islamic school system, according to the 2007 National Socio-Economic Survey (*Susenas*).

175 Business and management senior secondary vocational schools are known as *Sekolah Menengah Ekonomi Atas* (SMEA), while technical and industry senior secondary vocational schools are referred to as *Sekolah Teknik Menengah* (STM). In 2005-06, of a total of 6,025 SMKs, 39 percent were STMs and another 49 percent were SMEAs. (Alisjahbana, 2008c).

**Figure 8.1 Senior secondary schools, by type** **Figure 8.2 Enrollment in senior secondary schools, by type**



Source: MoNE, [www.depdiknas.go.id](http://www.depdiknas.go.id)

**Increased enrollment has been mostly driven by an expansion of public, general schools.** Access to senior secondary schools is increasing, pushing enrollment rates upwards. This trend has largely been driven by more construction of public schools, which were providing more opportunities for young people to attend school (Figures 8.1 and 8.2).<sup>176</sup> Although more students used to attend private schools, they were equally distributed between private and public schools by 2006-07. Between 2002 and 2007, more general schools were built every year than vocational schools, absorbing the majority of new students every year.

### III. Expansion Policies for Vocational Education

**The Government launched a vocational school expansion plan to reduce youth unemployment rates.** According to their strategic plan for 2005-09, the Ministry of National Education (MoNE) aimed to place 70 percent of senior secondary students in vocational schools and 30 percent in general schools by 2015.<sup>177</sup> The intent of the “70:30” policy was to reduce youth unemployment and better prepare graduates for employment by providing ready-to-work skills.<sup>178</sup> The justification for the policy was the belief that SMK graduates have a higher chance of being absorbed into the labor market because their unemployment rates are historically less than half that of SMA graduates.<sup>179</sup>

**To reach the target, the ministry is rapidly building vocational schools and has instituted a moratorium on new general schools.** MoNE's policy target is to achieve a 50:50 vocational to general student ratio by 2010 (Table 8.1), and the ratio of 70:30 by 2015. It has three general strategies to achieve the desired quota: freeze construction of new SMA schools, accelerate the construction of new SMK schools, and convert existing general schools into vocational schools. The ministerial plans also outline three additional objectives related to vocational education: the establishment of 441 international SMKs by 2010; the revitalization of education equipment found in SMKs, and; the development of entrepreneurship programs for vocational students.<sup>180</sup>

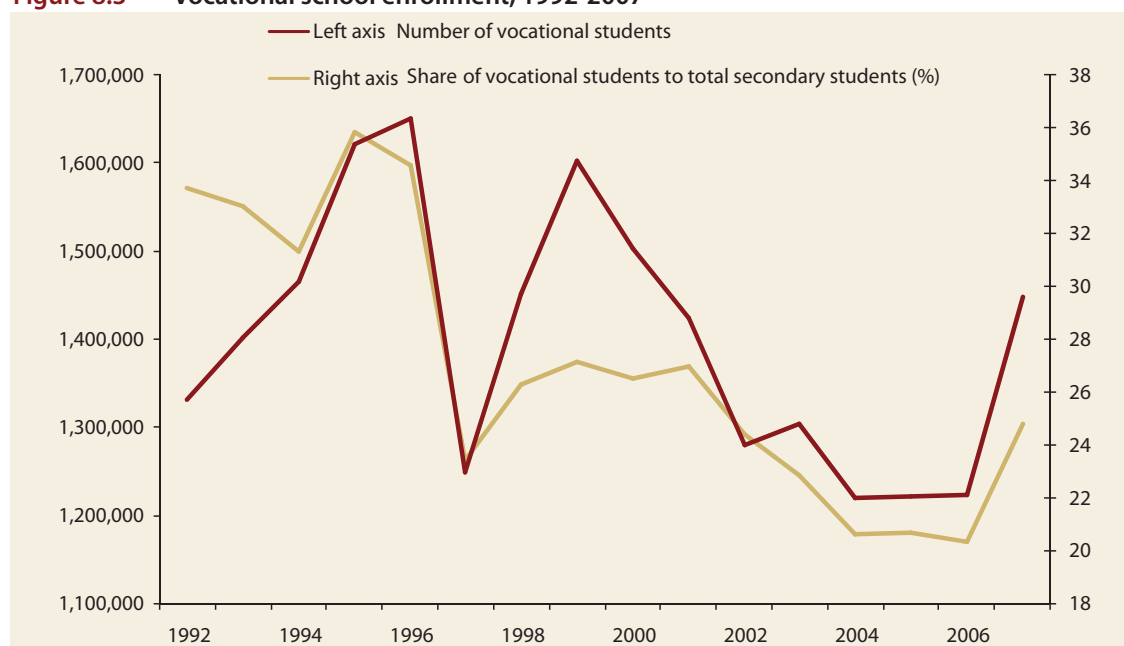
<sup>176</sup> Annex VIII.1.

<sup>177</sup> Alisjahbana, 2008c; Rencana Strategis Departemen Pendidikan Nasional Tahun 2005-2009 (MoNE, 2006a). The “70:30” policy aims to increase the number of both private and public SMKs.

<sup>178</sup> Alisjahbana, 2008c.

<sup>179</sup> MoNE, 2006b.

<sup>180</sup> Ibid.

**Figure 8.3** Vocational school enrollment, 1992-2007

Source: MoNE, www.depdiknas.go.id

**Table 8.1** Vocational technical education development roadmap

Targets	2005/06	2006/07	2007/08	2008/09	2009/10
Student ratio: SMK to SMA	35:65	37:63	38:62	43:57	50:50
Number of SMK	6,000	6,150	6,300	6,500	6,600
Number of SMK students (million)	2.1	2.4	2.9	3.5	4.3
Number of SMK teachers	94,000	110,000	138,000	174,000	216,000

Source: MoNE<sup>181</sup>**Table 8.2** Ratio applicants to entrants

School type	Ratio
<b>General (SMA)</b>	<b>1.44</b>
Public	1.57
Private	1.22
<b>Vocational (SMK)</b>	<b>1.26</b>
Public	1.53
Private	1.13

Source: MoNE

**The policy is taking effect and more students are enrolling in vocational schools.** 1,211 additional vocational schools were created from 2006-07 until 2008-09. Over the same period 375 general schools were closed.<sup>182</sup> This has resulted in the reversal of a long-term, declining trend of vocational school enrollment (Figure 8.3). By 2007, increasingly more students were enrolling in vocational schools. Most of the increased uptake was through private vocational schools that are absorbing more male and female students.<sup>183</sup> Despite the jump, however, it is unlikely that the Ministry will meet either its 50:50 target by 2010 or the 70:30 target five years later. Only 24 percent of all senior secondary students were attending SMKs in 2007, falling short of the interim roadmap target.

181 Alisjahbana, 2008c.

182 Annex VIII.1.

183 Newhouse and Suryadarma, 2009.

### Box 8.1      The South Korean experience: expanding vocational education may not be the answer

Given the Indonesian government's interest in expanding vocational education, it is useful to look at the experience of other countries that have initiated similar policies in the past. One such example is South Korea, which implemented a vocational expansion policy in the early 1990s.

**A decline in vocational education.** Rapid economic growth in South Korea during the 1960s and 1970s fueled a growing demand for skilled workers and technicians. The enrolment ratio of vocational to general high schools (VHS) increased from 40 percent in 1965 to 45 percent in 1980. In the 1980s, however, the share of VHS students started to decline, from 45 percent of all high school students in 1980 to only 35 percent in 1990. The drop was caused by a rapid increase in enrolment rates for higher education.

**The "50:50 Policy" for vocational expansion.** The government of South Korea felt that vocational education should be expanded to reverse the shortage of skilled workers and curb excessive demand for tertiary education. Consequently, in the early 1990s, the South Korean government adopted a "50:50 Policy" in order to increase the share of VHS students to 50 percent by 1998. The government set about converting general high schools into VHS and building new vocational schools to encourage higher enrolment. But the policy was a failure: although VHS enrollment reached 42 percent in 1995, the ratio declined thereafter and stood at only 29 percent in 2005 — well below the original target.

**Why the policy failed. There were two main reasons for the failure.** First, parents did not accept that students of general secondary and tertiary education faced worse employment prospects and, therefore, resisted the policy. Second, contrary to the government's analysis, unmet demand for skilled workers did not necessitate an increase in VHS enrolment. Labor-saving technology (e.g., automated machinery) replaced many repetitive and routine jobs previously done by VHS graduates.

**Research supports parents' view that general education is superior.** Recent research seems to vindicate parents' views that the returns to a general high school education are superior to vocational education. Analysis of panel data for 2001-06 found that while there was no significant difference in employment results between vocational and general high school graduates, average monthly wages were roughly 10 percent higher for general high school graduates than their vocational peers.

**Possible VTE lessons for Indonesia. South Korea's experience suggests two lessons.** First, VTE expansion policies will fail unless it is satisfying unmet demand and in-line with evolving market conditions. Second, careful research is needed to test the hypothesis underlying school expansion. Long-term changes in the demand for skills, labor outcomes for graduates of general and vocational schools, together with better analysis of the social demand for general and higher education, should all be undertaken before expansion policies are accepted and implemented.

*Source:* "VET Provision and Expansion: Korean Experiences," presentation given at the ESA workshop, Bogor, Indonesia, on May 16, 2008, by Sung Joon Paik, World Bank Senior Education Specialist.

**This shift, however, is not in-line with parents' demand.** Senior secondary vocational schools are second choices for most parents. Parental demand, measured by applicant to enrollment ratios, is slightly stronger for SMA than for SMK, regardless of whether the schools belong to the public or private systems (Table 8.2).<sup>184</sup> This preference is even stronger for higher educated parents who are less likely to enroll their children in vocational schools, especially private SMK.<sup>185</sup>

184 Luque, 2009.

185 Newhouse and Suryadarma, 2009.

**Implementation of the “70:30” policy has taken place in the absence of rigorous empirical analysis.**

International evidence on the benefits of vocational education is mixed. Some studies have found that vocational graduates earn a wage premium, while other studies have found either no differences in labor market outcomes or wage premiums for general graduates.<sup>186</sup> South Korea attempted to implement a vocational expansion policy in the 1990s to increase the availability of skilled workers. The policy, however, failed and vocational high school enrollment actually fell between 1995 and 2005 (Box 8.1). Nevertheless, the “70:30” policy was launched in the absence of solid empirical evidence to justify the policy. Subsequent studies, however, have examined the outcomes of vocational high school graduates in Indonesia.<sup>187</sup> The next section fills this gap and considers how well different types of senior secondary education perform in preparing graduates for success in the labor force.

## IV Assessing Graduates Success in the Labor Market

**Based on the performance of graduates over the past 20 years, vocational and general education tracks lead to almost the same labor market outcomes.**

Women in vocational schools have had the same labor outcomes as graduates from public general schools.<sup>188</sup> Earnings, unemployment and formal employment rates are the same for female vocational graduates (public and private) and as they are for those who attended public SMA. Similarly, men who graduated from vocational schools are as likely to be unemployed as those from general schools and can expect the same level of earnings.<sup>189</sup> There are some benefits, however, for men who graduated from public SMK: they are more likely to be employed in the formal sector.

**The success of graduates depends more on whether they have a public school diploma than on whether they attended general or vocational school.**

The difference in labor market outcomes between graduates from private and public school is more significant. Male private school graduates earn substantially less than those who were educated in the public system. This is the case regardless of whether they graduated from general or vocational public schools. Similarly, female graduates from private general schools experience lower labor force participation and formal employment rates than graduates from the other three types of senior secondary schools.

**Students from disadvantaged backgrounds who attend private schools face poor job prospects.**

Paternal level of education is a proxy for family background; those whose father has at most a junior

186 Ibid.

187 The World Bank recently produced three reports on the effects of vocational education. See Chen (2009) and Luque (2009). Chapter 8 is based on the findings by Newhouse and Suryadarma (2009) who estimated heterogeneous effects of school type, across scholastic ability, age, and family background, for both men and women. Their use of a household panel, covering 14 years, enabled them to distinguish between age and cohort effects and assess changes in the returns to vocational education over time. To the extent that bias due to confounding unobserved characteristics remains constant over time, this provides an accurate estimate in the changes in returns over time.

188 Annex VIII.3 and Annex VIII.4. The former shows labor market outcomes for sub-groups of senior secondary graduates. Non-random selection into employment, however, can bias the estimated effects of school type on formality and wages, if unobserved determinants of school type are correlated with the probability that different types of graduates choose to work. It is therefore important to control for as many pre-determined or exogenous characteristics as possible. Annex VIII.4 shows labor market outcomes controlling for a full range of observable characteristics as possible to isolate the effects of type of senior secondary schools. These variables include: parental education, for both resident and non-co-resident parents; height; self-reported size of residence at age 12; grade repetition in junior high and elementary school; public lower secondary school attendance; working while attending elementary school, or lower secondary, and year of interview. In addition, district of junior secondary graduation fixed effects to take into account differences in the supply of education, community characteristics, and peer effects that vary across districts.

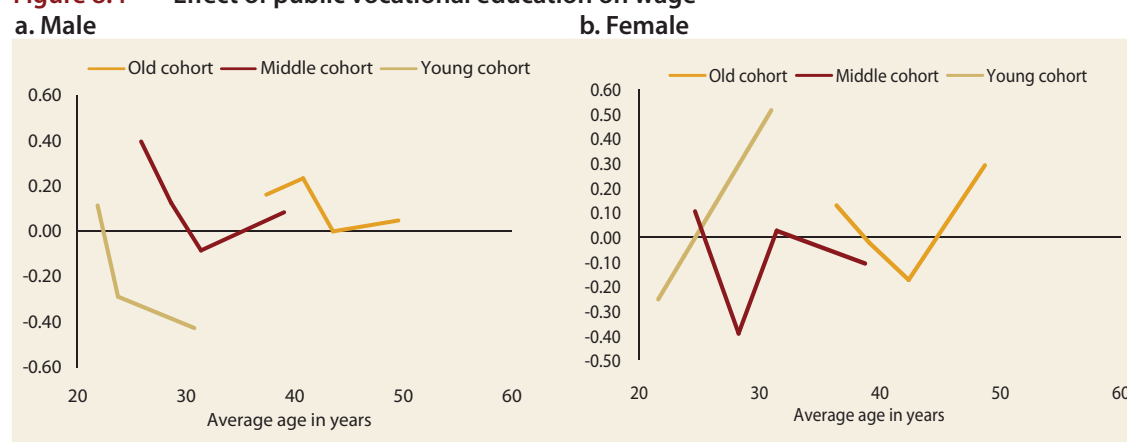
189 The wage of self-employed individuals is calculated using their average hourly profit. The Statistics Indonesia urban price index is used to deflate 1993 wages, while IFLS price indices are used for subsequent years (Newhouse and Suryadarma, 2009).

secondary education are categorized as ‘disadvantaged,’ while those whose father has at least a senior secondary education are considered ‘advantaged.’ Among disadvantaged male workers, private general graduates face the lowest prospects of a formal job and a large wage penalty relative to public school graduates.<sup>190</sup> Therefore, men from disadvantaged backgrounds obtain the largest benefits from public vocational education and the largest wage penalties from private schools. The effects are similar for women. Among these disadvantaged female workers, private general graduates fare the worst, facing a lower participation and job formality rate.

**Recently, however, the performance of male graduates from public vocational schools has eroded and is now a penalty.** Recent male public SMK graduates are no longer more likely to be employed in the formal sector.<sup>191</sup> Of more concern, there has been a dramatic decline in the wage premium among young men who have recently graduated from public SMKs. While a 25 year old man who graduated from public SMK used to expect a strong wage premium, they now face a stiff wage penalty that deteriorates further over time (Figure 8.4a). Estimates of the wage penalty for the youngest cohort of men reached 30 percent in 2000 and 43 percent in 2007.

**The declining performance of male graduates from vocational schools may result from changes in the structure of the economy.** Since the financial crisis of 1998, the economy has increasingly relied on the service sector to generate growth.<sup>192</sup> Annual growth in the industrial sector has fallen dramatically, while annual service sector growth remained strong. From 2003 to 2007, employment in the service sector has grown more rapidly than employment in the industrial sector employment. This change in the structure may be negatively affecting male graduates from vocational schools because they tend to choose technical and industrial majors over more service-oriented majors (Figure 8.5).

**Figure 8.4** Effect of public vocational education on wage<sup>193</sup>



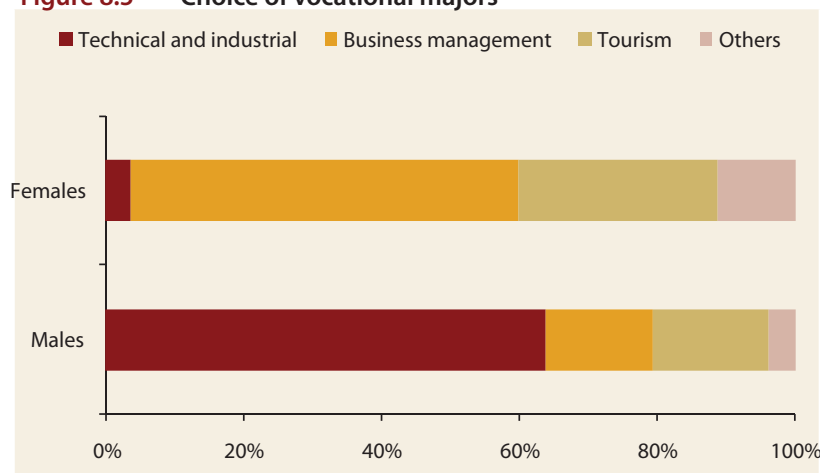
Source: Bank staff calculations, based on IFLS 1993, 1997, 2000, 2007.

190 Annex VIII.5.

191 Annex VIII.7.

192 See Chapter 2 for a discussion on the changes in the economy and effects on sectoral job creation.

193 Newhouse and Suryadarma, 2009. To examine age effects, the sample is divided into three cohorts: old (those born between 1940 and 1962), middle (1963-1972), and young (1973-1980). Note: Each point shows the estimated effect of public vocational relative to public general for a particular cohort and year. The horizontal axis indicates the average age of that cohort in that year.

**Figure 8.5** Choice of vocational majors

Source: World Bank staff calculations, based on Susenas, 2006

**Women, on the other hand, tend to choose service-oriented majors in vocational school and emerge with better outcomes.** They tend to choose majors compatible with the service sector, where educated workers benefit from higher wage premiums.<sup>194</sup> 56 percent of women are enrolled in business management and 28.9 percent study tourism (Figure 8.5). Since in the service sector, women in vocational school may disproportionately face

better outcomes. There are some early indications that this is already happening. The youngest cohort of women graduating from public SMK may be experiencing an increase in their wage premium, beginning at 30 years of age (Figure 8.4b).<sup>195</sup>

**Implementation of the “70:30” policy may have a negative effect on students with higher academic abilities.** Academically strong students, who score in the top third of standardized exams, are far more likely to attend general schools.<sup>196</sup> The vocational expansion policy – and the closure of general schools for conversion into vocational schools – threatens to push more top-scoring students into the vocational track. It is these high scoring men who stand the most to lose from investing in vocational education in an economy that increasingly values broadly educated and cognitively skilled workers. They face a 41 percent wage penalty for attending public vocational schools and a 49 percent penalty for attending private SMK.<sup>197</sup> Higher scoring women, like higher scoring men, appear to suffer the largest penalty for vocational education. Public and private vocational graduates who are higher scoring women earn a 16 and 32 percent wage penalty, respectively.

**Vocational schools, however, are as effective in preparing male students with lower levels of academic ability for the labor force as general schools.** Students with less-educated parents and those with lower academic abilities are disproportionately likely to enroll in private SMK schools.<sup>198</sup> Even though attending private vocational schools leads to significant wage penalties for high-scoring students, low-scoring students fare better. Male and female low-scoring students are likely to earn as much as if they attended public general or public vocational schools.<sup>199</sup> Female graduates from private SMK, however, are much more likely to be unemployed and less likely to be formally employed. Private vocational education, therefore, only works to the benefit of male students who are academically weak; they are as likely to be employed and have a formal job as they would in any other type of school. Low-scoring male graduates

<sup>194</sup> See Chapter 7 for more information on returns to education by sector of employment.

<sup>195</sup> Annex VIII.7. Note: the increase in the wage premium for the youngest cohort of women is large, but the effect is not statistically significant.

<sup>196</sup> Annex VIII.6.

<sup>197</sup> Annex VIII.9.

<sup>198</sup> Annex VIII.6.

<sup>199</sup> Annex VIII.9.



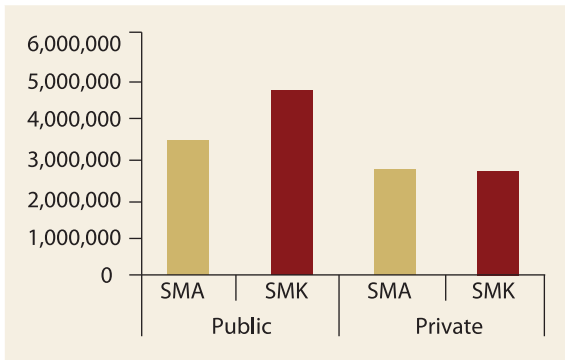
from public vocational schools not only earn as much as those from public general schools, but they are also significantly less likely to be unemployed. This is in contrast to low-scoring women who are more likely to be unemployed if they graduate from public vocational schools.

## V Recommendations

**The current “70:30” policy will not achieve its goal to reduce overall unemployment rates.** Despite the intention of the expansion policy, most graduates from vocational schools are as likely to be unemployed as graduates from general schools. Male graduates from public vocational schools with lower academic abilities are the only sub-group less likely to be unemployed. Graduates from both types of schools are also just as likely to find preferred jobs in the formal sector. Wage and formal employment benefits that existed in the past for male graduates have eroded and have more recently become a wage penalty. Male students with high academic ability have the most to lose if there are fewer opportunities to attend public general schools and they are pushed into vocational schools.

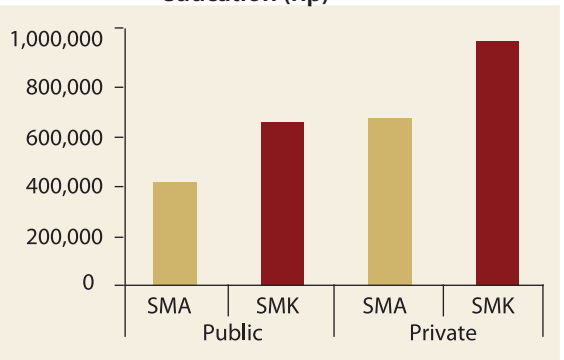
**Without clearly improving labor outcomes for all, the current broad expansion of vocational schools is not cost effective.** Vocational schools are more expensive than general schools. The estimated annual cost per student for public SMA is Rp 3.5 million (Figure 8.6).<sup>200</sup> Estimated public SMK costs per student are 37 percent higher at Rp 4.8 million. The vocational expansion policy will require an additional budgetary input of approximately Rp 5 trillion per year once the 70:30 target is reached.<sup>201</sup> This is a massive increase, equal to 65 percent of the entire predicted senior secondary budget for 2009 of Rp 8.9 trillion.<sup>202</sup> “Out-of-pocket” costs for parents are 36.9 percent higher for public SMK than public SMA (Figure 8.7).<sup>203</sup> Similarly, private SMK is 31.4 percent more expensive for parents than private SMA. Given the conversion of general schools into vocational schools, however, there will be fewer options for parents who want to send their children to senior secondary school. This will especially affect poor families who are disproportionately represented in private schools and must pay higher “out-of-pocket” costs.

