

Chapter 3

Improving labour market outcomes

Since the financial crisis of 1997-98 job creation has slowed, unemployment has been high, particularly among youths, and informality remains widespread. Important contributory factors are a tightening of employment protection legislation (EPL), especially with the enactment of the Manpower Law of 2003, and sharp increases in the real value of the minimum wage. Strict EPL is nevertheless failing to provide effective social protection for the needy, because it is not binding in the informal sector. It is also affecting Indonesia's trade competitiveness, because the country has a comparative advantage in labour-intensive manufacturing, whose former dynamism has waned.

This chapter argues that options for reform could focus on making labour legislation more flexible, particularly for regular contracts, while enhancing formal safety nets, especially through well targeted, conditional income-transfer programmes.

Indonesia has suffered from slow job creation, pervasive informality and persistently high unemployment since the 1997-98 crisis. The rebound in economic growth, especially since 2004 (discussed in Chapter 1), has therefore failed to deliver a commensurate improvement in labour-market performance. To a large extent, this outcome is associated with a tightening of employment protection legislation (EPL), following the enactment of a new labour code in 2003 and a substantial increase in the real value of the minimum wage since 2001. Indonesia's labour code is characterised by burdensome dismissal procedures and onerous severance compensation entitlements, even in relation to countries in the OECD area.

While a tightening of EPL over the years was aimed essentially at protecting workers from adverse economic shocks, it has failed to boost social protection and to promote economic efficiency. This is because a more restrictive labour code has protected relatively better-off workers in the formal sector to the detriment of those with a more tenuous attachment to the labour market, such as women, youths and the less educated. A more restrictive labour code is also likely to have hurt Indonesia's trade competitiveness, given the country's comparative advantage in labour-intensive manufacturing, a sector that has lost dynamism. Enterprises operating in the formal sector are likely to have substituted skilled labour and capital for unskilled labour in response to rising costs associated with progressively more onerous labour legislation.

This chapter reviews trends in employment, labour-force participation, unemployment and informality, as well as in poverty and income distribution. Emphasis is placed on the main provisions of Indonesia's labour code, including minimum-wage entitlements, that are likely to have held back improvements in labour-market outcomes. The chapter's key policy message is that a combination of greater flexibility in EPL and more effective social-insurance and assistance programmes would better equip Indonesia to meet the demands for enhanced social protection while making greater use of available labour inputs in support of faster sustainable growth.

Labour-market trends

Trends in labour-force participation, employment, unemployment and informality

On the basis of Indonesia's National Labour Market Survey (*Sakernas*), labour-force participation has been fairly stable over time at about two-thirds of individuals aged at least 15 years (Table 3.1). In comparison with OECD countries, labour supply is fairly low among women, although it is slightly higher for men (Figure 3.1). Participation is somewhat lower than in the OECD area for prime-age individuals (aged 25-54), reflecting a comparatively low rate for women, but is much higher for older workers (aged 55-64). This latter finding most probably reflects the precariousness of formal social insurance in Indonesia (Box 3.1), which limits the ability of older workers, especially those who have worked predominantly in the informal sector, to save for retirement. With regard to female participation, there are cultural reasons why women may prefer not to work outside the home, but international experience suggests that a lack of affordable child care makes it

Table 3.1. Trends in labour-force participation, unemployment and employment, 1996 and 2004

In per cent, individuals aged 15 years and above

	1996				2004			
	Labour force participation	Employment	Unemployment	Informal sector ¹ (in % of employment)	Labour force participation	Employment	Unemployment ²	Informal sector ¹ (in % of employment)
Total	66.1	62.6	5.3	65.4	65.0	60.7	6.7	69.6
By gender								
Males	82.7	78.9	4.6	61.1	83.5	78.6	5.8	67.7
Females	49.9	46.7	6.5	72.5	46.7	42.9	8.2	72.9
By age								
15-24	50.9	42.6	16.4	57.7	50.0	39.0	22.1	58.8
25-54	76.5	74.7	2.4	64.1	74.2	71.8	3.2	68.5
55-64	66.1	65.9	0.3	83.3	63.5	63.1	0.6	88.4
65+	40.3	40.2	0.2	89.8	39.7	39.6	0.2	95.5
By residence								
Rural	71.7	69.4	3.2	77.2	69.8	67.1	3.9	86.3
Urban	58.8	53.8	8.6	45.7	60.1	54.2	9.9	48.7
By education								
No schooling	67.6	67.0	0.9	82.4	63.5	62.8	1.2	92.2
Primary	67.5	65.7	2.7	74.2	66.6	64.9	2.6	84.4
Lower secondary	51.4	47.9	6.9	62.6	55.9	51.7	7.5	72.2
Upper secondary	71.2	61.4	13.8	34.2	68.9	58.7	14.8	41.0
Tertiary	86.3	76.3	11.6	12.4	85.3	77.3	9.4	15.9

1. The informal-sector is defined as including all self-employed and unpaid workers.

2. Calculated using the same definition as in 1996. The unemployment rate reported by BPS for 2004 is much higher, at 9.9%, because it includes discouraged workers. The labour force participation rate consistent with this alternative definition of unemployment is 68.6%.

Source: Sakernas and OECD calculations.