**Figure 8.6** Public education costs (Rp)



Source: Ghozali

**Figure 8.7** “Out-of-pocket” costs for education (Rp)



Source: Susenas, 2006

200 Ghozali, 2006. These figures represent the costs, in 2003 Rupiah, paid through public expenditures, not including household expenditures towards educational costs.

201 World Bank staff estimates. Figures are 2003 Rupiah.

202 World Bank, 2007.

203 Annex VIII.2 (Luque, 2009). Households surveyed in IFLS2000, in contrast, report that private general schools are the most expensive, followed by private and public vocational schools respectively, with public schools being the least expensive (Newhouse and Suryadarma, 2009).

**Remove the moratorium on public general senior secondary schools to cost-effectively meet the demand for educated workers.** Although the share of workers with senior secondary education is growing, there is much room for expansion so that young workers can benefit from strong wage premiums for educated labor. Public general schools are the most cost effective way for the government to prepare students for succeeding in the workplace. Parents also prefer public education, especially SMA schools, because it is less expensive than private education and provides their children with the best chances to succeed in the labor market. Without expanding access to public general schools there is a risk that students with higher academic ability, especially men, will be unable to benefit from wage premiums that they could expect with a public SMA diploma.

**Vocational schools still have an important role in educating future workers, but there is a need to improve quality and the relevance of skills.** Although the expansion of the education system should focus on more cost-effective general schools, vocational schools still have an important role to play in improving the labor outcomes of future workers. Vocational schools perform just as well as general schools in training male students who are weaker academically and, if they attend public vocational schools, can even decrease their likelihood of being unemployed. The deterioration in the returns to vocational education for men over time, however, may be indication that the quality and appropriateness of vocational schools is in need of improvement. Supporting the needs for school improvement, the Ministry of National Education states that most SMKs in Indonesia currently fall below national standards.<sup>204</sup> Qualitative assessments have indicated that approximately half of SMKs lack the necessary technical facilities to support effective learning, and equipment is often different from that actually used by industries in practice.

**Improve vocational education quality by fostering linkages with firms, while adopting and implementing minimum service standards.** Recent research examining model vocational schools in Indonesia shows that fostering industrial linkages, ensuring adequate financial resources, and improving teacher quality are keys for success (see Box 9.2).<sup>205</sup> Working together with industry leaders, MoNE can seek to ensure that vocational curriculums are relevant for the current needs of the workforce and provide students with on-site training opportunities. Minimum standards can also help to equalize the quality of education across different schools and ensure that private schools are improving.

**Avoid setting pre-determined targets for vocational enrollment; instead, determine the “right mix” of schools by following the demand for skills in the labor market.** Setting quotas is not the best approach to determine school enrollment levels. The supply of education should be flexible so that it can better respond to changes in the demand, following the fluctuations of the labor market.. Research projects can play a useful role in pinpointing which vocational skills are in most demand by workers. First, conduct tracer studies on labor market outcomes of students from different types of schools and vocational majors to identify where premiums are higher. Second, conduct regional employer surveys to identify skills in demand by prospective employers. The results of such research can help guide decisions regarding school expansion policies.

**Finally, develop a comprehensive strategy for vocational education, including both formal and non-formal institutions.** Vocational senior secondary schools are not the only way to provide job-relevant skills for the future workforce. Skills training programs play an even more important role, especially considering that most of Indonesia’s workforce has not completed a senior secondary level of education. The next chapter, therefore, looks at how skills training programs can provide second-chances for workers who have not attended senior secondary or tertiary schools.

204 World Bank interview with MoNE, 2008. There are currently over 7,000 SMK in Indonesia. Of those, 290 are categorized as high performers, while around half fail MoNE’s standards.

205 Wicaksono, 2008.

## Box 8.2 Model SMK: The Chemical Analyst Vocational School in Bogor

The *Sekolah Menengah Kejuruan Analisis Kimia Bogor*, popularly known as SMAK Bogor, is a vocational senior secondary school under the auspices of the Ministry of Industry. The school is one of only three public vocational schools nationwide that trains chemical laboratory analysts, a profession increasingly in demand.

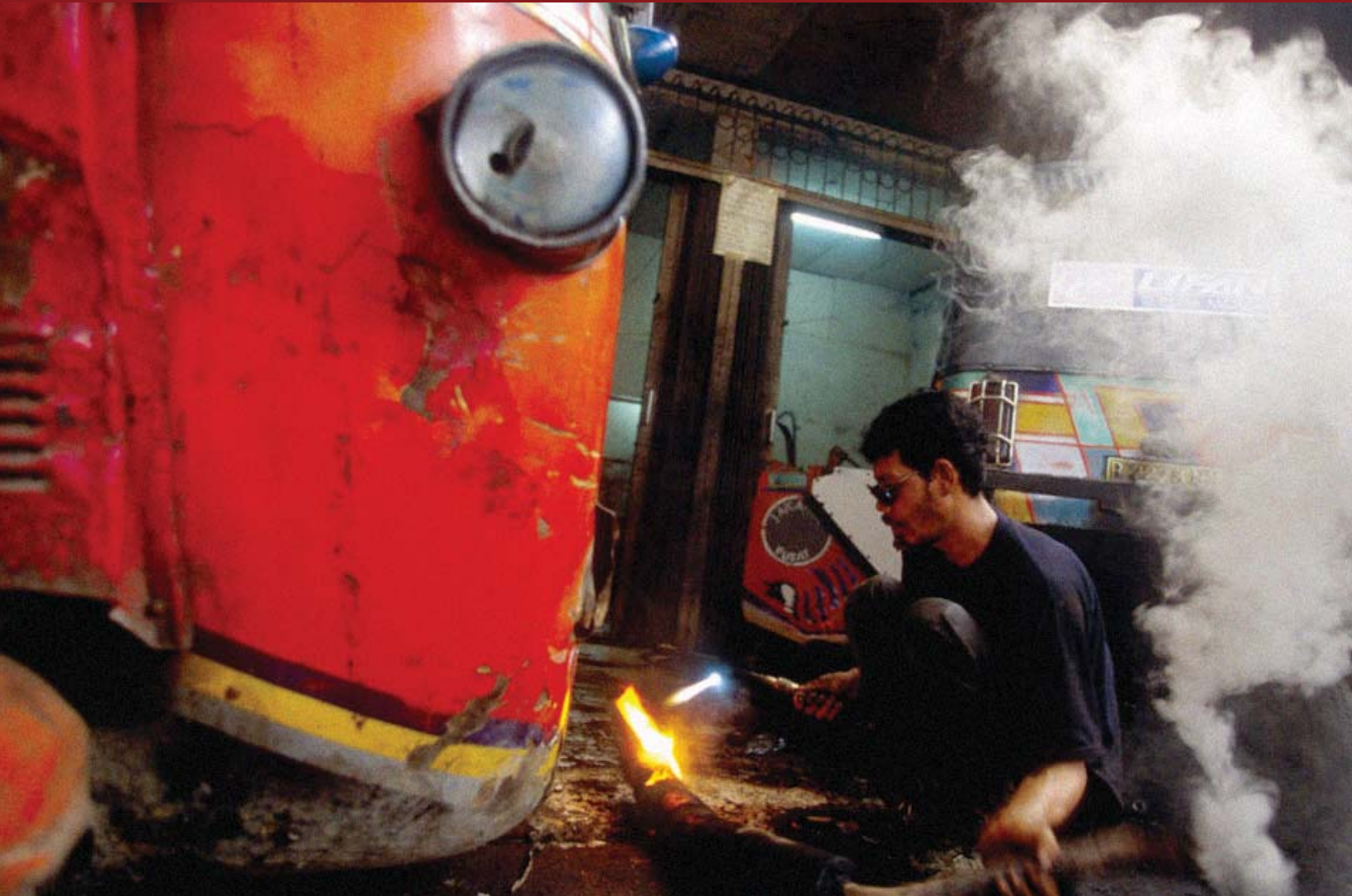
SMAK Bogor is recognized as a model vocational school in Indonesia, as confirmed by the success of its students. Graduates compete with more educated students with Bachelor (*Sarjana*) or Associate (Diploma) degrees. For example, at PT Sucofindo – a state-owned inspection company – about 80 percent of chemical analyst positions at the company are filled with SMAK graduates, while Bachelor and Associate graduates occupy only 15 percent and 5 percent respectively. According to a Sucofindo executive, the company scouts SMAK graduates because they are able to more quickly adapt to high-tech laboratory equipment than graduates from tertiary schools.

SMAK Bogor's track record and reputation is attributed to three success factors:

- Industrial linkages. The school has a distinct and innovative curriculum that attempts to meet the demand from prospective employers in the industry. Instead of the standard three years, SMAK students take four years to complete their program, providing more time for practical-oriented subjects. The school also utilizes its network with companies and alumni to keep up with the specific needs of the job market. Internship programs, not only for students but also for teachers, are part of the training.
- Creative fundraising. The financial support that SMAK Bogor receives from the government to pay for teachers' salary and school facilities is not enough for its operations. This has forced the school to be creative in seeking for additional sources of funding. The school collects donations from the private sector and established a profit-oriented wing that offers commercial services to the public. With this additional income, the SMAK can invest further in teacher training and skill-upgrading.
- Qualified students and teachers. SMAK Bogor has been able to maintain a high standard of teaching because it attracts qualified students and teachers. Entrance to the school is competitive and the program is demanding. First year student who fail to enter the second grade must leave the school. The school employs qualified teachers from Center of Industry (*Balai Industri*, a research institute operated by the Ministry of Industry) and university lecturers. It also attracts visiting teachers from companies so the students and teachers can benefit from experienced professionals.

Source: Wicaksono, 2008; Chatab 2008.

# Chapter 9



## Building A Skilled Workforce (Part II)

Non-Formal Job Skills Training Programs

## Chapter 9 Summary

Although formal education is one of the best ways to help young people succeed in the labor market, relatively few youth graduate from senior secondary. Job skills training programs and skills certification, therefore, play an important role in offering second chances for workers who are at risk of being left behind.

Public training facilities in Indonesia are limited in Indonesia and tend to help those who are already employed, especially in the formal sector. They are less successful in reaching those who would benefit the most from a second chance: the unemployed, informal workers, and the poor. These programs are predominantly classroom-based. International experience shows, however, that training interventions are more likely to improve labor market outcomes for participants if they provide a broader array of services that include: internships, job search assistance or on-the-job training, soft and life skills, and wage subsidies. Indonesia's recent "Three-in-One" policy is a step in the right direction, but further work is needed to realize the benefits of a comprehensive approach to skills training.

National professional certification agencies also play an important role in off-setting job search constraints, especially for the poor who are less likely to attend formal education institutions. Although Indonesia established such an agency in 2004, the overall national qualifications framework remains fragmented as various government ministries continue to set their own competence standards.

### Recommendations:

- Introduce a new comprehensive skills training program to fill the current gap in training opportunities. Adopt a model that follows the *Jóvenes* experience, including the soft-skills that Indonesian firms are increasingly demanding and an array of complementary services such as internships, job search assistance or on-the-job training, and wage subsidies.
- Target training at workers who most need a second chance: young and poor workers, and those currently employed in the informal sector.
- Contract training services out to private and NGO service providers. Manpower offices play a key role in providing strategic guidance and monitoring the performance of service providers.
- Create an institutional environment in which a training program can thrive, including regulations that create more job opportunities and a unified and centralized professional certification agency.

## I. Introduction

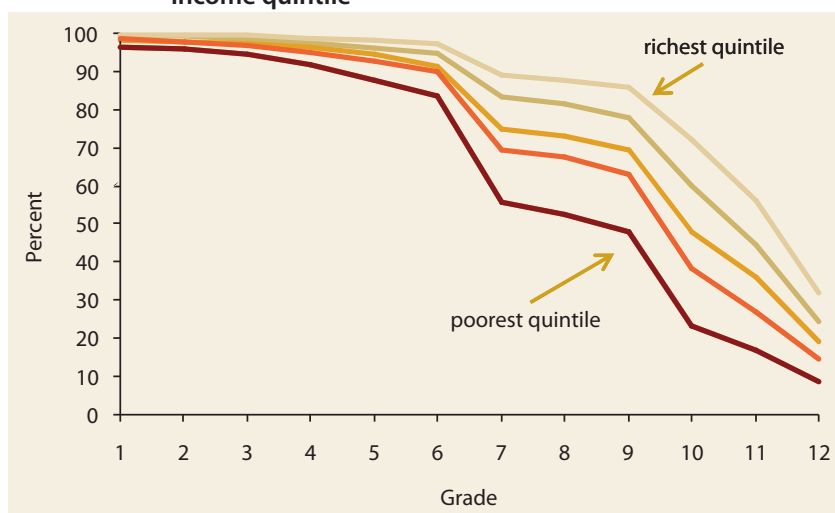
**Although formal education is one of the best ways to help young people succeed in the labor market, relatively few youth graduate from senior secondary school.** Indonesia has made significant improvements in access to education over the past three decades. Almost all children now attend primary school. Limited access to quality education at the senior secondary and tertiary levels, however, continues to be barrier for young people. The problem particularly affects future workers from poor households who are more likely to drop out of the formal education system (Figure 9.1).<sup>206</sup> This places them at a disadvantage in the labor market, where they are less likely to find jobs in the preferred formal and non-agricultural sectors.

**Job skills training programs and skills certification offer second chances for workers who are at risk of being left behind.** Enrollment in formal education offers workers with the first chance to develop job-relevant skills. For those who do not have access to formal education or do not have job-relevant skills, however, training programs can offer an alternative opportunity to develop skills in demand by employers. These programs can also be used to target particularly vulnerable groups, such as the poor, for whom integration into the labor market is vital to improve their well-being. Similarly, skills qualifications frameworks provide a second chance by allowing workers to be assessed on the basis of their skills and competencies, regardless of their educational backgrounds or the way in which their skills were acquired.

<sup>206</sup> Also see Ridao-Cano and Filmer, 2004.



**Figure 9.1** Highest level of education attended, 16-18 year olds by income quintile



Source: Bank staff calculations, based on Susenas 2008.

Chapter 9 considers how skills training interventions in Indonesia can be designed to counteract labor market barriers, especially for the poor and vulnerable. Active labor market programs (ALMP) have been implemented in a wide range of countries to address market failures that contribute to higher unemployment risks, longer unemployment spells, or lower income levels. This chapter reviews job training in Indonesia and then offers recommendations that

draw on best practices from interventions implemented in middle-income and developed economies. The chapter is divided into four sections:

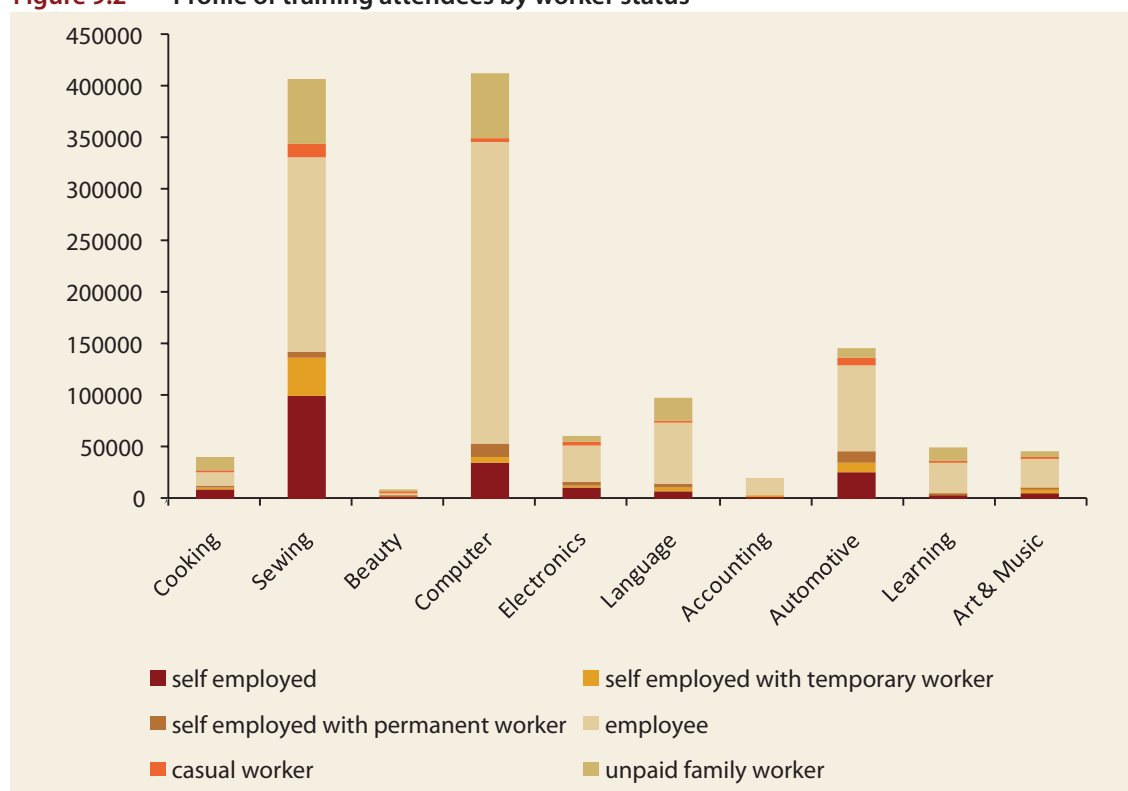
- The first provides an overview of the current range of training services in Indonesia, and a description of who tends to benefit from training in the non-formal education sector.
- The second considers technical and non-technical skills training programs that address employability barriers in the following categories: a) classroom vocational training; b) soft and life skills training, and; c) programs adopting a comprehensive approach. The overview highlights the main features of each approach, as well as initial conditions, success factors, and relevance to the Indonesian context.
- The third focuses on national qualification frameworks, which can counteract job search barriers through better signaling to prospective employers.
- The fourth and final section concludes with recommendations for Indonesia, with a special emphasis on improving labor market outcomes for poor and vulnerable groups.

## II. Training in Indonesia

**Public skills training facilities in Indonesia are limited.** *Balai Latihan Kerja* (BLK), public vocational training centers, are the primary institutions responsible for providing skills training services in Indonesia. The centers are intended to serve job seekers and self-employed workers in small business and agriculture. During 2003-04, approximately 42,500 people were trained in the 162 BLK located across the country.<sup>207</sup> In addition to BLKs, there are 18 regional productivity development centers (*Balai Pengembangan Produktivitas Daerah* or BPPD) that provide public skills training. Several line ministries – such as the Ministry of Agriculture, Ministry of Industry, and Ministry of Trade – also offer training programs but these tend to be much smaller.

207 Based on "Public and Private Training Provision," a report prepared by Alisjahbana, March 2008b, and "Mapping Exercise: Situational Analysis for Youth Employment and Enterprise Creation," a report by LP3ES, December 2006.

**Figure 9.2** Profile of training attendees by worker status



Source: Bank staff calculations, based on Susenas 2008.

**Private training services, on the other hand, are flourishing.** The majority of training centers in Indonesia are operated by the private sector and local community groups. Private training centers have proliferated over the past ten years, reaching a total of approximately 25,000 registered centers by 2005. As part of the local non-formal education system, they are under the control of local governments and require operating permits from district/municipal education offices. At the same time, private training providers must meet national standards. The National Accreditation Board for Non-Formal Education (*Badan Akreditasi Nasional Pendidikan Non Formal*, BAN-PNF), consisting of representatives from the Ministry of National Education, professional associations and industrial sector firms, must accredit all training centers.<sup>208</sup>

**Training services tend to support those who already have jobs, rather than the unemployed.** Most training attendees are people between the ages of 19 and 34. A large proportion of trainees, however, are not in the labor force indicating that many people attend training courses for personal interest or as hobbies.<sup>209</sup> In 2003, only 6 percent of persons attending training courses were currently unemployed.<sup>210</sup> Furthermore, trainees tend to be already employed in the formal sector. Few workers from the informal sector participate in training to improve their skills.

208 Ibid.

209 Overall, 40 percent of course attendees in 2003 were not participating in the labor force. Automotive and trade courses were an exception where only 20 percent of attendees were not in the labor force, but tend to be mostly men. Alisjahbana, March 2008b.

210 Alisjahbana, March 2008b.



**While the BLKs originally targeted poor job seekers, they are increasingly providing fee-based training services to firms to generate income.** Demand-based company training increased from 20 percent of the BLK portfolio in 1999/94 to 45 percent in 2003. The shift may be intended to generate additional revenues to supplement limited public financing for the centers. The central government allocated, on average, Rp 250-300 million for each BLK in 2006, in addition to a de-concentration fund of Rp 45 billion allocated for BLKs in 33 provinces.<sup>211</sup>

**Training services are also not successful in reaching the poor, who most need second-chance opportunities.** Non-formal training, in theory, provides a second chance for poor workers who are less likely to improve their skills and employability through the formal education system. Training centers are less likely to be found in poorer districts.<sup>212</sup> It comes as no surprise, therefore, that individuals who participate in training courses tend to come from richer families. On average, 50 percent of training attendees came from the richest quintile of households in 2000, compared to only 5 percent from the poorest quintile.<sup>213</sup> This problem is not entirely attributable to the cost of training, which can be a barrier to poor families. Even courses that are provided for no cost fail to attract poor individuals. Only 11 percent of attendees of free courses in 2000 came from the poorest quintile, compared to 37 percent from the richest quintile.<sup>214</sup> This may be due to lack of information in poor areas or non-tuition costs (such as traveling and accommodation) that make even free trainings prohibitively expensive for poor individuals.

### III. Skills Training Programs

**Skills training programs are the most common interventions to enhance the human capital of workers, but vary greatly across countries.** Overview studies of active labor market programs have highlighted the popularity of training programs over other active labor market measures, including employment services, wage/employment subsidies, public works, and entrepreneurship schemes. Several of these skills training programs and the results of their impact studies are summarized in Annex IX.1. A recent global inventory of youth employment schemes found that skills training programs were the most frequent type of intervention, accounting for nearly 38 percent of all documented programs.<sup>215</sup> These training programs, although common in purpose, take many different forms. This section reviews three general categories of public training interventions: i) classroom vocational; ii) soft and life skills training, and; iii) comprehensive approach training. The approaches are not mutually exclusive; comprehensive training incorporates elements from both classroom and soft skills trainings.

#### Classroom Vocational Training

**The most long-standing approach consists of classroom training with a vocational emphasis.** They are aimed at providing individuals with skills and experiences that would improve their future job prospects while, at the same time, responding to the needs of the labor market. Programs in this category may have more specific, targeted objectives. For instance, the main objective of PLANFOR, a training program in Brazil, is to gradually build up permanent vocational training facilities to train or retrain at least 20 per cent of the economically active population every year. Vocational training programs differ in the types of skills provided.

211 Ibid.

212 Ibid. The authors found that the existence of training centers is positively associated with higher welfare levels, based on village welfare indexes constructed using PODES data from 2000 and 2003.

213 Ibid.

214 Ibid.

215 Betcherman et al, 2007. Skills training programs accounted for 111 out of 289 ALMPs. Similarly, 45 out of 87 impact evaluation studies of ALMPs analyzed in 2004 were training-related (Betcherman et al, 2004).

Although target populations vary, they predominantly serve unemployed and disadvantaged individuals of various ages.

### **Box 9.1 National Plan of Professional Education, PLANFOR (Brazil)**

PLANFOR was a Brazilian vocational training program introduced in 1996. The program targeted marginalized young and adult workers who were unemployed, at risk of unemployment due to firm restructuring and/or macroeconomic policies, small producers, or self-employed. PLANFOR's major objective was to establish, over time, permanent vocational training facilities to train or retrain 20 per cent of the economically active population every year. Between 1996 and 1998, the program trained a total of 1.5 million workers aged 15-21. A secondary objective of the program was to improve the employability of the target population.

PLANFOR was a demand-driven program, providing training for basic skills necessary for work in both the formal and informal sectors. Courses had an average duration of 103 hours per beneficiary, using a well-developed curriculum. A tripartite committee of government and enterprises oversaw the fund that financed the program. The program also outsourced training activities through a state-sponsored bidding process.

An impact evaluation of PLANFOR found the following results:

- **Employment effects:** With an employment rate of approximately 48 percent, half of the trainees found a job in the informal sector. In Pernambuco, however, training courses did not increase the chances of getting a job. Impact evaluation results in Rio de Janeiro and Fortaleza showed that training programs had a positive and statistically significant impact on unemployment: those with access to training were 3-4 percent more likely to be employed six to 12 months afterwards.
- **Wage Benefits:** In Minas Gerais, courses with 50 hours of instruction resulted in a wage increase of approximately R\$64. However, in Rio de Janeiro and Fortaleza there was no impact on wages of those already employed.
- **Cost effectiveness:** Program costs amounted to approximately \$110 per person, with an average per hour cost estimated at US\$2.13. The program is cost-effective; a cost-benefit analysis showed that new jobs for participants needed to last more than 17 months for the program to have a net positive benefit.

Source: Barros et al., n/d; Rios-Neto and Oliveira, 1998

**Although international classroom vocational training programs have mixed results, there are ways that they can become more effective.** Evaluations results show that training programs sometimes do not lead to the desired outcomes. Adopting some of the following best practices can improve the chances for success:

- **Ensure the right initial conditions for the program.** In addition to the various characteristics and programmatic factors inherent to these programs, the following three conditions are crucial in ensuring successful outcomes: 1) sufficient government resources for training; 2) adequate supply of high quality training providers (referring to both institutions and teachers, whether public or private); and 3) capable technical management and supervision units that ensure transparency and quality in a 'competitive' environment.
- **Devise appropriate targeting strategies** in order to successfully impact the population that the program was designed to benefit. Most *Jóvenes* programs in Latin America organized a massive campaign advertising the courses in all selected municipalities. The selection of trainees began with the accreditation of young people who expressed an interest in participating. Accredited applicants were then required to approach a local (employment) office to complete a questionnaire and/or attend an interview. Targeting questionnaires were designed to assess their socioeconomic status and program eligibility. Interviews were used to check if applicants met the objective profile of the program.

- **Introduce a competitive bidding process for training services.** Brazil (PLANFOR), Dominican Republic (*Juventud y Empleo*) and Panama (Procajoven) are examples of programs that adopted effective mechanisms to ensure relevant, high quality training services from competent institutions at competitive prices.

**Classroom vocational training is the most common type of public training available in Indonesia but concerns have been raised about training quality.** There has been no rigorous evaluation of the labor market outcomes of BLK graduates. The Ministry of Manpower & Transmigration (MoMT or Depnaker), however, assessed BLK conditions in both 2004 and 2006. They found that approximately 60 percent of all BLKs are in poor condition, in terms of facilities, equipment and human resources.<sup>216</sup> Most instructors are senior secondary graduates, but few have tertiary education. Local governments control 94 percent of the BLKs. These decentralized centers tend to be in worse condition, especially in central and eastern Indonesia.

## Training in Soft and Life Skills

**An important, emerging element of jobs skills training is the provision of soft and life skills.**<sup>217</sup> Training interventions that focus on soft and life skills aim to provide training on communication, leadership, teamwork, motivation, and discipline. They are targeted mainly towards unemployed and disadvantaged groups, such as youth from economically disadvantaged neighborhoods with multiple issues such as substance abuse, criminal offenses, teen pregnancy, and low educational, social, and vocational skills development.<sup>218</sup> Such programs can be financed and managed by the government (such as Youth Build in the United States), or by the private and non-profit sectors (or a partnership between the two, see Box 9.2). Life skills can be incorporated into formal classroom-based curricula or adopted in experiential programming, such as team community service and development projects and leadership training efforts.

**The success of life skills programs depends on initial conditions and key success factors for generating positive outcomes.** Although no impact evaluations of soft and life skills training interventions are available, there have been several reviews of programs and evaluation results to date.<sup>219</sup> In general, a holistic approach – including a broad set of strategies and services to address the participants’ varying needs – is necessary to ensure that all aspects of the program are effectively targeted. Key findings are summarized as follows:

- **Make sure that initial conditions are in place.** Four initial conditions that must be in place to ensure effective implementation: i) financial support, guidance, and supervision, often from international organizations; ii) adequately and appropriately trained teachers; iii) adequate capacity building and performance standards, and; iv) strong national, state, and local offices that are effective individual entities and have the capacity to effectively cooperate.
- **Ensure that implementation quality factors are prioritized.** Program performance can be improved if program implementers pay attention to: allowing for adequate start-up time; communicating goals clearly; ensuring sufficient, timely, and sustained resources; providing strong leadership at the federal, state, and local levels; supporting professional staff development, and; effectively using data.

216 Alisjahbana, March 2008b.

217 The World Health Organization defines life skills as: “abilities for adaptive and positive behavior that enable individuals to deal effectively with the demands and challenges of everyday life. In particular, life skills are a group of psycho-social competencies and interpersonal skills that help people make informed decisions, solve problems, think critically and creatively, communicate effectively, build healthy relationships, empathize with others, and cope with and manage their lives in a healthy and productive manner.”

218 As evaluated by the American Youth Policy Forum (Batlle, 2006).

219 Hahn, Leavitt, and Lanspery (2006) have examined several programs that focus on life skills training, and have speculated on the initial conditions needed prior to implementing a successful program. In addition, Glenda L. Partee at the American Youth Policy Forum reviewed the evaluation results of approximately 100 programs to extract lessons learned.

- **Provide quality trainers.** Caring, knowledgeable adults such as teachers, counselors, mentors, caseworkers, and program directors who understand the participants' needs are crucial for the program's success. They must be knowledgeable, with extensive training and experience, and show, through their time and attention, that they are committed to the participants' well-being and future endeavors.
- **Focus both on participants and community members.** High standards and expectations of participants contribute to successful program outcomes. The success of programs extends beyond the participants themselves. The integration of community members such as parents and employers can provide additional support for effective program operations.

### **Box 9.2      Make a Connection, MAC (in 17 countries throughout the world)**

Introduced in 2000, Make a Connection (MAC) is a life skills program funded by Nokia and managed by the International Youth Foundation. The objective of the program is to improve young people's educational opportunities and life skills necessary to succeed in today's society. MAC programs operate in 17 countries: Brazil, Canada, China, the Czech Republic, Finland, Germany, Hungary, the Republic of Korea, Mexico, Peru, the Philippines, Poland, Russia, South Africa, Thailand, Turkey, and the United Kingdom. MAC programs target 12 essential life skills: communication, conflict resolution, making a contribution, cooperation, creative thinking, critical-thinking, decision making, empathy, managing emotions, respect, responsibility, and self-confidence. Training of these 12 skills takes place through a variety of methods, ranging from community service efforts to digital art projects.

The program pilot employed an Outcomes Measurement System (OMS) to measure program results.<sup>220</sup> Although these results are preliminary, they nevertheless shed light on the effectiveness of programs emphasizing life skills:

- **Life skills:** 95 percent of participants in 12 countries stated that their life skills had improved as a result of participating in the program. In particular, cooperation, self-confidence, and creative thinking were three life skills most frequently cited by participants as having improved. MAC programs appear to have contributed to increasing participants' confidence regarding their future; in 10 of the countries, an average of 74 percent of the participants stated that their project was "excellent" or "very good" in helping them prepare for a better life, while 66 percent said that it was "excellent" or "very good" in giving them confidence to deal with challenging situations. 72 percent of participants in programs that emphasized volunteerism continued their involvement in volunteer projects after completion of the training.
- **Educational outcomes:** In nine countries, an average of 43 percent of students reported achieving improved grades. In ten countries, an average of 50 percent of students reported working harder in school. In 11 countries, an average of 66 percent of the participants reported that they now think they can reach a higher level of education. Participants attribute such improvements to their participation in the program.

Source: Hahn, A., Lanspery, S., and Tom Leavitt. 2006. "Measuring Outcomes in Projects Designed to Help Young People Acquire Life Skills: Lessons and Challenges." Nokia-IYF Global Youth Development Initiative.

**Although training in Indonesia focuses on job-specific skills, firms recognize that soft and life skills are becoming increasingly important.** 85 percent of firms in the recent Employer Skills Survey reported that job-specific skills were the most important.<sup>221</sup> 80 percent of firms, however, also said that core soft skills are also increasingly needed, with specific reference to behavioral, thinking, teamwork and negotiation skills. In addition, firms identified behavioral skills – including independence, communication, negotiation, team

220 The Outcomes Measurement System consists of three components: 1) 11 programs participated in a prospective study, administering surveys to participants at three separate points of the program (at baseline, at program completion, and several months after completion of or further involvement in the program); 2) 7 programs administered a single retrospective survey to participants who had already completed the program or had been in the program for a long period, and; 3) 2 programs participated in an in-depth study, involving learning through visits, deeper analysis of context, and special efforts such as interviews with managers about program implementation.

221 World Bank, Employer Skills Survey, 2008.

work, and time management – as the weakest skill set of the skilled workers (production, administrative and sales workers) who were hired over the past two years.

### Box 9.3 The Jóvenes Programs (Latin American region)

*Jóvenes* programs offer poor, young people training in both professional and life skills followed by workplace internships. Based on a pilot in Chile in the early 1990s, this comprehensive approach to training has spread throughout the Latin American region, with each country tailoring the program to their needs. Disadvantaged young people are identified using, for example, out-of-work statistics, socioeconomic data, and poverty mapping. Qualified private firms, NGOs, public institutions and non-formal training agencies provide training on a competitive basis. Providers are required to arrange internships for their trainees and to ascertain what kind of skills local employers need before they can receive any funds for training. In this way, internships provide information on the skills for which there is demand. Intensive life skills training focuses mainly on problem-solving skills, correct workplace behavior, conflict management, job search techniques, and building self-esteem.

#### **Programa Jóvenes en Acción, Colombia**

Implementation of the Colombian *Jóvenes en Acción* pilot program began in May 2001 by offering job training courses for 100,000 unemployed men and women in the two lowest levels of income. The program was implemented in seven cities with a total investment of US\$ 17.6 million.

This training program is part of the Social Support Network (*Red de Apoyo Social*) that also includes emergency public works for job generation and family education and health allowances for poor rural families. Youths between the ages of 18 and 25 receive training allowances and vouchers, which they can use to enroll in a training course of their choice from a list of competitively selected providers. Job training lasts about three months and is followed by a three-month internship in a company or organization. Beneficiaries also receive a food and transportation allowance. The program is administered by a group of government agencies, nonprofit organizations and private companies.

An evaluation of the *Jóvenes en Acción* program showed impressive results:

- **Employment effects:** The program raised employment for both men and women. For women, training increased the probability of employment, days and hours worked, and the probability of having a job with a written contract. The impact was similar but more limited for men.
- **Wage benefits:** The most significant impact of the program was the substantial increases in salaries: women's salaries increased by 35 percent, while men's salaries increased by 18 percent.
- **Cost effectiveness:** The program generates a large net gain, especially for women. Even the most conservative of the cost-benefit calculations, which ignores the benefits associated to the higher probability of being employed in the formal sector and which allows the benefits to depreciate over time, suggest that the net benefits of the program more than justify its existence and possibly its expansion. The lower bound internal rate of return is of 13.5% for women and 4.5% for men.

Short-term interventions in developing countries have more substantial payoffs than in developed countries. This may be due to a relatively large increase in skills training in a context where education levels are very low, as well as the role of training institutions as intermediaries providing information to both sides of the labor market. Even though outcomes are positive, there are differences in impact among countries, possibly due to diverse initial conditions (such as labor market regulations and macroeconomic growth), implementation processes, or differences in the types of trainees.

Source: Attanasio, Orazio, Adriana Kugler and Costas Meghir. 2007. "Effects of Youth Training in Developing Countries: Evidence from a Randomized Training Program in Colombia." Mimeo.

## Comprehensive-Approach Training

**Over time, leading approaches to classroom vocational training have expanded to include comprehensive services.** These additional services include on-the-job training, internships, and other active labor market measures, such as wage subsidies and public works. They often incorporate life and soft skills training components as well. A recent overview study of training interventions around the world reveals a pattern of transition from classroom to comprehensive vocational training.<sup>222</sup> The transition is most clear in Latin America and the Caribbean, where they have moved from supply-driven, classroom-based training provided by public institutions to a fresh demand-driven training provided by a range of service providers. Similarly within the OECD area, Anglo-Saxon countries have demonstrated a heavy reliance on comprehensive approaches over the years. Continental European countries, on the other hand, have only recently begun to include broader services, including job search assistance and other measures to make the labor market work better.

**Training interventions that have adopted a comprehensive approach are more successful than traditional classroom-based, vocational programs.** The introduction of additional services such as on-the-job training and internship components has improved the performance of classroom training programs.<sup>223</sup> These components, in addition to classroom-based instruction allow for a more holistic training process and the development of various skills and competencies (including life and soft skills) in a variety of settings. Evaluations of training programs throughout the world underline the following factors for success:

- **Ensure that training content is demand-driven.** Trainees are more likely to have positive outcomes if they acquire skills and competencies that are in strong demand or in short supply in the labor market. For example, *Programa Juventud y Empleo* in the Dominican Republic aimed to train 37,500 disadvantaged youth in trades relevant for the productive sector, in order to increase their chances of getting a job.<sup>224</sup>
- **Offer financial incentives for employers and employees.** Wage reimbursements for employers allows for increased and more effective employer participation in the training provision of participants. Programs that have used wage reimbursements effectively include the Employability Improvement Program in Canada and the New Deal for the Young Unemployed in the United Kingdom. A promising new approach is also being considered in South Africa.
- **Provide financial support services for participants.** Financial assistance – in the form of stipends, reimbursement, or transportation vouchers – can support participants over the duration of the program. This approach has been used in various programs including: Summer Youth Employment and Training program (SYETP) and Job Corps in the United States; Employability Improvement Program in Canada; *Juventud y Empleo* in the Dominican Republic, and; *Proyecto Joven* in Argentina.
- **Cooperate with prospective employers.** These linkages can help ensure that the training content is demand-driven, while increasing the possibility of employment upon program completion. Successful comprehensive programs include: *Projovent* in Peru, where training services were mostly provided by enterprises that agreed to hire 80 percent of the training participants following a period of on-the-job training), and; the New Deal for the Young Unemployed in the United Kingdom, where 60,000 employers had agreed to provide employment opportunities for program participants in 2000.

222 Puerto and Fares (2008) studied a set of 345 studies of training programs implemented in 90 countries around the world since the late 1950s.

223 Quintini and Martin (2006) also stress the advantages of comprehensive interventions in addressing employability barriers in OECD countries. The authors suggest that the integration of services into a combined, comprehensive package seems to work better than separate provision.

224 Card et al., 2006.

- **Coordinate with public agencies.** Coordination between the government, national employment services, and all relevant players is necessary for effective and efficient program implementation. For example, *Proyecto Joven* in Argentina, where most procedures were centralized in Buenos Aires, left local offices around the country with no administrative authority to make any significant decision, approve, or refuse projects. This excessive centralization hindered the timing of the bidding processes for the selection of training providers, delaying the delivery of the courses and internships.<sup>225</sup>

#### Box 9.4 Innovative ALMP: Targeted wage subsidies for young workers (South Africa)

Unemployment in South Africa has almost doubled since the end of apartheid and subsequent transition to democracy in 1994. The unemployment rate (using the standard ILO definition) in 2005 was approximately 27 percent, up from 16 percent in 1995. Unemployment is especially prevalent among the young and those with only a primary education level or less.<sup>226</sup>

A team of international economists, advising the South African government on policies to enhance economic growth, has carefully examined South African unemployment data.<sup>227</sup> They found that obtaining the first job during the school-to-work transition is a critical bottleneck. Once a student secures a job in the formal sector, they tend to stay employed in the formal sector, albeit not always at the same job.<sup>228</sup>

The advisory team proposed to implement a targeted wage subsidy to smooth the difficult school-to-work transition for graduates. The subsidy is coupled with a brief probationary period during which firms are permitted to dismiss subsidized workers with “no questions asked.” Every South African, upon turning 18 years old, would receive a magnetic card with an initial balance of R 5, 000 (equal to about half the annual income of a new employee with a primary level of education). The balance can be used to pay up to half of the cardholder’s wage at any registered firm. If upon turning 18, the cardholder chooses to stay in school, the balance on the card would accrue interest as an incentive to increase education levels. The employer would have the right to dismiss the worker within a 10-week probationary period, after which standard employment security regulations would apply.<sup>229</sup>

This innovative idea demonstrates how governments can experiment with targeted programs to support high-risk or vulnerable populations. The program is promising, but could lead to some adverse impacts of the scheme. First, the program risks creating inefficiencies or incurring high budgetary costs for sponsoring governments. Second, firms may “game” the system by letting subsidized employees go just before their 10 weeks are up, only to replace them again from the pool of subsidized workers.<sup>230</sup> Careful assessment of a wage subsidy pilot program could help determine whether this model can be used alongside traditional training interventions to improve labor market outcomes for youth.

**Indonesia, too, has begun shifting towards comprehensive vocational training services with the introduction of the recent “Three-in-One” policy.** In 2007, the Ministry of Manpower & Transmigration introduced the “Three-in-One” policy in order to improve the quality of training and the placement of workers in positions suited to their areas of competence. The policy adopts a three-pronged approach that integrates technical training, skills certification, and job placement services. Implementation of the policy is still in its early stages and no formal evaluation has taken place. There are indications, however, that the policy has not

225 De Moura Castro, 1999.

226 Banerjee, Abhijit V., Galiani, Sebastian, Levinsohn, James A., McLaren, Zoe and Woolard, Ingrid. 2007.

227 See the project detail on <http://www.cid.harvard.edu/southafrica/>.

228 Levinsohn, May 2008a.

229 Levinsohn, May 2008b.

230 Levinsohn and Rodrik, 2008.



yet been implemented to achieve full potential. An initial assessment of the program in Bandung found that the program is poorly funded, lacks sufficient staffing and suffers from weak inter-agency coordination.<sup>231</sup>

## IV. National Qualification Frameworks (NQF)

**Skills certifications are increasingly important for the labor market as a quality assurance mechanism to recognize and certify an individual's skills and competencies.** An inherent factor for success in training systems relies on the ability of trainees to signal their acquired skills to employers. Skills certification, often referred to as competency-based certification, performs this role in three ways. First, certification allows for the recognition of skills and competencies regardless of the way in which they were acquired. Second, it allows for individuals' skills to be compared across the labor market, regardless of educational background. Finally, certification serves as the interface between skills acquired through training or other means and the skills required for a job.<sup>232</sup>

**Skills certification provides incentives for individuals who have not completed general level of schooling and/or are engaged in non-formal learning.** Formal education generally provides the standard way to measure skill levels. Skills certification, on the other hand, provides a more flexible, diverse means of having their skills recognized in the labor market for those that are otherwise not able to access formal education. While skills certification is intended for no particular target population, it provides more benefits for workers who have not been formally educated. This is especially relevant for the poor who are less likely to attain senior secondary or tertiary levels of education.

**NQFs ensure that skills certifications act in a coordinated and consistent system.** An NQF is defined as a single, coherent, and comprehensive instrument for the classification of qualifications according to a set of criteria for specified levels of learning achieved. It aims to integrate and coordinate national qualifications subsystems and improve the transparency, access, progression, and quality of qualifications in relation to the labor market and civil society.<sup>233</sup> Key features that distinguish NQF from other systems imply that qualifications are:<sup>234</sup>

- Achieved by accumulation over time (credit accumulation and transfer).
- Transferable as units of one qualification can be used for other qualifications.
- Transparent because learners know precisely what learning outcomes they are required to demonstrate to achieve a qualification.
- Independent of any specific prior learning program requirements.

As most established skills certification frameworks and mechanisms occur in OECD countries, they are financed predominantly by their national governments. However, as more and more developing countries are moving towards developing certification frameworks and mechanisms, there has been an increase in donor funding in this area of education reform.<sup>235</sup>

231 Alisjahbana, March 2008b. Note: BLKs are responsible for training, the *Lembaga Sertifikasi Profesi* (LSP) is responsible for certification, and the local Manpower offices (Disnaker) are responsible for placement services.

232 Boudier et al., forthcoming. Further, less-immediate but nevertheless crucial objectives include improved occupational mobility, promotion of lifelong learning, and international and intergenerational comparative analysis (Boudier et al. forthcoming, World Bank 2008, and Armstrong et al. forthcoming).

233 Coles, 2008.

234 Young, 2005.

235 For example, the national qualifications framework in South Africa has been mostly funded by the European Union, with additional support from the Canadian government (Allais 2007). The Chile Califica program is funded by the government (50%) and the World Bank (50%).

**Ensuring the right initial conditions are in place will help improve the chances for a successfully implemented program.** The experiences of NQF highlight the importance of the following conditions: (i) political willingness of the national government; (ii) legislative basis for the qualifications framework<sup>236</sup>; (iii) interest and collaboration of various stakeholders, especially a tripartite planning committee of employers, providers, and students<sup>237</sup>; (iv) competent and cooperative governmental departments sharing responsibilities in the implementation of the NQF, especially those involved in education and training and in labor market policy<sup>238</sup>; (v) capable technical management and assessment units/agencies to ensure sound assessment of competencies; (vi) trust between the providers and users of NQFs that have been established over time and give credibility to the qualifications<sup>239</sup>; and (vii) effective communication to the general population for their successful implementation and operation.<sup>240</sup>

### Box 9.5 Lifelong Learning and Training (Argentina)

The Lifelong Learning and Training Project in Argentina is a World Bank project with the objective of enhancing employability and career ladder opportunities by improving the lifelong learning and competency-based training system for disadvantaged adults. While the project has not yet been evaluated, it sheds considerable light on the complex nature of establishing competency-based standards and qualifications frameworks.

The project consists of four main components:

1. The key component of the project involves expanding and strengthening competency-based training and certification. This involves establishing competency-based certification in 30 key sectors over five years, registering 300 competency-based standards in approximately 120 occupations.
2. The project also promotes “competency normalization activities” by participating sector organizations to: a) ensure and monitor the processes leading to the definition, validation, and registration of competency-based standards for selected occupations; b) train and certify evaluators, and; c) register Assessment Centers that will measure and assess individual attainment by the competency-based standards.
3. The third sub-component promotes effective demand and developing capacity for competency-based training, assessment, and certification.
4. The final subcomponent involves registering and accrediting Certification Organizations that would award individuals with recognized certificates as well as accredit the Assessment Centers.

In addition to establishing competency-based certification, the project seeks to align training with the competency-based approach and strengthen professional training institutes. The Lifelong Learning and Training project also aims to support the actual training, assessing, and certifying the workers according to competency-based standards.

Source: World Bank, project appraisal document.

236 OECD, 2007a.

237 Grubb, 2007.

238 OECD, 2007a.

239 Young, 2005.

240 These initial conditions must be carefully considered in conjunction with the political and economic context of the country. It is important to realize that the initial conditions mentioned above are key for the success of NQF in the developed economies of Scotland, New Zealand, and Ireland; which are also geographically and demographically small and fairly culturally homogenous (Young 2005).

**International experience offers lessons learned for the successful implementation of NQFs.** These lessons learned are based both on best practices as well as from the difficulties experienced in implementing such frameworks.<sup>241</sup>

- **Adopt an incremental approach.** Partial frameworks can be used as building blocks for the establishment of a broader, more comprehensive framework in the future. A radical break does not allow practitioners and other involved actors any benchmarks to test the new principles against their experience. Indeed, employing an incremental approach will significantly aid in the prevention of polarized positions.<sup>242</sup>
- **Build consensus and be willing to compromise.** Qualifications can only operate on the basis of trust. Therefore, consultation processes such as those in the Irish NQF and compromise agreements in New Zealand are crucial. When such processes do not occur, the entire idea of an NQF may lose public and professional credibility. For example, forced compromises over national vocational qualifications in England have prevented them from making greater progress in developing a broader national framework.
- **Develop common approaches through shared experience and use, not by tightly specified definitions.** Differences in the language of standards, units, and levels used to define criteria lead to technical and professional problems when applied to very different qualifications. Further difficulties emerge from differences in value judgments regarding learning and knowledge. In order to minimize these problems, recognize that language differences and assessment approaches are inevitable and allow for sufficient periods of time to develop common approaches.
- **Widen the policy breadth.** Various conditions such as the availability of assessment systems, the adequate (re-)training of teachers, the existence of established sectoral organizations, and new partnerships are all critical features that contribute to the implementation and operation of an NQF.
- **Be aware of the political and administrative difficulties associated with implementing NFQs.** Political tensions can arise because the responsibility for an NQF is never housed within one government agency but shared between departments.<sup>243</sup> As frameworks become more comprehensive, they pose a greater threat to the very departments that established them. Administrative difficulties can also result from the uncertainties faced by new agencies regarding their responsibilities for quality assurance, standard setting and assessment. Difficulties in recruiting personnel with appropriate expertise can slow down the setting-up of an NFQ, and potentially undermine confidence in the new qualifications.
- **Be cautious in the implementation of NQFs in order to bridge the gap between standards and actual practices.** A general underlying difficulty in implementing NQFs is that there is often a disconnect in an outcomes-based framework between processes such as standard setting and assessment, and the individuals responsible for teaching, training, selecting, and assessing. This is especially pertinent for developing countries with weak educational systems. New forms of partnerships between institutions are needed to manage the difficult process of conforming knowledge and skills to measurable performance indicators, with minimal disruption of on-going training programs.<sup>244</sup>

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241 Adapted from Young, 2005.

242 An example of an incremental approach is the Scottish Qualifications Framework, developed through a series of linked reforms, without any complex standard-setting procedures or the development of new qualifications.

243 Inter-agency disputes occurred in New Zealand between the Qualifications Authority and the Department of Education regarding power over the school curriculum. This led to the recognition that some differentiation was necessary, as the principle of similarity could not encompass all types of learning.

244 Young, 2005.

**Indonesia created a national professional certification agency in 2004.** The *Badan Nasional Sertifikasi Profesi* (BNSP), Indonesia's independent certification agency, was established in 2004 and became operational in 2005.<sup>245</sup> The agency issues licenses to certified institutions for each profession (*Lembaga Sertifikasi Profesi*, LSP). The institutions, typically BLKs, are responsible for testing and certifying technical skills and competencies for workers such as welders, machine operators, pharmacists or laboratory workers. Tests and certifications are to be based on national competency standards (*Standar Kompetensi Kerja Nasional Indonesia*, SKKNI) that are centrally determined by Depnaker. In the future, each profession is to be represented by a certified institution. In some cases, BNSP coordinates with related professional certification agencies to issue internationally acknowledged certificates, including those for Certified Public Accountants and Certified Financial Analysts.

**The development of competency standards requires strengthening coordination across government ministries.** As of 2008, Depnaker has created approximately 14 standards in cooperation with representatives from industry and the private sector; another 80 standards are still in the process of development.<sup>246</sup> The aim to create a unified, national system, however, is facing difficulties due to lack of coordination across ministries (the Ministry of National Education, the Ministry of Industry, and the Ministry of Manpower and Transmigration), which currently set their own competence standards. Each ministry maintains its own competency standards and bureaucracy, resulting in a fragmented system with inherent overlaps and gaps.

## V. Recommendations

**Pilot and test a national well-designed comprehensive skills training program.** BLKs, in their current form, are not sufficient for the number of workers in Indonesia. They reach only a small number of workers, many of whom are already employed by firms that contract BLKs. There is a gap in providing skills for the unemployed or new entrants to the labor market. Introduce a new approach to skills training to fill this gap. The *Jóvenes* program, especially in Colombia, offers the most promising model for replication. International experience shows that this approach to training has been successful in improving labor market outcomes for participants. This approach may be more successful in achieving the aims outlined in the government's "Three-in-One" policy. Include soft and life skills in future training curriculum, especially in areas such as those identified in the Employer Skill Survey. Start with a pilot of the program and test it rigorously before considering scaling up the program nationally. Following the example of the *Jóvenes* program in Colombia, consider implementing the program alongside current poverty reduction programs such as the conditional cash transfer program (*Program Keluarga Harapan*, PKH).

**Target the program at vulnerable and disadvantaged workers who most need a second chance.** Training cannot reach all vulnerable workers given the size of Indonesia's workforce. There is a need, therefore, to design skills training policies and programs that effectively target the most vulnerable workers. Future programs should therefore target workers who are young, poor and currently working in the informal sector. These groups who are most likely not to have completed their formal education would benefit the most from being given a 'second chance.'

**Contract training services out to private and NGO service providers so that the government can move into a more strategic role.** Depnaker should take the lead in developing a national strategic plan for skills development. The actual implementation of the plan, however, is best left to contracted service

<sup>245</sup> The BNSP was established in 2004 through PP No. 23/2004. (Alisjahbana, March 2008a).

<sup>246</sup> Alisjahbana, March 2008a.

providers (both private sector and NGO providers). The selection of the service providers through a transparent and competitive bidding process can help to ensure that training services are of the highest possible quality. Responsibility for monitoring the performance of the implementing agencies rests solely with local Manpower offices. Both central and local Manpower offices can consider providing incentives for service providers that effectively target vulnerable and disadvantaged workers.

**Support private-public partnerships to build links with prospective employers.** Local Manpower offices should work closely with training providers to survey local employers to ascertain the needs of the local labor market. Listen to firms about how to improve the quality of training services. Firms indicate that non-formal education programs, including vocational training centers, can be improved by ensuring quality control, promoting industry linkages, offering better curriculum, and operating for longer hours.<sup>247</sup> The National Vocational Training Development Center (*Balai Besar Pengembangan dan Latihan Kerja Dalam Negeri*), for example, has been successful in developing funding relationships with private companies.

**Finally, foster conditions under which training programs can thrive.** In addition to the various characteristics and programmatic factors that are crucial in ensuring successful outcomes, it is essential to highlight the initial conditions necessary for a successful implementation of a program. These include: sufficient government resources for training; adequate supply of high quality training providers (institutions and teachers, both public and private); a unified and centrally coordinated professional certification agency, and; a capable technical management and supervision units that ensure transparency and quality in a 'competitive' environment. Furthermore, success also relies on the country's degree of flexibility of labor market regulations. Evidence from OECD countries suggests that strict employment protection rules hamper the entry of young people into the labor market.<sup>248</sup> Backing this finding, the Youth Employment Inventory shows that economies with more flexible labor market regulations tend to obtain better outcomes from youth employment programs.<sup>249</sup>

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247 World Bank. *Indonesia Skills Survey*. (forthcoming).

248 OECD, 2004.

249 A meta-analysis of youth employment programs reveals a significantly negative, although very small, coefficient of the employment rigidity index (a composite measure of employment rules on hiring, contracting, and dismissal) in the probability of obtaining positive labor market impacts from ALMPs for young people. I.e. the higher the index, the higher the employment rigidity and the lower the chances of positive impacts (Puerto, 2007b).



# Chapter 10



## Expanding Labor Safety Nets

Protecting Vulnerable Workers from Employment  
and Wage Shocks

## Chapter 10 Summary

**Indonesia faces challenges in detecting shocks that hurt the labor market and finding ways to respond quickly and appropriately.** Although Indonesia's labor market seems to have weathered the global economic crisis and economic downturn, concerns have been raised about Indonesia's preparedness to protect workers from the effects of shocks. National labor survey data (Sakernas) is collected bi-annually and is only available to policy-makers months after collection. This impedes their ability to detect wage and employment shocks, accurately analyze how workers are affected by the shock, and determine the most appropriate response mechanism to deliver assistance to employers or workers when they most need it.

**The capacity to respond to wage and employment shocks will require new policies and approaches designed to protect both employers and workers.** Indonesia's rigid labor regulations restrict the resilience of the labor market and fail to protect vulnerable workers during shocks. In the absence of safety nets, workers typically resort to finding work in the informal and agricultural sectors. Alternative policies, therefore, are required to better protect both employers and workers. There are three categories of interventions that could be used in response to shocks: 1) policies and programs that boost the demand for employment; 2) programs that maintain the income of terminated workers, and; 3) policies designed to support workers' earnings.

**Public works programs can be effective in generating employment opportunities for low-wage and unemployed workers.** One of the programs that helps boost the demand for employment is public works. Indonesia implemented a short-term public works program, *Padat Karya*, in response to the 1997 financial crisis that largely failed to protect the most vulnerable workers due to critical flaws in program design. Program wages exceeded prevailing market wages, attracting already employed workers who competed with the targeted unemployed workers. Properly designed and implemented public works programs, however, have proven to be effective. Evaluations have demonstrated that high performing public works programs can reach poor workers and alleviate short-term poverty.

### Recommendations:

Prepare for future employment and wage shocks by introducing labor safety net programs to protect the most vulnerable workers.

- Increase the frequency of labor data to track "in-time" changes and develop a standing vulnerability and shock monitoring system to accurately pinpoint affected regions and understand how employers and workers are being affected.
- Design a standing emergency response system that can be used to quickly trigger safety nets to protect vulnerable workers. A "one-size fits all" approach will not work for all shocks. The use of program responses should be tailored based on the type of shock and how its effects are transmitted.
- As one of the program responses, develop a national public works framework through which the government can trigger programs that generate temporary employment opportunities for workers in both rural and urban areas. Target the neediest workers by setting wages below prevailing market rates, and ensure that projects are labor intensive and provide useful infrastructure and services. One of the existing programs that can channel public works funds is the National Community Empowerment Program (*Program Nasional Pemberdayaan Masyarakat Mandiri* or PNPM-Mandiri), which has been shown to successfully reduce unemployment rates in rural areas.

## I. Introduction

**Indonesia's labor market has faced serious wage and employment shocks.** The 1997 East Asia financial crisis was a severe wage crisis for employees. Following the crisis, Indonesia's exchange rate collapsed in 1998 and real GDP fell by an astounding 13 percent in one year. Workers first felt the impact as a wage crisis: real wages fell by 31 percent in one year. Poverty rates increased, as poor workers no longer had the means to earn their way out of poverty. At the same time, workers were also experiencing a serious jobs crisis. Stable employment rates hid a massive re-allocation of workers from the formal and non-agricultural



sectors. The structural transformation of the previous decade began to unravel as laid-off workers resorted to finding work in agricultural and informal jobs.

**Although these shocks may be short-lived, the recovery of the labor market tends to be gradual and slow.** While economies may recover quickly after a shock, it takes much longer for the labor market to recover causing workers to experience the negative effects of a shock long after it has passed. Following the 1997 crisis, the labor market continued to struggle with jobless growth even through economic growth resumed. It was not until 2003 that employment in the formal and non-agricultural sectors began to expand again, although still falling short of the pace of the 1990s. This shift of formal sector workers into the informal and agricultural sectors undermines progress in the labor market, and can be very costly for families who depend on salaried jobs.

**The prospect of further shocks has raised concerns about Indonesia's preparedness to protect workers in the future.** The recent global economic crisis raised concerns that another wage or employment shock could again hit Indonesia's labor market, as it did in many countries around the world. Many worried that job losses in the formal sector could set back the country's progress in job creation and push workers back into the informal and agricultural sectors. It appears that Indonesia has weathered the global economic crisis and economic downturn; the labor market did not experience the shock that was initially feared.<sup>250</sup> The threat of crisis, however, has raised concerns about Indonesia's preparedness to protect workers from the effects of shocks. First, the country does not have warning systems in place to detect shocks, understand their effect on the labor market, and identify the most vulnerable workers. This impedes the ability of policy-makers to respond accurately and appropriately. Second, there is no standing rapid response system that can be used to quickly deploy appropriate assistance for vulnerable workers.

**Chapter 10 considers how the government can better protect workers and employers from shocks.** Indonesia's labor market will certainly face shocks again in the future. It is necessary, therefore, to consider how the government can take advantage of this window of time, when both the economy and the labor market are strong, to prepare for the challenges of future shocks. This chapter, which explores how Indonesia can better prepare for shocks to the labor market, is divided into three sections:

- The first considers the range of policies and programs that can be used to detect and understand shocks that affect the labor market.
- The second examine policies and programs that can protect employers and workers by: a) boosting employment demand; b) maintaining the income of terminated workers, and; c) enhancing workers' employability and earnings.
- The second section provides recommendations for how the government can better prepare itself for labor market shocks in the future.

## II. Detecting Shocks and Understanding How They Affect Workers

**Policy-makers require reliable "in-time" data in order to monitor the labor market and detect wage and employment shocks.** Sakernas provides a rich source of data that can be used to analyze trends in the labor market and the effect of labor policies and programs. The usefulness of the survey, however, is limited during times of shock and crisis due to its frequency. It is collected bi-annually and is only available to policy-makers months after collection. This impedes their ability to detect wage and employment shocks, accurately analyze how workers are affected by the shock, and determine the most appropriate response mechanism to deliver assistance to employers or workers when they most need it.

250 World Bank. 2009d. "Indonesia Economic Quarterly: Back on Track?" December 2009.

### Protecting workers starts with building monitoring systems that can detect shocks in “real-time.”

The suddenness of the global financial crisis highlighted the difficulties in detecting how shocks affect households (Box 10.1). It has also emphasized the need to develop a national, standing monitoring and response system through which the government can quickly and appropriately support households that have been affected by serious shocks. Establishment of such a system would enable the near-real-time monitoring of a range of vulnerability and shock indicators, allowing the government to understand how a crisis, be it economic or natural, is being transmitted to households, what coping mechanisms they are adopting in response, and the impact on socio-economic indicators.

#### Box 10.1 Improving Shock Monitoring Systems: Indonesia and the Global Financial Crisis

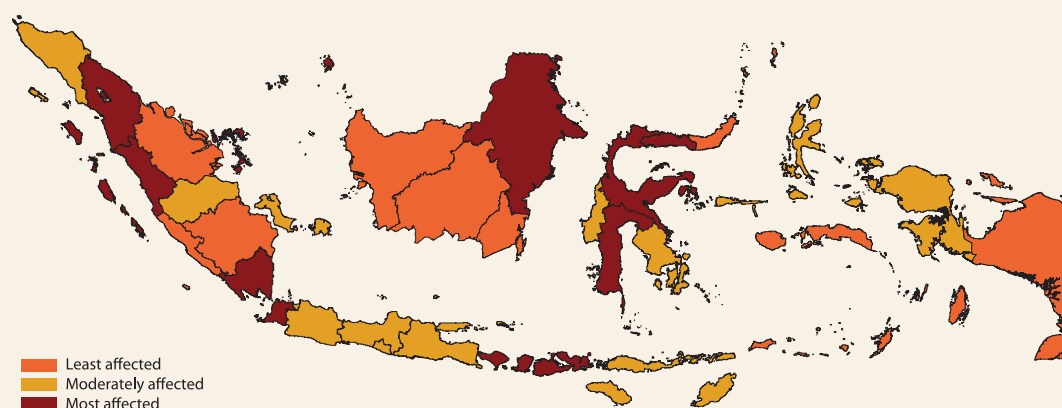
The effects of the global economic crisis on the Indonesian economy began in late 2008 with a sharp fall in exports in the fourth quarter. Consequently, growth in GDP slowed in the fourth quarter of 2008 and into the first quarter of 2009. As exports recovered through 2009, the economy made a steady recovery. Robust domestic consumption helped the Indonesian macro-economy weather the storm.

The effects of a crisis on households, however, may lag behind the recovery of the economy and only become evident months after the downturn in output. Also, groups and regions may experience the shocks differently and recover at different rates. Therefore, it is necessary to monitor key indicators at the household level to better understand how families are affected by shocks such as the global economic crisis and whether they are recovering.

The Government of Indonesia established a Crisis Monitoring and Response System (CMRS) to understand how shocks are transmitted to households, how households are responding, and what their socio-economic outcomes are. The initiative was carried out by Bappenas and BPS in partnership with the World Bank, with financial support from Australian Agency for International Development (AusAID).

The CMRS features a new household survey (CMRSS) that was conducted in August and November 2009. The first two rounds of the survey show that during mid-2009 households experienced a drop in working hours that adversely affected household incomes. Families responded by consuming lower-quality or cheaper food. By late 2009, working hours had partially recovered and families no longer reported having difficulties in meeting their consumption costs. Regions experienced the shock differently (Figure 10.1) and may be recovering at different rates. These changes in households' spending and work patterns may be a consequence of the global economic crisis, alongside other possible causes (e.g., seasonality or events such as national elections).

**Figure 10.1** Quarterly change in labor market conditions and household hardship, by province



Source: CMRSS and World Bank analysis

The CMRS results show that there was little change in the unemployment or labor force participation rates for heads of household. Similarly, formal and informal wages remained steady for most workers. Workers, however, experienced a reduction in working hours. Weekly hours for heads of household dropped 1.3 hours on average between May and August 2009, across both poor and non-poor households. Rural areas experienced a greater drop than urban areas. The national average of weekly working hours of heads of household in CMRSS August 2009 is also 0.8 hours lower than the national average from the Sakernas surveys of August 2008. Sakernas data also show that working hours for heads of household were stable between February and August 2009 (0.2 hours difference), whereas they were 0.8 hours increase between February and August 2008.

The drop in working hours corresponded to nearly a 5 per cent reduction in rural incomes, assuming constant wage rates. Consequently, households reported that they experienced a significant increase in difficulty meeting their consumption costs. The proportion of households that reported difficulty increased by 3 percentage points from April to July 2009, with the proportion amongst the poor increasing by 6 percentage points.

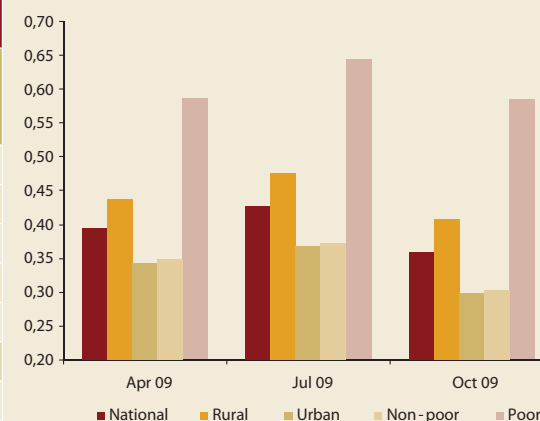
The results from the second round of the CMRS indicate that the situation for households has improved. Working hours increased by 0.6 hours between August and November 2009, partially compensating for the previous downward trend. Female headed households are recovering more quickly. Female heads regained more hours than male heads during this period, with weekly hours in excess of April levels. This appears to have improved household income levels. Household perceptions of difficulties in meeting their consumption costs returned to April quarter levels, as did food substitution trends.

**Figure 10.2** Change in weekly working hours (head of households)

	Quarterly		Semi-annually
	May-August 2009	August-November 2009	May-November 2009
National	-1.3	0.6	-0.8
Rural	-1.5	1.1	-0.5
Urban	-1.1	0.0	-1.1
Non-poor	-1.3	0.3	-1.0
Poor	-1.5	1.8	0.3
Head of household:			
Male	-1.4	0.4	-1.0
Female	-1.1	2.4	1.2

Source: CMRSS

**Figure 10.3** Reported difficulty in meeting consumption costs (per cent of survey respondents)



Source: CMRSS

Source: World Bank. "Indonesia Economic Quarterly: Building Momentum." March 2010. Based on "Indonesia's Crisis Monitoring and Response System – First and Second Round Summary Report." World Bank. March 2010 (Mimeo).

**International experience offers clear lessons on how to build and institutionalize a successful country monitoring system.** Indonesia can learn from other countries that have established monitoring systems. Although there is no single model for what a monitoring system should look like, success stories share some of the same characteristics.<sup>251</sup> An institutional lead in the government is necessary to spearhead the design, development and eventual management of the system. At the same time, country experiences

251 Mackay, 2007.

underscore the need to build a reliable mechanism to collect, manage and share data on which monitoring systems depend. It is also critical to have well-trained officials who have the skills to manage and oversee the monitoring system. This typically requires the provision of training to build the capacity of officials responsible for these functions. Finally, data users are needed who can analyze the data and provide advice to policy makers who are responsible for responding to shocks through programs and policies, which are reviewed in the next section.

### III. Policies and Programs to Protect Workers from Shocks

**Responding to shocks will require a comprehensive policy package designed to protect both employers and workers.** Monitor the labor market in “real time” to detect shocks and understand how their effects are transmitted to workers. Second, a corresponding response system can incorporate three categories of interventions: 1) policies and programs that boost the demand for employment; 2) programs that maintain the income of terminated workers, and; 3) policies designed to enhance workers’ employability and earnings.<sup>252</sup> A single response mechanism is unlikely to be adequate since external shocks hit specific sections of the population through different transmission channels. Therefore, response systems must be robust and include a range of programs that can be quickly deployed to vulnerable workers and their communities. They can be implemented alongside broader social safety net programs, such as direct cash transfers, that can help cushion the working poor from the effects of the crisis.

#### A. Policies and Programs that Boost Employment Demand

**Public works programs can be effective in generating employment opportunities for low-wage and unemployed workers.** A public works program, also known as workfare, is a program that aims to provide temporary jobs for workers while, at the same time, contribute to the development of public goods. These public goods are typically infrastructure projects, but could also include the delivery of services such as building or infrastructure maintenance. Public works programs exist in over 40 percent of low-income countries and are especially suitable during economic shocks. Evaluations have demonstrated that public works programs, when well designed, are effective in reaching poor workers and alleviating short-term poverty.<sup>253</sup>

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252 Categories and descriptions of response options summarized in this chapter are adapted from “How Should Labor Market Policy Respond to the Financial Crisis,” April 2009. World Bank. 2009b.

253 World Bank. 2008c. “Labor Market Programs that Make a Difference in Times of Crisis.”

**Box 10.2 Public Works: Learning from South Africa**

The South African government launched its 'Expanded Public Works Program' (EPWP) at the Growth and Development Summit in 2003. The program provides work and training opportunities to more than one million people a year in order to provide temporary work opportunities for the unemployed.<sup>254</sup> The program is managed by the Department of Public Works, but cuts across all departments and spheres of government.

EPWP supports infrastructure projects that use labor-intensive methods to upgrade rural and municipal roads, municipal pipelines, and storm-water drains. Beyond traditional infrastructure, the program also generates employment through social and economic activities. Work opportunities are created through public environmental improvement projects (including land rehabilitation, coastline cleanup and recycling projects), public social projects (such as home-based care workers and early childhood development workers), and developing small businesses and cooperatives. The average length of the participation ranges from four months to over one year, providing a steady income for participants.

Most of the unemployed attracted to the program are unskilled workers who were willing to work for the minimum wage. The program introduced additional components to increase the ability of these unskilled workers to earn an income once they leave the program. Training, education or skills development was provided alongside work opportunities to improve employability in sectors where demand for jobs is high. The number of average training days varies from 10 days in the environmental sector to 30 days for those participating in social activities.

Evaluations of EPWP find that program participation has a statistically significant, positive effect on the share of the project budget spent on labor, number of days of work created, and the number of training days undertaken.<sup>255</sup> Overall, the researchers found that EPWP reduces the cost of creating employment and of transferring income to the poor.

The program was shown to increase women's share of employment, although it also faced challenges in reaching targets for women and poor regions. The project guidelines aimed to achieve a female participation rate of 40 percent; however, only 23 percent of the employment generated by the programs actually went to women.<sup>256</sup> Some districts with high levels of poverty and unemployment had no public works projects, while others with low levels of poverty had benefited from several. This is likely because poor areas were less accessible and more difficult to work in.<sup>257</sup>

Source: del Ninno, Subbarao and Milazzo, 2009.

**Indonesia implemented a short-term public works program in response to the 1997 financial crisis.**

*Padat Karya* (PK) consisted of more than a dozen employment creation programs that were considered a part of the broader Social Safety Net program (*Jaring Pengaman Sosial*, JPS). PK programs fell into four types of labor-intensive projects<sup>258</sup>: i) redesign of on-going investment and infrastructure programs to become more labor-intensive; ii) block grants to local communities with a menu for the utilization of funds, including public works; iii) special labor-intensive projects including forestry and re-training laid-off workers, and; iv) "food for work" programs. The intended program beneficiaries included workers who lost their job, and those without permanent incomes. The program, however, largely failed to protect the most vulnerable workers due to critical design flaws. (Box 10.2). The program came to halt several years after the crisis.

254 For details on the EPWP program, see the Government of South Africa's website: <http://www.epwp.gov.za/>.

255 Adato and Haddad, 2001. Impact assessments account for the endogeneity of participation. Dependent variables include share of the project budget spent on labor log of number of days of work created and the log number of training days undertaken. The magnitudes of these impacts are sizeable and robust to a variety of model specifications and the inclusion of other covariates.

256 Ibid

257 Ibid

258 Sumarto, Suryhadi and Pritchett. 2000. World Bank.

### Box 10.3 Learning from Indonesia's Experience with Public Works

**Padat Karya was successful in generating employment across the country.** During the second phase PK created about 225 million person-days of employment between April 1998 and December 1999. During this period the program was present in approximately 40 percent of communities across the country. 61.3 percent of urban communities reported having PK in their areas, compared to only 44.6 percent of those in rural areas.<sup>259</sup>

**The program, however, was not effective in targeting the poor.** PK programs covered only 8.3 percent of poor households before February 1999. 70 percent of PK program participants were from non-poor households.<sup>260</sup> The targeting ratio is almost the same as that of other anti-poverty programs during that period, including subsidized rice (*Raskin*), education scholarships, and health cards.

**The failure of the program to provide an effective safety net for poor workers is attributed to three main design flaws:**

- a. **Padat Karya was a fragmented program that was separately implemented by various departments.** The public works scheme included as many as 16 individual programs as part of the overall program when it was first launched. In addition to Public Works, departments such as Forestry and Religious Affairs also began implementing public works programs despite having no track record in the delivery of social assistance. The media criticized many implementing agencies for their poor and hasty planning, inadequate monitoring and supervision, and weak public consultations.<sup>261</sup>
- b. **The program displaced workers because set wages exceeded prevailing market wages.** Wages were centrally determined for 4 broad regions. The median PK wages, however, were set relatively high for unskilled workers – on average at the 40th percentile of individual market wages.<sup>262</sup> Since wages were higher than market rates, demand for jobs exceeded supply. Village public security councils (Lembaga Ketahanan Masyarakat Desa, LKMD) and neighborhood heads (RT/RW), therefore, played key roles in identifying beneficiaries, with the help of the village head and his staff. This led to accusations of officials acting as patrons and giving jobs to family, friends, and clients. Furthermore, higher wages incentivized workers who were already employed to switch jobs, competing with the unemployed for whom the program was originally intended.<sup>263</sup>
- c. **Padat Karya programs were not as labor-intensive as originally intended.** Expected wage allocation for the projects was 70 percent. In reality, only 50 percent of the project budget was allocated to wages.<sup>264</sup> The lower level of labor intensity decreased the availability of jobs, further exacerbating the demand created by relatively high wages. In addition, women's participation rates were low due to the heavy, physical nature of the work. 81 percent of program beneficiaries were men, compared to only 19 percent women.<sup>265</sup>

**A standing public works framework can help the government generate short-term employment opportunities in times of need.** Such a framework can provide two main functions: a) it can determine the regions where job creation is needed, and; b) it can trigger program responses to create short-term employment opportunities for workers in both rural and urban areas. International experience with public works provides lessons for establishing effective public works programs. The problems associated with past public works experiences can be avoided by adhering to the following best practice principles<sup>266</sup>:

- **Create a unified program and is centrally managed.** Weak coordination is a challenge for large-scale public works programs, particularly if implemented by multiple levels of government. To avoid this,

259 Strauss et al. 2001. Indonesian Living Standards. (Based on IFLS 2000).

260 Suharso, Sumarto, and Suryahadi. 2005. SMERU. (Drawing on data provided by the Susenas Special Module).

261 Perdana and Maxwell, 2004.

262 Strauss et al. 2001. Indonesian Living Standards. (Based on IFLS3).

263 Grosh et al. 2008. For Protection and Promotion: The Design and Implementation of Effective Safety Nets. Quoting Sumarto, Suryahadi and Pritchett, 2000.

264 Strauss et al. 2001 (Based on IFLS3 data from the community side).

265 Perdana and Maxwell, 2004.

266 World Bank, 2008c.

appoint a single, central institution to be responsible for overall strategic leadership and monitoring the implementation of the program.

- **Select projects with the highest level of labor intensity** to increase the employment opportunities created by the program. The labor intensity of a public works program reflects the percentage of labor costs in relation to the overall costs of the project. It depends on a number of factors including the choice of the asset to be created, the wage rate and the ability of the implementing agency to budget adequately for non-wage costs.<sup>267</sup> Although projects should strive for high levels of labor intensity (e.g., 60 percent or higher), it is important to ensure that there are adequate resources for materials and equipment so that the project can be completed as planned and reach the desired quality standards.
- **Encourage women's participation by modifying program design elements.** Public works design features can be adapted to enable women's participation. Some projects – including those in Malawi (MASAF), India (SGRY), South Africa (EPWP) and Tanzania (TASAF) – set a target for the minimum percentage of women's participation in the project guidelines. Diversify the type of labor requirements to encourage women's participation. Since heavy labor projects tend to exclude the participation of women, consider offering various types of light work such as building maintenance and park grooming. The Maharashtra Employment Guarantee Scheme (MEGS) in India encouraged the participation of women by providing employment within five kilometers of participants' homes, providing child care facilities, and offering equal wages. Finally, the type of payment may have an impact on women's participation; wages in-kind or piece-wage payment may attract more women than men to work sites.<sup>268</sup>
- **Set wages below the market level for unskilled workers** so that the poorest workers will self-select themselves into the program. This will ensure that the programs are pro-poor, attracting those who have no other alternatives to earn an income and need the additional income the most, while excluding the non-poor and those already gainfully employed. At the same time, low wages will encourage participants to continue searching for better employment opportunities. Evidence suggests that when public works programs set the wage level at the minimum wage (which in many countries is higher than the market wage), the program not only tends to be poorly targeted, but also extremely costly for the government to sustain.<sup>269</sup>
- **Concentrate public works in poor areas with high unemployment levels.** The central coordinating agency should also use systematic geographic targeting in determining program locations (Box 10.3). Allocating budgets in proportion to regional levels of poverty will help ensure that those areas most in need will benefit the most from the intervention.

267 del Ninno, Subbarao and Milazzo, 2009.

268 Ibid.

269 Ibid.



#### Box 10.4 Targeting the Neediest through Public Works

There is evidence showing that the use of multiple targeting methods makes the identification of the neediest more accurate and comprehensive, improving the targeting performance of public works programs.<sup>239</sup> The use of pure self selection, for example, might be insufficient in reaching vulnerable groups in poor areas or when the demand for participation is very large and some form of employment rationing is needed.

Broadly speaking, there are three approaches to targeting: (a) self-selection, (b) self-selection in combination with other methods, and (c) other methods including geographic targeting. The most popular method, worldwide, is a combination of self-selection and other methods, such as geographic or community targeting.

The use of poverty mapping for geographical targeting may help focus the areas with higher poverty concentration within the country. This has been done in Malawi, where targeting for participation in the MASAF public works occurs at two levels. The process starts with the identification of geographic areas based on the Vulnerability Assessment Mapping System (VAM) data, which takes into account factors such as food availability at the household level, the availability of coping mechanisms, and land. Then, the management unit of MASAF in conjunction with the Poverty Monitoring Unit (PMU) is responsible to develop a suitable index and cut-off point of eligible areas. Within the targeted areas, at the community level, wages are set below the minimum wage rate to encourage self-selection.

Similarly, Argentina's *Trabajar* program adopted a combination of geographical targeting and self-selection by offering a wage rate which was initially set at the minimum wage (lower than the market wage) and subsequently lowered to a level below the minimum wage in 2000.

Source: del Ninno, Carlo, Kalanidhi Subbarao and Annamaria Milazzo. "How to Make Public Works Work: A review of the Experiences." 2009. SP Discussion Paper No. 0905. World Bank.

**Involving communities in public works programs to select employment generation projects has many advantages.**<sup>270</sup> First, it will result in the creation of infrastructure/assets that are most needed by the community. Public works would then become a genuinely demand-driven activity. Second, it creates ownership of the asset created and may lead to better maintenance of the asset (such as community water outlets). Third, it may help on the site supervision of the project by the community and thus contribute to better quality of the asset created. Community involvement can be built into the design of the project.

**For these reasons, a public works framework should use existing community-driven development (CDD) programs.** The National Community Empowerment Program (*Program Nasional Pemberdayaan Masyarakat Mandiri* or PNPM-Mandiri), a consolidation of all CDD programs overseen by the Government of Indonesia, provides block grants to sub-districts (*kecamatan*) to support community-identified development projects. The program was scaled up during 2007-09 and now reaches all sub-districts across the country. The program has proven to successfully generate short-term employment in rural areas where unemployment rates have decreased by an average of 1.5 percentage points. The government is channeling additional funds through the program to finance employment-creation projects in areas most affected by the current global economic crisis.

**Care must be taken, however, not to undermine the social capital that community-driven programs aim to build.** PNPM-Mandiri builds social capital by providing the space for communities to make decisions about their own development. Selection of projects funded through block grants is done at open village meetings, which all members of the community can attend. If additional funds are channeled through PNPM during employment shocks, labor-intensive projects should be selected from standing lists already identified by the community. Conditions for the use of additional funds may still be necessary to ensure that

270 del Ninno, Subbarao and Milazzo, 2009.

program wages fall below market wages for skilled workers in order to target the neediest workers. Not all PNPM-Mandiri programs, however, are appropriate for public works. In urban areas, the program relies on volunteers for project implementation. For these reasons, additional channels are needed to reach urban areas and generate a greater number of temporary jobs during extreme employment shocks.

**In addition to public works, there are other policy measures that can stimulate job creation.** The following are two examples of such initiatives that can either be used during or in the wake of employment shocks:

- **Temporary wage subsidies can help dampen the pace of job destruction in the formal sector.** Wage subsidies may prevent the short-term retrenchment of workers by decreasing labor costs for employers without reducing workers' salaries. Firms also avoid losing skills and the subsequent costs of re-hiring workers following recovery from the shock. Wage subsidies can be used to target protection for vulnerable groups of workers, such as low-wage workers or new entrants to the labor market. Wage subsidies, however, are only fiscally sustainable if they are applied for short periods of time. For this reason, they may not be a suitable instrument for the long-term effects of shocks.
- **Enhancing access to micro-credit for small and medium enterprises (SMEs) can also help stimulate the demand for labor in both the formal and informal sectors.** Maintaining access to credit can help aspiring entrepreneurs in setting up small businesses and generating employment opportunities. Credit can also play an important role in preventing viable firms from going out of business, thereby preventing unnecessary job losses in productive sectors. Consistent with these objectives, Brazil, China and India have recently established policies to target credit and provide subsidies to high productivity sectors and SMEs.

## B. Income Maintenance for Terminated Workers

**Indonesia's rigid labor regulations restrict the resilience of the labor market by limiting the ability of firms to cope with shock.** Current firing regulations limit the ability of firms to adjust to changes in global demand and re-allocate workers to more productive sectors. This is because compliant firms incur high severance pay liabilities if they downsize due to a restriction in demand. In fact, according to the law, employers are liable for less severance pay if they go bankrupt than if they downsize. This not only can exacerbate job loss during economic shocks, but it also affects dismissed workers who are unlikely to receive severance pay from bankrupt firms.

**Current regulations not only affect employers but also fail to adequately protect vulnerable workers from downturns in the labor market.** Regulations such as severance pay are designed to protect jobs, but do little to protect workers vulnerable to losing their jobs during times of crisis. These regulations offer little or no protection for the majority of the workforce who are in the informal sector. Nor are these regulations effective in protecting formal sector employees since most work in the absence of a contract and employer compliance rates are low, especially among small firms.

**An unemployment benefit system is the main instrument used by middle-income countries to maintain incomes of laid-off workers.** As discussed earlier, there is a range of policies that countries can adopt to provide unemployment benefits for formal sector workers. These programs can be modified in the following ways to provide additional protection during times of shock, including: extending the benefit duration; broadening coverage to sub-groups not previously covered; and providing partial compensation for workers with reduced work hours. Although Indonesia lacks an unemployment benefit system, the current crisis may trigger renewed attempts to explore reform options and prepare the analytical groundwork for a future system.<sup>271</sup>

<sup>271</sup> See Chapter 4 for a discussion of unemployment benefit reform options.

**Pension provident funds can provide safeguards for workers who lose their jobs during a shock.**

Some countries permit early withdrawals from pension provident funds for contributors who have been laid off. Indonesia's pension provident fund (*Jamsostek*), however, does not provide a safeguard for workers who lose their jobs during a shock. Early withdrawals are only permitted for workers with a history of 5 years of contributions and who have been unemployed for six months or longer.<sup>272</sup> Even if this restriction is relaxed, *Jamsostek* offers little protection for vulnerable workers. While 4 percent of all workers (approximately 27 percent of wage and salary employees) contribute to the pension scheme, only 1 percent of workers were identified as being highly vulnerable during the current crisis. Even workers who collect their pension receive little income protection; the payout, on average, is only equal to 3.8 months of salary due to low contribution rates.

## C. Policies to Enhance Workers' Employability and Earnings

**Comprehensive training programs can help unemployed workers boost their employability and earnings.**

Comprehensive training services provide not only a second chance for workers, but they can also absorb unemployed workers or new entrants to the workforce who face dim prospects during times of crisis. In the absence of unemployment benefit programs and where there is fiscal space, training services could be complemented with a training stipend to increase income levels of the unemployed. Indonesia's skills training centers, however, are too few and inadequate for accommodating the needs of vulnerable workers during shocks. The current crisis may highlight the need to expand training services not only to increase the skill levels of the workforce but also as part of a shock-response system.

**A voucher system could help to provide training for the newly terminated and new entrants to the labor force.**

Recently terminated workers could be given vouchers that could be redeemed for skills training in skills training centers that have been contracted by Depnaker. Similarly, vouchers could be provided to recent senior-secondary graduates who have not yet entered the labor force. Providing additional training not only removes these workers from the ranks of the unemployed but also decreases the likelihood that they will negatively cope with a jobs shock by moving back into agricultural work. Instead, additional training can prepare them for better jobs following the labor market's eventual recovery.

**Not all policies to support workers' earnings function as effective safety nets during wage shocks.**

Following the 1997 financial crisis and the ensuing democratic transformation, minimum wages in Indonesia rapidly increased to help employees recover from the wage crisis. The government's policy to rapidly increase minimum wages, however, failed to protect low-wage workers after the crisis and led to increased exclusion of informal workers.<sup>273</sup> Minimum wage increases had the unintended consequence of shrinking the availability of formal and non-agricultural jobs. Policies to increase minimum wages, moreover, failed to provide an effective safety net for low-wage workers because they are more likely to work for non-compliant employers (i.e., small and medium enterprises that fall below the surveillance of labor inspectorates).

## IV. Recommendations

**Indonesia is not well prepared to protect employers and workers from either wage or job shocks.**

The Government has few labor policy instruments at their disposal to respond to the current financial crisis. For this reason, there is a need to develop programs and policies that can improve the resiliency of the labor market and offer comprehensive protection for the most vulnerable workers. The following

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<sup>272</sup> Vroman, 2007.

<sup>273</sup> See Chapter 5 for a discussion on minimum wage policies in Indonesia.

recommendations provide the foundation for creating a shock monitoring and response system that can be used to respond to labor shocks in the future.

**Increasing the frequency and improving the comprehensiveness of labor data can help to detect shocks in-time and accurately pinpoint affected workers.** Protecting workers from shocks requires collecting up-to-date information for early detection and pinpointing which regions and households are most affected. Currently, labor force surveys are only conducted semi-annually using a large sample size. BPS can increase the timeliness of data while, at the same time, reduce costs, by adopting a quarterly or continuous survey approach that can provide labor data on a quarterly or monthly basis. There is also a need to expand survey questions to better monitor the extent of vulnerability among workers. Local think tanks and research facilities, with technical support and capacity building, can use this data to track changes in the labor market and diagnose how shocks are transmitted to workers to inform the design of response mechanisms. Delays in delivering program responses can be costly to vulnerable workers and their families.

**This data can feed into a permanent monitoring system that can detect future shocks,** including wage and employment shocks. Emergency safety nets cannot be effective or timely unless there is a monitoring system and a stand-by team responsible for scanning available data (including on-the-ground reports) to detect impending crises. The crisis monitoring and response system serves as a prototype for a future monitoring and response system, which could be established on a sustainable and on-going basis so that future shocks can be monitored and addressed as they occur.

**Monitoring information can inform the design of a future emergency response system that governs when and how safety nets for workers will be delivered** in anticipation of a range of potential shocks. The system should identify triggers that justify the deployment of temporary assistance through various program channels. Developing this system will require the advance preparation of guidelines that anticipate responses for specific scenarios, including details on recipient identification, size and type (e.g., cash or in-kind transfers, public works) of assistance package, and window-closing conditions. The design of the response system should also clarify how institutions will work together to carry out design, activation, financing and delivery in order to provide assistance as quickly and efficiently as possible.

**One of the pillars of a national shock response system should be a public works framework.** The framework should govern when, where and how employment generating projects will be delivered in anticipation of a range of potential shocks. This could include the identification of triggers that will launch public works projects or increase allocations for existing labor intensive programs. For example, PNPM-Mandiri can channel funds to support labor intensive, locally identified development projects in rural areas where it has been shown to reduce unemployment rates. Additional projects or channels must also be identified to provide temporary assistance to workers when needed in urban areas. At the same time, the response system can maintain a standing-list of on-going and planned infrastructure projects that can quickly absorb workers during shocks in both urban and rural areas.

**Learning from past experiences and adhering to international “best practices” will help to ensure that the neediest workers are reached.** These best practices include: appointing one single, central institution to be responsible for overall strategic leadership and monitoring the implementation of the program; using systematic geographic targeting in determining program locations; setting wages below the market level for unskilled workers so that workers will self-select themselves into the program; encouraging women's participation by modifying program design elements; and selecting labor intensive projects that have been identified by communities or supporting infrastructure projects that are already included in development strategies will help to ensure that public works projects are useful and productive.







## Annexes

## Annex I.1 Core labor market indicator trends by sub-group (average annual growth rates)

Indicators		1990-97		1997-99		1999-2003		2003-07	
Employment	<b>Employment ratio growth (percentage points)</b>	<b>-0.2</b>		<b>-0.1</b>		<b>-0.4</b>		<b>-0.1</b>	
	Men/Women	-0.1	-0.3	-0.7	0.3	0.1	-1	-0.5	0.3
	Poor/Non-poor	N/A	N/A	2	-0.7	-1.2	-0.1	-2.1	-0.1
	Urban/Rural	0.5	-0.3	-0.1	0.1	0.0	-0.6	0.1	-0.3
	Adult/Young	-0.2	-0.6	0.0	-0.7	-0.5	-0.7	-0.2	0.2
	Less-educated/More-educated	-0.3	0.3	0.2	-1.5	-0.5	-0.1	0.1	-0.8
	<b>Unemployment growth (percentage points)</b>	<b>0.1</b>		<b>0.8</b>		<b>-0.2</b>		<b>0.5</b>	
	Men/Women	N/A	N/A	1	0.6	-0.3	-0.1	0.4	0.6
	Poor/Non-poor	N/A	N/A	0	1.2	0.2	-0.4	0.8	0.3
	Urban/Rural	N/A	N/A	1.2	0.5	-0.5	0.0	0.6	0.4
	Adult/Young	N/A	N/A	0.5	2.2	-0.1	-0.3	0.5	0.6
	Less-educated/More-educated	N/A	N/A	0.6	1.4	-0.1	-0.7	0.3	0.7
Labor Structure	<b>Non-agricultural employment share growth (percentage points)</b>	<b>2.1</b>		<b>-1.3</b>		<b>-0.8</b>		<b>1.3</b>	
	Men/Women	2	2	-1.7	0.7	-0.6	-1.1	1.1	1.5
	Poor/Non-poor	N/A	N/A	-3.4	-0.5	-2.2	-0.2	3.8	0.4
	Urban/Rural	0.4	1.7	-1.5	-1.9	-0.8	-1.5	0.8	1.7
	Adult/Young	2.0	2.6	-1.0	-2.6	-0.9	-0.1	1.3	1.3
	Less-educated/More-educated	1.8	0.5	-1.6	-1.3	-1.1	-0.3	1.4	0.1
	<b>Formal employment share growth (pp)</b>	<b>1.5</b>		<b>-0.9</b>		<b>-0.3</b>		<b>1.2</b>	
	Men/Women	1.6	1.2	-1.4	0.1	-0.3	-0.6	1.3	1.2
	Poor/Non-poor	3.6	-0.1	-2.4	-0.6	-0.8	-0.2	2.1	0.7
	Urban/Rural	0.4	1.2	-1.7	-0.9	-0.3	-0.8	0.1	1.9
	Adult/Young	1.4	1.9	-0.6	-1.8	-0.3	-0.2	1.2	1.3
	Less-educated/More-educated	1.1	0.1	-0.8	-2.1	-0.6	0.0	1.4	-0.2
Wages	<b>Median wage growth (percent)</b>	<b>7.1</b>		<b>-11</b>		<b>8.9</b>		<b>-3.8</b>	
	Men/Women	6.4	10.3	-10.2		7.9	9.7	-4.1	-3.2
	Poor/Non-poor	-0.2	11.1	-10.8		6.1	9.3	-1.2	-2.3
	Urban/Rural	5.9	7.4	-12.9	-9.5	9.6	5.6	-3.6	-2.2
	Adult/Young	6.5	8.8	-11.0		7.6	10.6	-3.7	-3.7
	Less-educated/More-educated	7.1	4.4	-10.9		7.0	7.0	-3.1	-2.1

Source: Sakernas; Susenas for 1992-97 unemployment rates.

Notes:

1. The national labor force (Sakernas) only collects data on profits from casual workers and self-employed workers who work alone, which excludes nearly half of the self-employed. Moreover, prior to 2001, the survey collected no profit data from the self-employed. This is because self-employed profits are very difficult to measure accurately, as they are frequently unknown by those running small and informal businesses, and may vary considerably from month to month.
2. Employment in non-agricultural sectors (i.e., industry and service sectors) is considered preferable because the agricultural sector is the least productive, has high proportions of unpaid and casual workers, and the lowest proportion of educated workers. The sector of work is less informative about wages, although wages in the agriculture sector are significantly lower for both wage and self-employed (alone) workers. This may be due to the reluctance of farmers to leave agriculture, or barriers to entering the more formal service and industrial sector.



Sector Attributes (2007)	Agriculture	Industry	Services	Total
Annual Productivity				
Mean US\$ per worker	13	99	39	40
IDR per worker	1,334	9,888	3,932	3,981
Employment status				
% of workers casual	14.4	16.9	3.2	10.4
% of workers unpaid family workers	30.7	6.8	8.3	17.3
% of workers salaried employee	5.8	52.9	39.4	28.1
Wages				
Median Employee wage	3098	3688	4683	4016
Median Self-employed (alone) wage	2295	2869	3031	2754
Education				
% of workers with senior secondary or above	7.4	27.3	41.5	24.8
Share of work force				
By sector	41.3	18.8	39.9	100

- Since 2001, the Sakernas has classified all workers into one of six employment status categories: Casual laborers, unpaid family workers, self-employed alone, self-employed with temporary or family workers, self-employed with permanent workers, and salaried employees. While this classification contains important information about job quality, the categories are very diverse. For example, salaried employees include both housekeepers and university professors, while self-employed workers include both low-wage *becak* (pedicab) drivers and high-profit medicine sellers or independent real estate agents.

## Annex II.1 Cross-country growth and labor market trends

Period	Country	Growth	Employment	Unemployment	Labor Structure
		Annualized real GDP growth (%)	Average annual rate of growth in adults (age 15+) working (percentage points)	Average annual rate of change in (core) unemployment rate (percentage points)	Average annual rate of change in share of workers in non-agricultural sectors (percentage points)
Pre-Crisis 1990-97	<b>Indonesia</b>	<b>7.4</b>	<b>-0.2</b>	<b>0.1</b>	<b>2.1</b>
	China	11.5	-0.2	0.0	0.9
	Malaysia	9.2	0.4	-0.3	1.2
	Philippines	3.1	0.2	0.0	0.7
	Thailand	6.8	-0.9	-0.2	2.0
	Vietnam	8.4	-0.2	N/A	1.6
Financial Crisis 1997-98	<b>Indonesia</b>	<b>-6.4</b>	<b>-0.1</b>	<b>0.8</b>	<b>-1.3</b>
	China	7.7	-0.23	0.0	0.3
	Malaysia	-0.8	-0.9	0.5	-0.6
	Philippines	1.4	-1.8	0.8	1.3
	Thailand	-3.3	-2.5	1.1	0.9
	Vietnam	5.3	0.7	-0.3	0.2
Recovery 1999-2003	<b>Indonesia</b>	<b>4.5</b>	<b>-0.4</b>	<b>-0.2</b>	<b>-0.8</b>
	China	9.0	-0.4	0.1	0.9
	Malaysia	4.7	0.2	0.0	1.0
	Philippines	4.3	0.4	0.2	0.1
	Thailand	4.8	0.3	-0.4	0.9
	Vietnam	7.0	-0.2	0.0	1.3
Expansion 2003-06	<b>Indonesia</b>	<b>5.4</b>	<b>-0.1</b>	<b>0.5</b>	<b>1.3</b>
	China	10.3	-0.4	0.0	N/A
	Malaysia	6.1	-0.6	0.4	N/A
	Philippines	5.5	-0.5	-0.9	0.1
	Thailand	5.3	0.2	-0.1	1.2
	Vietnam	8.1	-0.1	-0.3	1.8

Source: CEIC, ILO, Sakernas, Susenas for 1992-97 unemployment rates in Indonesia, World Development Indicators.

## Annex II.2 Cross-country growth and non-agricultural sectoral employment trends

Period	Country	Growth	Non-ag employment growth	Industrial sector			Service sector			Real wage growth
				GDP growth	Employment growth	Employment elasticity	GDP growth	Employment growth	Employment elasticity	
		Annualized real GDP growth (%)	Average growth in number of adults working in non-ag sectors	Average growth in value added in industrial sector	Average rate of growth in number of industrial employees	Employment elasticity in industrial sector	Average growth in value added in service sector	Average rate of growth in number of service employees	Employment elasticity in service sector	Average growth in average wage
Pre-Crisis 1990-97	Indonesia	7.38	6.31	8.95	6.88	0.77	6.95	6.04	0.87	3.3
	China	11.51	4.62	15.64	2.76	0.18	10.59	6.55	0.62	5.8
	Malaysia	9.24	4.42	11.04	6.66	0.60	9.98	4.39	0.44	N/A
	Philippines	3.11	4.34	3.30	4.67	1.42	3.51	4.23	1.21	1.5
	Thailand	6.75	5.58	8.82	5.71	0.65	6.36	5.67	0.89	3.5
	Vietnam	8.36	6.46	12.44	3.36	0.27	8.45	3.36	1.39	N/A
Financial Crisis 1997-98	Indonesia	7.7	-0.50	-6.33	-1.76	0.28	-9.07	0.09	-0.01	-11.1
	China	-6.43	0.92	8.50	-0.38	-0.04	8.80	2.07	0.24	14.9
	Malaysia	-0.84	0.88	-1.42	-1.50	1.06	-0.14	2.48	-17.48	N/A
	Philippines	1.39	1.90	-0.63	-1.68	2.66	3.75	3.26	0.87	2.3
	Thailand	-3.32	0.10	-2.35	-5.25	2.23	-4.97	3.22	-0.65	-2.3
	Vietnam	5.27	1.31	8.01	-9.80	-1.22	3.64	7.20	1.98	N/A
Recovery 1999-2003	Indonesia	4.46	-0.11	4.15	1.14	0.28	5.40	-0.71	-0.13	11.2
	China	8.95	1.55	10.06	-0.53	-0.05	9.95	3.23	0.32	13.6
	Malaysia	4.71	4.07	5.15	3.04	0.59	4.49	4.70	1.05	N/A
	Philippines	4.26	3.50	3.51	2.42	0.69	4.97	3.89	0.78	-0.1
	Thailand	4.83	3.55	5.89	5.14	0.87	3.54	2.97	0.84	-5.7
	Vietnam	7.03	5.60	10.10	16.40	1.62	6.10	16.40	0.37	4.6
Expansion 2003-06	Indonesia	5.4	3.53	4.47	2.54	0.57	7.81	4.01	0.51	-2.0
	China	10.33	4.99	11.77	6.14	0.52	10.27	4.12	0.40	11.7
	Malaysia	6.1	1.21	7.79	-2.35	-0.30	6.22	1.49	0.24	N/A
	Philippines	5.51	2.24	4.49	-0.56	-0.12	7.27	3.15	0.43	-1.8
	Thailand	5.25	4.43	6.63	3.61	0.54	5.94	4.89	0.82	-1.8
	Vietnam	8.13	7.36	10.22	9.03	0.88	7.26	9.03	0.85	-3.6

Source: CEIC, GSO Vietnam, Sakernas, and WDI.

## Annex III.1 Employee and job characteristics by contract status

Table B: Job characteristics		Contract status (percent share)		
		Permanent	Fixed-term	No formal contract
<b>Firm size</b>				
1–4 employees		9.21	5.51	26.52
5–19 employees		34.09	24.76	32.14
20–99 employees		28.78	30.05	23.99
100+ employees		27.96	39.74	17.36
<b>Sector</b>				
Agriculture		1.70	1.34	7.35
Mining and quarrying		2.49	1.27	1.19
Manufacturing		23.23	39.27	26.86
Utilities		1.21	1.54	0.56
Construction		1.52	1.38	3.67
Trade		8.88	16.39	19.24
Transportation		3.94	3.52	4.17
Financial services		5.63	10.11	4.82
Social services		50.00	23.66	30.31
Other		1.36	1.54	1.84
<b>Region</b>				
Bali and Nusa Tenggara		3.77	2.11	3.79
Kalimantan		7.23	1.73	2.57
Sulawesi		1.64	1.59	2.17
Sumatera		10.08	10.47	11.89
Java	Jakarta	13.11	12.97	6.17
	West Java	15.27	26.92	24.00
	Central Java	8.60	7.22	16.05
	Yogyakarta	10.20	6.40	6.83
	East Java	21.11	22.05	22.58
	Banten	8.95	8.58	3.99

Source: IFLS, 2007.

Table A: Employee characteristics	Contract status (percent share)		
	Permanent	Fixed-term	No formal contract
<b>Age</b>			
15–19 years	3.17	8.02	7.22
20–24 years	15.09	35.17	16.52
25–34 years	30.85	32.82	32.37
35–44 years	26.85	14.17	23.58
45–54 years	19.62	7.73	14.85
55 years and older	4.39	2.10	5.46
<b>Average age (years)</b>	<b>35.6</b>	<b>28.9</b>	<b>34.2</b>
<b>Educational attainment</b>			
No schooling	0.28	0.37	2.03
Primary	9.29	8.84	27.78
Junior secondary	9.72	9.70	17.63
Senior secondary	43.86	53.59	32.80
Tertiary	36.87	27.45	19.76

Source: IFLS, 2007.

Note: Sub-totals by employee characteristic are each equal to 100%.

Table C: Job quality characteristics	Job difficulty level (Scale of 1 to 4, more arduous work is assigned a higher score)		
	Permanent	Fixed-term	No formal contract
Physical effort	2.2536	2.4730	2.5415
Lifting heavy loads	1.6209	1.7230	1.9934
Stooping, kneeling	2.0284	2.0196	2.3483
Good eyesight	3.0332	3.0515	2.8293
Intense concentration	3.2607	3.1985	2.9751
Interpersonal skills	3.2156	3.2132	2.9772
Computer skills	1.9100	1.7819	1.4280
Stress	1.6682	1.7475	1.5484

Source: IFLS, 2007.

Note: The IFLS4 survey asks individuals to respond to a statement intended to capture their perceptions about the quality of their job. These perceptions are collated to produce a measurement scale for each statement, the value shown in the above table. In constructing the scale, the responses were assigned a value of 4 for All/Almost all the time; 3 for Most of the time; 2 for Some of the time; and 1 for None/Almost none of the time. More arduous work has a higher score.

## Annex III.2 Differences in work intensity, wages and benefits based on contract status (relative to worker with no contract)

	Work intensity		Wages	Non-wage benefits						
Dependent variable:	Hours per week	Weeks per year	Log monthly wage	Meals	Transport	Medical	Credit	Pension	Severance	
Permanent	0.653	0.704	0.253	-0.021	0.027	0.156	-0.005	0.144	0.032	
	-0.88	-1.27	(8.14)**	-1.06	-1.38	(7.01)**	-0.23	(7.39)**	-1.49	
Fixed-term (FTC)	0.496	-3.179	0.112	0	0.006	0.081	-0.039	-0.064	-0.052	
	-0.69	(4.70)**	(3.66)**	-0.02	-0.35	(3.64)**	-1.86	(4.17)**	(2.61)**	
Constant	44.426	32.869	12.586	0.41	0.065	0.372	0.248	0.21	0.062	
	(26.47)**	(24.35)**	(195.54)**	(10.60)**	(2.52)*	(10.51)**	(7.13)**	(9.85)**	(2.10)*	
Observations	6736	6734	6609	6743	6743	6743	6743	6743	6743	
R-squared	0.1	0.09	0.42	0.06	0.1	0.27	0.06	0.32	0.15	

Source: IFLS4 (2007)

Notes:

1. \*\*\* significant at 1 percent; \*\* significant at 5 percent; \* significant at 10 percent.
2. Coefficients are average marginal effects.
3. Robust standard errors in parentheses.
4. Additional control variables include: sex; age; level of education attainment; firm size; sector of employment (two-digit); geographical location by region.

### Annex III.3 Determinants of formality

Dependent variable: Formal = 1 Informal = 0	
Male	0.066 [0.002]**
Urban	0.224 [0.002]**
	0.066
<i>Age (omitted group: 15-18)</i>	
19-24	0.063 [0.006]**
25-34	0.03 [0.005]**
35-49	0.03 [0.005]**
50-64	-0.008 [0.006]
65+	-0.088 [0.007]**
<i>Education (omitted group: below primary)</i>	
Primary	0.09 [0.003]**
Junior high	0.173 [0.004]**
High school	0.346 [0.004]**
Tertiary	0.609 [0.002]**
Vocational	0.051 [0.005]**
Observations	495,295
R-squared	0.184

Source: Sakernas, 2007

Notes:

1. Probit regression
2. \*\*\* significant at 1 percent; \*\* significant at 5 percent; \* significant at 10 percent.
3. Coefficients are marginal effects evaluated at means.
4. Robust standard errors in parentheses.
5. Other controls are regional dummies

### Annex III.4 Formal sector wage premium

Dependent variable: Log hourly wages	
Formal	0.311 [0.026]**
Male	0.393 [0.022]**
Urban	0.105 [0.023]**
Java	-0.226 [0.022]**
<i>Age (omitted group: 15-18)</i>	
19-24	0.106 [0.061]
25-34	0.349 [0.058]**
35-49	0.597 [0.058]**
50-64	0.603 [0.062]**
65+	0.425 [0.078]**
<i>Education (omitted group: below primary)</i>	
Primary	0.192 [0.048]**
Junior high	0.396 [0.055]**
High school	0.7 [0.057]**
Tertiary	1.44 [0.058]**
Vocational	0.047 [0.037]
<i>Industry (omitted group: agriculture)</i>	
Industry	0.289 [0.035]**
Services	0.195 [0.033]**
Observations	12,782
R-squared	0.24

Source: IFLS4

Notes:

1. \*\*\* significant at 1 percent; \*\* significant at 5 percent; \* significant at 10 percent.
2. Coefficients are marginal effects evaluated at means.
3. Robust standard errors in parentheses.



## Annex IV.1 Severance payment, long service pay and basic rights calculation by tenure

Severance		Long Service Pay		Severance + Long Service Pay	
Tenure (years)	Amount (months of salary)	Tenure (years)	Amount (months of salary)	Tenure (years)	Amount (months of salary)
< 1	1	3 to < 6	2	< 1	1
1 to < 2	2	6 to < 9	3	1 to < 2	2
2 to < 3	3	9 to < 12	4	2 to < 3	3
3 to < 4	4	12 to < 15	5	3 to < 4	6
4 to < 5	5	15 to < 18	6	4 to < 5	7
5 to < 6	6	18 to < 21	7	5 to < 6	8
6 to < 7	7	21 to < 24	8	6 to < 7	10
7 to < 8	8	≥ 24	10	7 to < 8	11
≥ 8	9			8 to < 9	12
				9 to < 12	13
				12 to < 15	14
				15 to < 18	15
				18 to < 21	16
				21 to < 24	17
				≥ 24	19

Payment of additional basic rights (D) (Articles 156-4)

1. Annual leaves that have not been taken and have not expired.
2. Transport cost for the workers and their family.
3. Health, medical and housing compensation: 15% from the severance and/or long service pay
4. Other items listed in the contract.

Source: Manpower Law (No. 13/2003), Article 156

## Annex IV.2 Non-compliance Indicators, by employee and job characteristics

Table A: Non-compliance by Employee Characteristics

Employee characteristics	Sakernas			IFLS	
	Indicator 1: Percent of eligible workers not receiving severance	Indicator 2: Percent of eligible workers receiving severance less than legally entitled*	Indicator 3: Average percent of severance received by the eligible workers*		Indicator 1: Percent of eligible workers not receiving severance
<b>All employees</b>	65.61	78.42	69.63	<b>All employees</b>	64.54
<b>Gender</b>				<b>Gender</b>	
Male	63.22	83.42	67.36	Male	65.66
Female	69.97	67.27	74.86	Female	62.55
<b>Age (years old)</b>				<b>Age (years old)</b>	
15-19	85.27	100.00	28.74	15-18	92.56
20-24	84.61	84.36	39.03	19-24	88.43
25-34	59.80	82.59	68.10	25-34	63.94
35-44	37.56	71.09	87.51	35-49	54.15
45-54	55.89	67.44	73.09	50-64	50.73
>=55	100.00	-	-	>=65	79.44
<b>Educational Attainment</b>				<b>Educational Attainment</b>	
No schooling	73.12	56.05	87.34		
Primary	65.53	75.87	61.42	Primary	70.96
Junior secondary	65.51	80.33	66.23	Junior secondary	61.92
Senior secondary	64.32	81.88	62.31	Senior secondary	63.69
Tertiary	67.32	69.88	142.85	Higher	57.93

Source: Sakernas, 2008

Source: IFLS, 2007

\* From those eligible workers received severance

**Table B: Non-compliance by Job Characteristics**

Job characteristics	Sakernas		
	Indicator 1: Percent of eligible workers not receiving severance	Indicator 2: Percent of eligible workers receiving severance less than legally entitled*	Indicator 3: Average percent of severance received by the eligible workers <sup>1</sup>
<b>All employees</b>	65.61	78.42	69.63
<b>Firm size (number of employees)</b>			
1 - 4	74.37	100.00	23.18
5 - 19	71.95	81.44	54.16
20 - 100	65.08	83.11	61.73
100+	61.20	70.30	87.71
<b>Tenure</b>			
0-3 years	82.12	81.59	68.45
4-9 years	43.60	85.00	62.03
10+ years	38.92	65.68	81.67
<b>Wage (Rp)</b>			
250,000 or less	86.94	0.00	145.80
250,001 – 500k	76.24	83.85	51.26
500,001 – 1m	67.88	85.67	63.75
1,000,001 – 1.5m	47.04	66.76	84.20
>1.5m	43.89	86.44	63.72
<b>Firm type of ownership</b>			
Government	100.00	-	-
SOE <sup>2</sup>	68.48	55.33	193.36
Domestic private	57.39	72.04	76.35
Foreign/MNC <sup>3</sup>	78.24	85.12	70.79
Individually owned	70.64	91.04	46.16
Others	73.40	100.00	27.59
<b>Sector</b>			
Agriculture	86.14	100.00	36.36
Mining	100.00	-	-
Manufacturing	66.61	71.07	82.63
Utilities	-	-	-
Construction	42.51	77.14	61.47
Trade	55.42	75.73	76.56
Transportation	21.08	83.08	64.10
Financial services	83.42	100.00	57.21
Social services	70.29	79.64	65.84
<b>Region</b>			
Kalimantan	34.14	100.00	30.15
Sulawesi	100.00	-	-
Sumatera	55.55	85.22	44.62
Java/Bali	66.41	77.08	73.46

Source: Sakernas, 2008

<sup>1</sup> From eligible workers who reported receiving severance pay.

<sup>2</sup> State-owned enterprise

<sup>3</sup> Multi-national corporation

IFLS	
	Indicator 1: Percent of eligible workers not receiving severance
<b>All employees</b>	64.54
<b>Firm size (number of employees)</b>	
1-4	72.90
5-19	71.85
20-99	69.64
>=100	52.84
<b>Tenure</b>	
< 1 year	88.67
1-5 years	74.37
5-10 years	59.99
>10 years	32.03
<b>Wage (Rp)</b>	
250,000 or less	78.94
250,001 – 500k	80.58
500,001 – 1m	56.27
1,000,001 – 1.5m	49.22
>1.5m	44.69
<b>Firm type of ownership</b>	
Government	74.50
SOE	65.25
Domestic private	65.41
Foreign/MNC	53.21
<b>Sector</b>	
Agriculture	72.59
Mining	-
Manufacturing	63.30
Electricity	52.85
Construction	73.65
Wholesale	69.63
Transportation	52.03
Finance	66.11
Public Service	60.44
Other	39.07

Source: IFLS, 2007

## Annex V.1 Wage and non-compliance effects of minimum wage increases

Dependent variables: Log wage of salaried workers, and indicator that wage is less than minimum wage.	Log provincial minimum wage (Current year)	Log provincial minimum wage (Prior year)	Log provincial minimum wage (Two years ago)
Log wage	0.30** (0.12)	0.30** (0.12)	0.24*** (0.08)
25 <sup>th</sup> Percentile	0.30*** (0.06)	0.24*** (0.07)	0.25*** (0.06)
50 <sup>th</sup> Percentile	0.28*** (0.06)	0.29*** (0.07)	0.19*** (0.05)
75 <sup>th</sup> Percentile	0.33*** (0.06)	0.21*** (0.06)	0.29*** (0.06)
Non-compliance	0.10*** (0.02)	0.10*** (0.02)	0.08** (0.04)
Lagged district characteristics:			
One year ago	Yes	No	No
Two years ago	No	Yes	No
Three years ago	No	No	Yes
Pre-determined controls	Yes	Yes	Yes
Number of provinces (2007)	33	33	33
Number of years	13	12	11
Observations	33,901	29,695	29,691

Source: Sakernas 1993, 1994, 1996-2007 (August)

Notes:

1. Each cell represents a different regression. Log wage regression is OLS, percentile regressions are taken from quantile regressions; Compliance is average marginal effect from probit regression
2. Lagged district controls include provincial minimum wage, the share of persons in the bottom two quintiles of predicted consumption and district averages of the following labor market indicators: Employee wage, percentage of employment in agriculture and industry, percentage of employment in job type (Self-employed alone, with temporary workers, with permanent workers, salaried, and family workers), employment and unemployment rates.
3. Additional pre-determined control variables include: Sex; age and its square, educational attainment level, vocational school attendance, location (urban/rural), and year.
4. \*\*\* significant at 1 percent; \*\* significant at 5 percent; \* significant at 10 percent.
5. Standard errors (in parentheses) are robust and clustered on province.

## Annex V.2 Employment and labor structure effects of minimum wage increases

Dependent variable: Employment status and job sector	Log provincial minimum wage (Current year)	Log provincial minimum wage (prior year)	Log provincial minimum wage (two years ago)	Mean of dependent variable (2007)
<b>Employment</b>				
Working	0.04*	0.003	-0.01	0.62
	(0.02)	(0.04)	(0.03)	
Unemployed (old, conditional on LFP)	-0.04***	-0.02	-0.02*	0.07
	(0.01)	(0.02)	(0.01)	
Out of the labor force	-0.02	0.02	0.03	0.34
	(0.02)	(0.03)	(0.02)	
<b>Job Sector</b>				
Formal	-0.04*	-0.10***	-0.05*	0.47
	(0.02)	(0.02)	(0.03)	
Agriculture	-0.01	0.06*	-0.0002	0.41
	(0.02)	(0.03)	(0.03)	
Industry	0.01	-0.10***	-0.02	0.18
	(0.02)	(0.02)	(0.02)	
Service	-0.00	0.04	0.02	0.40
	(0.01)	(0.04)	(0.03)	
Lagged district characteristics:				
One year ago	Yes	No	No	
Two years ago	No	Yes	No	
Three years ago	No	No	Yes	
Worker characteristics	Yes	Yes	Yes	
Number of provinces (2007)	33	33	33	
Number of years	13	12	11	
Observations	175,214	152,343	150,818	

Source: Sakernas, 1993-2007 (August)

Notes:

1. Coefficients are from linear probability models.
2. Lagged district characteristics include provincial minimum wage, and district averages of the following labor market indicators: Employee wage, percentage of employment in agriculture and industry, percentage of employment in job type (Self-employed alone, with temporary workers, with permanent workers, salaried, and family workers), employment and unemployment rates, and share of workers in bottom 2 quintiles of predicted consumption.
3. Worker characteristics include: Sex; age and its square, educational attainment level, vocational school attendance, location (urban/rural), and year.
4. \*\*\* significant at 1 percent; \*\* significant at 5 percent; \* significant at 10 percent.
5. Standard errors (in parentheses) are robust and clustered on province.

### Annex V.3 Employment and labor structure effects of lagged minimum wage increases, by type of worker

Log Provincial Minimum wage (prior year)				
Dependent variable:	Formality	Agriculture	Industry	Services
Men	-0.11*** (0.03)	0.05 (0.03)	-0.09*** (0.02)	0.04 (0.04)
Women	-0.09*** (0.03)	0.10*** (0.03)	-0.12*** (0.02)	0.02 (0.04)
Youth	-0.10*** (0.02)	0.07* (0.03)	-0.10*** (0.02)	0.03 (0.04)
Adult	-0.10*** (0.02)	0.06* (0.03)	-0.10*** (0.02)	0.04 (0.04)
Skilled	-0.08** (0.04)	0.10* (0.05)	-0.06** (0.02)	-0.03 (0.05)
Unskilled	-0.11*** (0.02)	0.05 (0.04)	-0.11*** (0.02)	0.06 (0.04)
Urban	-0.10*** (0.03)	0.06 (0.04)	-0.10*** (0.02)	0.04 (0.04)
Rural	-0.10*** (0.03)	0.07* (0.04)	-0.10*** (0.02)	0.03 (0.04)
Poor	-0.10*** (0.02)	0.06* (0.04)	-0.10*** (0.02)	0.04 (0.04)
Non-poor	-0.10*** (0.03)	0.08* (0.04)	-0.09*** (0.02)	0.01 (0.04)
Lagged district characteristics				
Two years ago	Yes	Yes	Yes	Yes
Worker characteristics	Yes	Yes	Yes	Yes
Number of provinces (2007)	33	33	33	33
Number of years	12	12	12	12
Observations	152,343	152,343	152,343	152,343

Source: Sakernas, 1993-2007 (August)

Notes:

1. Coefficients are from interactions of worker characteristics and lagged log minimum wage of the province, based on linear probability models.
2. Lagged district characteristics include provincial minimum wage, and district averages of the following labor market indicators: Employee wage, percentage of employment in agriculture and industry, percentage of employment in job type (Self-employed alone, with temporary workers, with permanent workers, salaried, and family workers), employment and unemployment rates, and share of workers in bottom 2 quintiles of predicted consumption.
3. Worker characteristics include: Sex; age and its square, educational attainment level, vocational school attendance, location (urban/rural), and year.
4. \*\*\* significant at 1 percent; \*\* significant at 5 percent; \* significant at 10 percent.
5. Standard errors (in parentheses) are robust and clustered on province.

## Annex V.4 Comparison of Studies on Minimum Wages in Indonesia

Study	Data	Years	Unit of analysis	Dependent variable	Min wage variable	Other control variables	Elasticity	Statist. Significant	Conclusion
<b>Papers based on Medium and Large Manufacturing Data</b>									
Alatas and Cameron (2007)	Survei Industri (Jakarta and West Java)	1992-1996	Firm	Production worker employment in medium and large manufacturing firms in Jakarta and West Java	Percent increase in province	Province and year fixed effects, and value added per worker	-0.16	No	No effect on large firms, large effect on smaller firms in some specifications.
Harrison and Scorse (2004)	Survei Industri	1990-1996	Firm	Production worker employment in medium and large manufacturing firms	Change in minimum wage	Provincial fixed effects	-0.14	Yes	Higher minimum wages reduce manufacturing employment for unskilled workers
<b>Papers based on Sakernas</b>									
Rama (1996)	Sakernas	1988-1995	Province	Percentage of adults in urban areas working	Ratio of minimum wage to average productivity	Province and year fixed effects only	.01 to -0.07	Mostly no	Raising minimum wage has a small negative impact on urban wage employment
Suryahadi, et al (2003)	Sakernas	1988-1999	Province	Total Employment	Real minimum wage	Province and year fixed effects. Population, compliance, regional GDP	-0.11	Yes but not robust	Minimum wage decreases employment
Islam and Nazara (2000)	Sakernas	1990-1998	Province	Total Employment	Real minimum wage	Crisis dummies and island groups	-0.05 to -0.1	Yes but not robust	Minimum wages decreases employment in some models, but it is not robust.
Pratomo (2007)	Sakernas	1990-1998	Province	Total Employment and urban salaried employment	-	Lagged unemployment, provincial characteristics, provincial and year dummies	-0.05 (total) to -0.12 (urban salaried)	No for total, yes for urban salaried	Minimum wage decrease urban formal employment
Jobs Report (2010)	Sakernas,	1996-2007	Adult	Probability of working in agricultural, industrial, or service sector. Probability of formal employment.	Lagged Real minimum wage	Worker sex, age, and education. Twice-lagged minimum wage. Twice-lagged district averages: employment in agriculture and industry, job type, employment rate, unemployment rate, and predicted poverty rate.	-0.1 (reduction in probability of working in industry and formal sector)	No for total, yes for non-ag and formal	Minimum wages have no effect on total employment, but do tend to decrease industrial and formal sector employment.



## Annex VI.1 Determinants of Union Membership

Dependent variable:	
members of union = 1, non-member = 0	
Personal characteristics	
Male	-0.008 (0.007)
Urban	-0.015 (0.008)*
Java	0.001 (0.007)
Age in years	0.001 (0.000)**
Number of workers in firm (Control: less than 20)	
20-100	0.041 (0.010)**
>100	0.118 (0.020)**
Monthly wages in Rp (Control: less than 250k)	
250-500k	0.029 (0.014)*
500k-2m	0.074 (0.015)**
2-5m	0.137 (0.027)**
>5m	0.103 (0.072)
Education	
Primary	0.039 (0.030)
Junior secondary	0.059 (0.042)
Senior secondary	0.073 (0.041)
Tertiary	0.108 (0.061)
vocational	0.01

	(0.009)
Sector (Control: agriculture)	
Mining	0.015 (0.032)
Manufacturing	0.08 (0.019)**
Electricity	0.049 (0.065)
Construction	-0.036 (0.009)**
Trade, warehouse, restaurant	-0.003 (0.013)
Transportation	0.034 (0.025)
Finance	0.026 (0.021)
Public services	0.028 (0.016)
Other	0.01 (0.025)
Observations	5,801

Robust standard errors in parentheses

\* significant at 5%; \*\* significant at 1%

Source: IFLS 2007

## Annex VI.2. Characteristics of Union Members in Non-government enterprises

	All employees	Union members
<b>All</b>		
Total	100.00%	100.00%
<b>Sex</b>		
male	61.30%	60.50%
female	38.70%	39.50%
<b>Location</b>		
Urban	67.30%	70.00%
Rural	32.70%	30.00%
<b>Education</b>		
Under primary	1.80%	1.30%
Primary	25.60%	21.80%
Junior secondary	16.10%	13.40%
High school	34.90%	34.10%
Tertiary	21.50%	29.40%
<b>Firm size</b>		
< 20 workers	62.30%	30.50%
20-100 workers	22.80%	26.80%
100+ workers	14.90%	42.80%
<b>HH income</b>		
Bottom quintile	16.80%	11.70%
2nd quintile	17.30%	14.60%
3rd quintile	17.80%	20.90%
4th quintile	20.30%	21.60%
Top quintile	27.90%	31.20%
<b>Monthly wage</b>		
<= Rp 250k	17.60%	4.00%
Rp 250k-500k	24.60%	11.90%
Rp 500k-2m	53.20%	76.60%
Rp 2-5m	3.80%	6.10%
Rp >5m	0.80%	1.50%

Source: IFLS 2007

## Annex VII.1 Growth in number of high schools, 2000-2005

		2000	2005	Increase (%)
<b>Urban</b>	Public SMP	3,199	4,907	53.4
	Private SMP	6,537	9,031	38.2
	Public SMA	1,894	3,358	77.3
	Private SMA	5,455	8,496	55.7
<b>Rural</b>	Public SMP	7,514	9,597	27.7
	Private SMP	9,999	10,299	3
	Public SMA	1,917	2,991	56
	Private SMA	3,584	4,130	15.2
<b>Total</b>	All	40,099	52,809	31.7
<b>Sub-totals</b>	Public	14,524	20,853	43.6
	Private	25,575	31,956	25.0
	Public SMA	3,811	6,349	66.6
	Public SMP	10,713	14,504	35.4
	Urban	17,085	25,792	51.0
	Rural	23,014	27,017	17.4

Source: Podes, various years.

Note: SMA includes general and vocational senior secondary schools; rural to urban reclassification of villages between 2000 and 2005 is ignored.

## Annex VII.2 Employer Skills Survey Findings

What, in your opinion, is the reason(s) for skill requirements in your firm to increase (please mark every reason from the table below that applies)

	Yes (share of firms)	No (share of firms)
<b>Overall</b>		
New technology imported from abroad	17	83
New technology developed home (through R&D)	35	65
Change in workplace organization (e.g., more emphasis on personal skills, etc.)	28	72
Higher quality standards (for the firm's products or services)	82	17
More competitive business environment	75	25
Higher export orientation	15	85
A generally higher supply of skilled workers in the labor market	48	52
<b>Manufacturing</b>		
New technology imported from abroad	20	80
New technology developed home (through R&D)	36	64
Change in workplace organization (e.g., more emphasis on personal skills, etc.)	22	78
Higher quality standards (for the firm's products or services)	90	10
More competitive business environment	68	32
Higher export orientation	26	74
A generally higher supply of skilled workers in the labor market	42	58
<b>Services</b>		
New technology imported from abroad	14	85
New technology developed home (through R&D)	34	66
Change in workplace organization (e.g., more emphasis on personal skills, etc.)	32	67
Higher quality standards (for the firm's products or services)	78	22
More competitive business environment	78	22
Higher export orientation	8	92
A generally higher supply of skilled workers in the labor market	52	48

Source: Employer Skills Survey (2008)

## Annex VIII.1 Number of schools and students, by senior secondary school type

Year	Public SMA		Public SMK		Private SMA		Private SMK	
	Schools	Students	Schools	Students	Schools	Students	Schools	Students
2002/2003	3,120	1,827,046	838	598,876	4,916	1,316,684	4,105	1,500,877
2003/2004	3,203	1,886,701	899	608,411	5,035	1,371,272	4,216	1,533,133
2004/2005	3,634	2,000,241	1,159	636,064	5,265	1,402,374	4,506	1,528,004
2005/2006	3,940	2,069,243	1,298	682,796	5,377	1,428,177	4,727	1,549,131
2006/2007	4,231	2,191,985	1,483	778,076	5,661	1,382,161	4,939	1,623,656
2007/2008	-	-	-	-	-	-	-	-
2008/2009	-	-	-	-	-	-	-	-

Year	Total Public		Total Private		Total SMA		Total SMK	
	Schools	Students	Schools	Students	Schools	Students	Schools	Students
2002/2003	3,958	2,425,922	9,021	2,817,561	8,036	3,143,730	4,943	2,099,753
2003/2004	4,102	2,495,112	9,251	2,904,405	8,238	3,257,973	5,115	2,141,574
2004/2005	4,793	2,636,305	9,771	2,930,378	8,899	3,402,615	5,665	2,164,068
2005/2006	5,238	2,752,039	10,104	2,977,308	9,317	3,497,420	6,025	2,231,927
2006/2007	5,714	2,970,061	10,600	3,005,817	9,892	3,574,146	6,442	2,401,732
2007/2008	-	-	-	-	9,539	3,686,219	6,746	2,864,962
2008/2009	-	-	-	-	9,517	3,863,744	7,653	3,290,396

Source: MoNE, [www.depdiknas.go.id](http://www.depdiknas.go.id)

## Annex VIII.2 “Out-of-pocket” school fees (Rupiah)

School Fee	Public SMA		Public SMK		Private SMA		Private SMK	
	Median	Mean	Median	Mean	Median	Mean	Median	Mean
Registration fee	15,000	245,358	40,000	318,799	50,000	331,383	75,000	297,323
School fee	120,000	267,017	350,000	517,393	240,000	369,459	480,000	520,823
Parent organization fee	0	104,719	0	90,057	0	105,154	0	91,720
Practice fee	0	22,492	0	32,167	0	95,368	0	93,606
Student organization fee	0	16,242	0	21,622	0	19,417	0	17,723
Test fee	0	15,411	0	49,243	0	25,015	0	61,844
Other teaching supporting materials	0	43,728	0	47,870	0	50,369	0	54,823
Uniform fee	0	135,881	0	139,257	0	150,298	0	126,680
Book fee	100,000	182,447	116,000	213,113	100,000	159,836	120,000	174,255
Stationary fee	60,000	94,887	70,000	97,307	60,000	92,778	70,000	96,957
Transport fee	120,000	359,370	100,000	393,965	208,000	489,015	240,000	478,619
Course fee	0	42,253	0	35,771	0	32,504	0	28,380
Others	0	144,803	0	163,200	0	179,670	0	175,102
<b>Total</b>	<b>415,000</b>	<b>1,674,608</b>	<b>676,000</b>	<b>2,119,763</b>	<b>658,000</b>	<b>2,100,265</b>	<b>985,000</b>	<b>2,217,855</b>

Source: Susenas Education Module 2006

## Annex VIII.3 Labor market outcomes by school type

### General senior secondary education (SMA) vs. vocational senior secondary (SMK)

Labor outcome indicator	Unemployment rate (%)		Employment rate (%)		Out of the labor force (%)		Median wage (IDR)		Casual work <sup>274</sup> (%)	
	SMA	SMK	SMA	SMK	SMA	SMK	SMA	SMK	SMA	SMK
School type										
Average	4.6	3.7	72.3	76.8	24.4	20.7	6,896	5,520	6.6	7.9
Male	4.8	4.0	82.5	88.2	13.7	8.6	7,065	5,764	5.3	5.7
Female	4.3	3.1	60.7	62.9	36.5	35.3	6,783	4,962	8.7	11.7
Young	18.6	15.0	40.1	53.5	50.7	37.1	3,403	3,213	18.6	18.2
Old	2.0	1.5	82.6	82.8	16.0	16.5	7,403	6,180	4.9	6.2
Advantaged	5.7	3.5	66.2	72.1	30.0	25.3	7,172	5,347	6.2	6.7
Disadvantaged	3.9	3.6	75.8	77.4	21.3	20.3	6,829	5,520	7.1	8.8

Source: IFLS, 2007

### Senior secondary education: public vs. private

Labor Indicator	SMA		SMK	
	Public	Private	Public	Private
Unemployment rate (%)	4.6	4.6	3.7	6.8
Employment rate (%)	72.3	72.2	76.8	68.9
Out of the labor force (%)	24.4	24.6	20.7	26.3
Median wage (IDR)	6,896	4,857	5,520	4,067
Casual work (%)	6.6	9.2	7.9	11

Source: IFLS, 2007

274 Casual work is conditional on being employed.



## Annex VIII.4 Effect of school type on labor market outcomes (full sample pooled)

	Male					Female				
	Labor force participation LPM	Unemployment LPM	Formal employment LPM	Wages OLS	Wages LAD	Labor force participation LPM	Unemployment LPM	Formal employment LPM	Wages OLS	Wages LAD
Public SMK	0.013* (0.007)	-0.006 (0.011)	0.036** (0.017)	0.009 (0.056)	0.032 (0.044)	0.023 (0.029)	-0.017 (0.012)	0.032 (0.025)	0.087 (0.075)	0.133*** (0.049)
Private SMA	0.013* (0.007)	-0.003 (0.008)	-0.042* (0.025)	-0.171*** (0.062)	-0.278*** (0.045)	-0.076** (0.032)	0.016 (0.010)	-0.052* (0.028)	-0.047 (0.076)	-0.202*** (0.064)
Private SMK	0.005 (0.008)	0.010 (0.012)	0.019 (0.020)	-0.203*** (0.064)	-0.188*** (0.057)	-0.032 (0.034)	0.004 (0.013)	0.007 (0.029)	-0.014 (0.081)	-0.048 (0.058)
Pub Gen Prob	0.971	0.051	0.575			0.693	0.045	0.566		
R <sup>2</sup>	0.090	0.171	0.559	0.230		0.175	0.232	0.584	0.314	
Observations	6084	5931	5642	5065	5065	5330	3452	3288	2681	2681

Source: IFLS1-4

Notes:

1. \*\*\* significant at 1 percent; \*\* significant at 5 percent; \* significant at 10 percent.
2. Standard errors in parentheses; they are robust to heteroskedasticity and clustered at subdistrict level.
3. LPM stands for Linear Probability Model, OLS stands for Ordinary Least Squares, and LAD for Least Absolute Deviations.
4. In all cases, the sample is rebalanced by reweighting observations by the estimated inverse probability of attending their school type, in addition to standard individual cross-sectional weights.
5. All estimates are based on equation (2) in the text. Wage LAD estimates include provincial instead of district fixed effects. Standard errors for LAD estimates are obtained from an unweighted bootstrap procedure.
6. Control variables include: survey year; parental education; place of living when 12 years old; district of junior secondary school graduation; age and its square; number of repeated grades during primary and junior secondary; whether working during primary and junior secondary; whether graduated from a public junior secondary school; sex control variable is included in all estimations except in the gender heterogeneity estimation.

## Annex VIII.5 Effect of parental education on school choice (full sample)

	Male				Female			
	Public SMA	Public SMK	Private SMA	Private SMK	Public SMA	Public SMK	Private SMA	Private SMK
Father graduated elementary (SD)	4.2 (4.5)	-1.3 (3.9)	4.1 (4.2)	-7.0* (4.2)	-6.5 (6.2)	-4.6 (5.3)	5.8 (6.2)	5.3 (6.5)
Father graduated junior secondary (SMP)	6.2 (5.4)	-3.9 (4.1)	7.4 (5.2)	-9.8** (4.5)	-5.6 (6.6)	-8.8* (5.3)	8.0 (6.9)	6.4 (7.1)
Father graduated senior secondary (SMA)	6.0 (5.9)	-6.8 (4.5)	13.0** (6.1)	-12.2** (4.8)	-1.5 (7.8)	-8.5 (5.5)	11.0 (7.6)	-1.0 (6.1)
Father graduated university	18.7** (7.7)	-12.2*** (4.4)	12.4* (7.3)	-18.9*** (4.5)	6.1 (9.0)	-11.3* (5.9)	7.0 (7.4)	-1.8 (7.0)
Father attended vocational school	3.5 (5.0)	7.0 (5.5)	-5.2 (4.2)	-5.3 (4.4)	1.5 (5.4)	0.2 (4.6)	-8.9** (4.2)	7.2 (5.3)
Mother graduated elementary (SD)	0.1 (3.2)	-4.6* (2.5)	5.8* (3.2)	-1.3 (3.1)	6.7 (4.5)	6.6* (3.5)	-4.6 (3.6)	-8.7*** (3.2)
Mother graduated junior secondary (SMP)	3.0 (4.4)	-4.5 (3.7)	7.1 (4.7)	-5.6 (3.8)	13.2** (5.6)	-2.0 (3.4)	1.9 (4.9)	-13.1*** (3.4)
Mother graduated senior secondary (SMA)	5.2 (6.9)	-8.8* (5.0)	2.0 (6.0)	1.5 (6.9)	10.0 (6.7)	4.7 (5.9)	-2.2 (6.6)	-12.5** (5.4)
Mother graduated university	18.6* (11.3)	-5.3 (10.6)	-4.7 (5.7)	-8.7 (7.8)	17.2* (10.1)	7.3 (10.1)	-11.4 (7.2)	-13.1** (6.7)
Mother attended vocational school	-0.9 (6.5)	7.1 (7.9)	-3.5 (5.5)	-2.7 (5.7)	3.9 (6.1)	-2.6 (5.3)	-5.1 (6.0)	3.9 (7.4)
Base Case Probability	12.8	30.8	18.4	39.0	50.6	19.8	17.7	11.9
Observation s	2,675					2,260		
R-Squared	0.099					0.116		

Source: IFLS1-4

Notes:

1. \*\*\* significant at 1 percent; \*\* significant at 5 percent; \* significant at 10 percent.
2. Regression estimated using probit, where the coefficients are marginal effects in percentage points.
3. Robust standard errors in parentheses; they are robust to heteroskedasticity and clustered at the sub-district level.
4. Control variables include: survey year; parental education; place of living when 12 years old; district of junior secondary school graduation; age and its square; number of repeated grades during primary and junior secondary; whether working during primary and junior secondary; whether graduated from a public junior secondary school; sex control variable is included in all estimations except in the gender heterogeneity estimation.
5. Father's education attainment is used as a proxy for household welfare level. Households where the father has an attainment level of SMP or below are considered as disadvantaged. Households where the father has an attainment level of SMA or above are considered as advantaged.

## Annex VIII.6 Effect of test scores on school choice (full sample)

	Male				Female			
	Public SMA	Public SMK	Private SMA	Private SMK	Public SMA	Public SMK	Private SMA	Private SMK
Junior secondary test scores								
Middle third (tercile)	13.7*** (4.8)	8.3* (4.2)	-3.4 (4.6)	-18.6*** (4.2)	4.7 (5.3)	8.9** (4.3)	-2.5 (5.0)	-11.2*** (4.3)
Top third (tercile)	23.6*** (6.5)	16.4*** (5.6)	-17.4*** (3.9)	-22.7*** (4.8)	19.6*** (5.9)	12.9*** (4.9)	-9.7** (4.6)	-22.8*** (4.2)
Base Case Probability	28.4	0.3	46.1	25.3	40.2	10.7	30.3	18.8
Observations	745				771			
R-Squared	0.199				0.218			

Source: IFLS1-4

Notes:

1. \*\*\* significant at 1 percent; \*\* significant at 5 percent; \* significant at 10 percent.
2. Regression estimated using probit, where the coefficients are marginal effects in percentage points.
3. Robust standard errors in parentheses; they are robust to heteroskedasticity and clustered at the sub-district level.
4. Control variables include: survey year; parental education; place of living when 12 years old; district of junior secondary school graduation; age and its square; number of repeated grades during primary and junior secondary; whether working during primary and junior secondary; whether graduated from a public junior secondary school; sex control variable is included in all estimations except in the gender heterogeneity estimation.
5. Father's education attainment is used as a proxy for household welfare level. Households where the father has an attainment level of SMP or below are considered as disadvantaged. Households where the father has an attainment level of SMP or below are considered as disadvantaged. Households where the father has an attainment level of SMA or above are considered as advantaged.

Table VIII.7 Effect of school type on labor market outcomes (young cohort)

	Male, young cohort				Female, young cohort			
	Labor force participation	Unemployment	Formal employment	Wages	Labor force participation	Unemployment	Formal employment	Wages
Public SMK	0.011 (0.030)	-0.055 (0.050)	0.039 (0.040)	-0.328*** (0.101)	-0.027 (0.057)	-0.009 (0.038)	-0.042 (0.053)	-0.175 (0.142)
Private SMA	0.017 (0.026)	0.002 (0.045)	0.023 (0.047)	-0.180 (0.114)	-0.080 (0.064)	0.072 (0.050)	-0.122** (0.054)	-0.063 (0.137)
Private SMK	-0.014 (0.027)	0.013 (0.046)	0.067 (0.051)	-0.134 (0.106)	-0.052 (0.057)	0.079** (0.039)	-0.098** (0.042)	-0.222 (0.164)
R <sup>2</sup>	0.262	0.338	0.647	0.395	0.275	0.385	0.678	0.501
Observations	1,244	1,156	979	803	1,363	864	752	578

Source: IFLS1-4

Notes:

1. \*\*\* significant at 1 percent; \*\* significant at 5 percent; \* significant at 10 percent.
2. Standard errors in parentheses; they are robust to heteroskedasticity and clustered at subdistrict level.
3. Control variables include: survey year; parental education; place of living when 12 years old; district of junior secondary school graduation; age and its square; number of repeated grades during primary and junior secondary; whether working during primary and junior secondary; whether graduated from a public junior secondary school; sex control variable is included in all estimations except in the gender heterogeneity estimation.
4. Father's education attainment is used as a proxy for household welfare level. Households where the father has an attainment level of SMP or below are considered as disadvantaged. Households where the father has an attainment level of SMP or below are considered as disadvantaged. Households where the father has an attainment level of SMA or above are considered as advantaged.

**Table VIII.8 Estimated Effect of School Type on Employment and Job Quality, by father's education (male and female)**

Male	Junior secondary or below				Senior secondary or above			
	Labor Force Participation	Unemployment	Formal	Wage	LFP	Unemployment	Formal	Wage
	LPM	LPM	LPM	OLS	LPM	LPM	LPM	OLS
Public SMK	0.003 (0.007)	-0.014 (0.009)	0.060*** (0.021)	-0.001 (0.062)	0.023* (0.013)	0.023 (0.030)	0.036 (0.047)	-0.034 (0.142)
Private SMA	0.008 (0.008)	-0.011 (0.009)	-0.047* (0.027)	-0.223*** (0.061)	0.043** (0.018)	0.003 (0.028)	0.015 (0.054)	-0.129 (0.164)
Private SMK	0.004 (0.008)	0.008 (0.015)	0.012 (0.024)	-0.287*** (0.076)	-0.009 (0.027)	0.058 (0.041)	0.009 (0.064)	-0.167 (0.137)
Pub Gen Prob	0.971	0.045	0.586		0.960	0.068	0.611	
R <sup>2</sup>	0.089	0.163	0.571	0.252	0.156	0.323	0.661	0.434
Observations	4,389	4,285	4,106	3,698	1,037	999	917	799

Source: IFLS1-4

Notes:

1. \*\*\* significant at 1 percent; \*\* significant at 5 percent; \* significant at 10 percent.
2. Standard errors in parentheses; they are robust to heteroskedasticity and clustered at subdistrict level.
3. Control variables include: survey year; parental education; place of living when 12 years old; district of junior secondary school graduation; age and its square; number of repeated grades during primary and junior secondary; whether working during primary and junior secondary; whether graduated from a public junior secondary school; sex control variable is included in all estimations except in the gender heterogeneity estimation.
4. Father's education attainment is used as a proxy for household welfare level. Households where the father has an attainment level of SMP or below are considered as disadvantaged. Households where the father has an attainment level of SMA or above are considered as advantaged.

Female	Junior secondary or below				Senior secondary or above			
	LFP	Unemployment	Formal	Wage	LFP	Unemployment	Formal	Wage
	LPM	LPM	LPM	OLS	LPM	LPM	LPM	OLS
Public SMK	0.064* (0.033)	-0.014 (0.013)	0.022 (0.034)	0.125 (0.102)	0.043 (0.061)	-0.032 (0.027)	0.005 (0.048)	-0.053 (0.146)
Private SMA	-0.065* (0.038)	0.009 (0.014)	-0.089** (0.037)	-0.200 (0.146)	-0.053 (0.056)	-0.006 (0.033)	-0.037 (0.045)	0.174 (0.140)
Private SMK	0.010 (0.040)	0.010 (0.017)	-0.027 (0.041)	-0.019 (0.099)	-0.069 (0.084)	-0.008 (0.033)	-0.002 (0.047)	0.170 (0.165)
Pub Gen Prob	0.642	0.049	0.532		0.700	0.074	0.654	
R <sup>2</sup>	0.176	0.260	0.550	0.332	0.292	0.329	0.710	0.432
Observations	3,513	2,238	2,142	1,713	1,370	930	875	739

Source: IFLS1-4

Notes:

1. \*\*\* significant at 1 percent; \*\* significant at 5 percent; \* significant at 10 percent.
2. Standard errors in parentheses; they are robust to heteroskedasticity and clustered at subdistrict level.
3. Control variables include: survey year; parental education; place of living when 12 years old; district of junior secondary school graduation; age and its square; number of repeated grades during primary and junior secondary; whether working during primary and junior secondary; whether graduated from a public junior secondary school; sex control variable is included in all estimations except in the gender heterogeneity estimation.
4. Father's education attainment is used as a proxy for household welfare level. Households where the father has an attainment level of SMP or below are considered as disadvantaged. Households where the father has an attainment level of SMA or above are considered as advantaged.

**Table VIII.9 Estimated Effect of School Type on Employment and Job Quality, by test score (male and female)**

Male	Low scores				High scores			
	LFP	Unemployment	Formal	Wage	LFP	Unemployment	Formal	Wage
	LPM	LPM	LPM	OLS	LPM	LPM	LPM	OLS
Public SMK	0.028 (0.049)	-0.176* (0.092)	0.089 (0.098)	-0.235 (0.191)	0.023 (0.041)	-0.047 (0.063)	0.026 (0.066)	-0.409*** (0.157)
Private SMA	0.031 (0.048)	-0.041 (0.080)	0.010 (0.082)	-0.163 (0.150)	0.014 (0.041)	-0.066 (0.050)	-0.018 (0.093)	-0.330** (0.153)
Private SMK	0.030 (0.048)	-0.037 (0.082)	0.062 (0.097)	-0.127 (0.150)	0.002 (0.067)	0.021 (0.076)	0.067 (0.099)	-0.492*** (0.187)
Pub Gen Prob	0.924	0.208	0.427		0.944	0.133	0.539	
R <sup>2</sup>	0.282	0.309	0.650	0.419	0.282	0.327	0.653	0.482
Observations	717	667	570	484	705	664	581	477

Source: IFLS1-4

Notes:

1. \*\*\* significant at 1 percent; \*\* significant at 5 percent; \* significant at 10 percent.
2. Standard errors in parentheses; they are robust to heteroskedasticity and clustered at subdistrict level.
3. Low scores are below the median.
4. Control variables include: survey year; parental education; place of living when 12 years old; district of junior secondary school graduation; age and its square; number of repeated grades during primary and junior secondary; whether working during primary and junior secondary; whether graduated from a public junior secondary school; sex control variable is included in all estimations except in the gender heterogeneity estimation.



Female	Low scores				High scores			
	LFP	Unemployment	Formal	Wage	LFP	Unemployment	Formal	Wage
	LPM	LPM	LPM	OLS	LPM	LPM	LPM	OLS
Public SMK	0.075 (0.092)	0.149** (0.076)	0.017 (0.104)	0.213 (0.321)	-0.025 (0.064)	-0.026 (0.047)	-0.040 (0.086)	-0.155 (0.183)
Private SMA	0.054 (0.072)	0.118* (0.069)	-0.132* (0.069)	0.154 (0.259)	-0.109 (0.103)	0.029 (0.066)	-0.086 (0.084)	0.093 (0.232)
Private SMK	0.075 (0.073)	0.195*** (0.070)	-0.193** (0.079)	0.167 (0.160)	-0.040 (0.072)	0.019 (0.066)	-0.023 (0.074)	-0.328* (0.193)
Pub Gen Prob	0.551	0.069	0.574		0.706	0.157	0.554	
R <sup>2</sup>	0.317	0.509	0.733	0.649	0.357	0.463	0.701	0.522
Observations	770	443	394	287	726	495	430	350

Source: IFLS1-4

Notes:

1. \*\*\* significant at 1 percent; \*\* significant at 5 percent; \* significant at 10 percent.
2. Standard errors in parentheses; they are robust to heteroskedasticity and clustered at subdistrict level.
3. Low scores are below the median.
4. Control variables include: survey year; parental education; place of living when 12 years old; district of junior secondary school graduation; age and its square; number of repeated grades during primary and junior secondary; whether working during primary and junior secondary; whether graduated from a public junior secondary school; sex control variable is included in all estimations except in the gender heterogeneity estimation.

## Annex IX.1 Overview of evaluation results from international job skills training programs

### A. Vocational Education Training Programs

Program	Description	Program Assessment	
		Labor Market Outcomes	Cost-effectiveness
Government Re/Training Program Poland	<p><b>Objective:</b> To offer participants part-time work in a firm, completed by part-time education in a public training center. Usual length of a contract is two years, but it can vary between 1 and 3 years. The training is partly general, but also comprises occupation-specific components.</p> <p><b>Period:</b> 1984-1997</p> <p><b>Target population:</b> Unemployed youth.</p>	<p><b>Overall assessment: Negative or zero impact on labor market outcomes</b></p> <ul style="list-style-type: none"> <li>The training programs directed at unemployed young persons have no effect on post-training wages or employment probabilities unless they have a large training content.</li> <li>On-the-job-training programs in the private sector give better results than the programs in the public sector</li> </ul>	N/A
	<p><b>Objective:</b> Occupational skill retraining with 12 months maximum length of training duration targeted to areas of skill shortages. Participants who left a course before completion had to reimburse the costs of training.</p> <p><b>Period:</b> 1995-96</p> <p><b>Target population:</b> Registered unemployed.</p>	<p><b>Overall assessment: Positive labor market outcomes but cost- ineffective</b></p> <ul style="list-style-type: none"> <li>More impact on older age groups, however vast majority of retraining participants are in the younger age group that shows relatively smaller impacts.</li> <li>At time of survey, increased chances of being employed in a non-subsidized job by 8.0% and 9.8% for employment in any job.</li> <li>Increased current monthly earnings by 5.7Zl (Note: Prices are in 1996 polish Zlots, Zl)</li> <li>Employment impact has been quite durable (continued employment through the survey date).</li> </ul>	<p>Direct cost of operating the program per participant (907Zl) &amp; administrative cost of program per participant (90Zl).</p> <p>Benefit: Increased earnings (671Zl) per participant.</p>
	<p><b>Objective:</b> To build up, over time, permanent vocational training facilities to train or retrain at least 20 per cent of economically active population annually. Fund is overseen by a tripartite committee of government and enterprises and outsources training activities through state-sponsored bidding processes. Strong basic skills components and well-developed materials for the courses (average duration of 103 hours per beneficiary).</p> <p><b>Period:</b> 1996 – 2004</p> <p><b>Target population:</b> Marginalized young and adult workers who are: (i) unemployed (mainly unemployment benefit recipients and first time job seekers); (ii) workers at risk of unemployment due to firm restructuring and/or macroeconomic policies; (iii) small producers and (iv) self-employed.</p>	<p><b>Overall assessment: Positive labor market outcomes and cost-effective.</b></p> <ul style="list-style-type: none"> <li>With a labor employment rate of approximately 48 percent, half of the trainees found a job in the informal sector.</li> <li>In Pernambuco, however, training courses did not increase the chances of getting a job.</li> <li>An evaluation in Rio de Janeiro and Fortaleza showed that training programs had: Positive and statistically significant impact on unemployment, but not on incomes of those already employed; those with access to training were 3-4 percent more likely to be employed six to 12 months afterwards. No impact on wages of those employed already.</li> <li>In Minas Gerais, courses with 50 hours of instruction resulted in a wage increase of approximately R\$64.</li> </ul>	<p>Program costs about R\$170 per person. The average per hour cost is estimated at US\$2.13.</p> <p>New jobs for participants need to last more than 17 months for the program to have a net positive benefit.</p>

Program	Description	Program Assessment	
		Labor Market Outcomes	Cost-effectiveness
<b>Servicio Nacional de</b>	<p><b>Objective:</b> To offer and execute integral vocational training that contributes to the economic, social and technical development of the country.</p> <p><b>Period:</b> 1957 – present</p> <p><b>Target population:</b> Either disadvantaged individuals who undergo training in order to improve their labor market prospects (the young and the unemployed figure prominently in this group), or they are middle-income workers who undergo training in order to upgrade their skills (older workers in manufacturing are common in this group).</p>	<p><b>Overall assessment: Negative labor market outcomes.</b></p> <ul style="list-style-type: none"> <li>Impact on earnings is negative, and the impact on employment is very low.</li> <li>Impact on earnings is substantial: average wages of beneficiaries are 10% lower than the control group.</li> <li>Impact on the probability on employment is small: about one fifth of a percentage point. (Impact estimates using data from ENCV)</li> </ul>	<p>The direct cost per semester of a training course in SENA can be estimated in \$1,027,700 (nearly US\$890) for short courses \$1,090,000 (nearly US\$944) for long courses.</p>
<b>Summer Youth Employment Program (SYETP)</b> United States	<p><b>Objective:</b> To provide summer job and training opportunities for disadvantaged youth. Also offered short-term financial assistance. The Program started offering remedial educational services since 1986.</p> <p><b>Period:</b> 1981–98</p> <p><b>Target population:</b> Disadvantaged youth aged 14–21.</p>	<p><b>Overall assessment: Positive labor market outcomes but no information on cost effectiveness.</b></p> <ul style="list-style-type: none"> <li>Program appears to greatly increase summer employment rates among disadvantaged youth in sites where jobs are provided.</li> <li>No evidence on long-term impacts on employment after participants leave their summer jobs.</li> </ul>	<p>SYETP cost \$1,362 per youth per year.</p>

## B. Comprehensive Training Programs

Program	Description	Program Assessment	
		Labor Market Outcomes	Cost-effectiveness
<b>Extra 21</b> Latin America and the Caribbean region	<p><b>Objective:</b> Program of the International Youth Foundation (IYF) to improve the employability of Latin American and Caribbean youth. Participants enroll in a six-month (i.e., 640 hour) training program focusing on information and communication technology. Co-financed by Multilateral Investment Fund of the Inter-American Development Bank. Partnering agencies include the Microsoft Corporation, Lucent Technologies Foundation, Merrill Lynch, and USAID.</p> <p><b>Period:</b> 2003 – present</p> <p><b>Target population:</b> Youth, aged 16 – 29, who are: secondary school graduates, unmarried with no dependents, belonging to households with five or more members, and low-income earners. The program has trained 19,332 youth, 55 percent of whom are female.</p>	<p><b>Overall assessment: Positive labor market outcomes and cost-effective.</b></p> <ul style="list-style-type: none"> <li>On average, 54 percent of the training participants were placed in jobs, 80 percent of these were employed with a formal contract.</li> <li>Employment effects appear to be distributed equally among participants although male participants had stronger outcomes in some contexts.</li> <li>75 percent of placed graduates receive benefits. 80 percent earn at least the minimum wage. Overall, an additional 28 percent earn at least 150 percent of the minimum wage.</li> </ul> <p>Note: Evaluation did not rely on a comparison control group and therefore results are likely to be overestimating the impact of the program.</p>	
	<p><b>Objective:</b> No-cost education and vocational training program administered by the U.S. Department of Labor. Aims to help young people get a better job, make more money, and take control of their lives. Students enroll in a 30-week course (on average) to learn a trade, earn a high school diploma or GED and get help finding a good job. They are paid a monthly allowance during their training and receive career counseling and transition support for up to 12 months after graduation. The student cycle is: Outreach and Admissions (OA), Career Preparation Period (CPP), Career Development Period (CDP), and Career Transition Period (CTP).</p> <p><b>Period:</b> 1964 – present</p> <p><b>Target population:</b> Out-of-school severely disadvantaged 16- to 24-year-old youths. Beneficiaries must be U.S. citizens or legal residents, meet income requirements, and must be ready, willing, and able to participate fully in an educational environment.</p>	<p><b>Overall assessment: Positive labor market impacts but cost-ineffective.</b></p> <ul style="list-style-type: none"> <li>No beneficial earnings impact in the post-survey period that is statistically significant for any subgroup.</li> <li>The earnings gain from the Job Corps was twice as large for 20- to 24-year-olds, who make up around a quarter of participants.</li> <li>However, positive earnings gains for those 20 to 24 and those with a high school credential at program application persisted with little decay. In 1998, the last year with survey data, those randomly selected for the program earned \$220 more than the control group, on average, according to the Social Security data; \$5,804 versus \$5,584.</li> </ul> <p>An initial benefit-cost analysis based only on survey data indicates benefits exceed costs by \$17,000 per participant (assuming that the impacts on earnings in the observation period would persist without decay for the rest of the average participant's working lifetime).</p> <p>May be cost-effective for the 20- to 24-year-olds at program application whose earnings impacts persisted during the post-survey period (benefits to society are only \$500 lower than program costs).</p>	

Program	Description	Program Assessment	
		Labor Market Outcomes	Cost-effectiveness
Jóvenes en Acción Colombia	<p><b>Objective:</b> Youth job training program through courses and apprenticeship schemes. They receive training allowance and vouchers, which they can use to enroll in a training course of their choice from a list of competitively selected providers. Job training lasts about 3 months and is followed by a 3-month internship in a company or organization. Beneficiaries also receive a food and transportation allowance. The program is administered by a group of government agencies, nonprofit organizations and private companies.</p> <p><b>Period:</b> 2001-05</p> <p><b>Target population:</b> Directed at urban unemployed youth between the ages of 18 and 25 in cities.</p>	<p><b>Overall assessment: Positive labor market outcomes and cost-effective.</b></p> <ul style="list-style-type: none"> <li>Program raised employment for both men and women. For women, training increased the probability of employment by 5%, days and hours worked, and the probability of having a job with a written contract. Similar impact for men but more limited.</li> <li>The most significant impact of the program was the substantial increases in salaries: women's salaries increased by 35 percent, while men's increased by 18 percent.</li> </ul> <p>Large net gain, especially for women.</p> <p>The lower bound internal rate of return (IRR) is of 13.5% for women and 4.5% for men.</p>	
Juventud y Empleo Dominican Republic	<p><b>Objective:</b> Demand-driven labor market insertion program with two components: (1) 3 months of coursework on life and technical skills in qualified training institutions. (2) 2-month internship or on-the-job training in private firms. Beneficiaries receive a stipend to cover basic expenses (50 Dominican Pesos per day; roughly US\$2).</p> <p>The Ministry of Labor outsourced the training services to private institutions, through a competitive bidding process. Instituto Nacional de Formación Técnica Profesional (INFOTEP) is responsible for the technical evaluation of the proposals from training institutions and the supervision of the training courses.</p> <p><b>Period:</b> 1999 – present</p> <p><b>Target population:</b> Unemployed and disadvantaged out-of-school youth, ages 16 to 25. Beneficiaries education level must be no higher than high school.</p>	<p><b>Overall assessment: Positive labor market outcomes and cost-effective.</b></p> <ul style="list-style-type: none"> <li>No impact on the employment rate or employability of participants, even after disaggregating results by age, gender, education and region.<sup>27,5</sup></li> <li>The point estimates are positive and economically significant, however, for the youngest age group (17-19 year olds) and for those in the East and Santo Domingo regions.</li> <li>Beneficiaries' monthly total labor earnings were 17 percent higher than the control group (imprecise estimate, reflecting the small samples sizes and the variability in earnings).</li> <li>Earnings effects greater for the youngest age group, residents of Santo Domingo, and beneficiaries with some secondary education. 21 percent impact for those with some secondary education versus a 9 percent net impact for people with only primary education.</li> <li>Marginally significant impact of 10 percent on the hourly wages of participants.</li> </ul> <p>The costs to the government for the program amount to approximately US\$ 330 per course per beneficiary. The program "pays for itself" if the impacts are maintained for at least two years.</p> <p>Average net impact on monthly income for employed trainees is about US\$38. With zero employment effect, an employment rate of 55 percent, and a discount rate equal to the inflation rate, this investment would be recovered in two years (NPV&gt;0 if 2 years of positive benefits).</p>	

Program	Description	Program Assessment	
		Labor Market Outcomes	Cost-effectiveness
Youth Service Canada (YSC) Canada	<p><b>Objective:</b> The objectives of the program are: (i) acquire real work experience; (ii) learn and enhance transferable job-related skills; (iii) develop personal qualities and skills such as self-esteem, self-reliance, leadership, communication and teamwork; (iv) contribute to their community and country; (v) promote knowledge and awareness of community issues.</p> <p><b>Period:</b> 1998-2005</p> <p><b>Target population:</b> The initiative is open to under employed/unemployed, out-of-school youth, normally up to age 30, who are legally entitled to work in Canada.</p>	<b>Overall assessment: Negative labor market impacts.</b> <ul style="list-style-type: none"> <li>Participation had no statistically significant effect on annualized earnings, weekly wage, hours worked per week, or annual social assistance benefits.</li> <li>In the short term, project participants spent less time in the labor force and less time employed than would have been the case in the absence of YSC experience. This is accounted for by their statistically significant increase in post-program time spent in school (most youth participants) or in training.</li> <li>Employment insurance benefits were C\$ 183 lower per year as a result of participation in YSC.</li> </ul>	
		Per participant cost of the program is C\$8,277, slightly higher than other similar programs.	

Source: Puerto, 2008; Ibarraran and Rosas, 2008.

275 57 percent of the beneficiaries versus 56 percent of the control group were employed at the time of the follow-up survey. Employability is defined as the likelihood of getting a job if unemployed or the likelihood of remaining employed once that status is acquired, a dynamic random-coefficient logit model was estimated.

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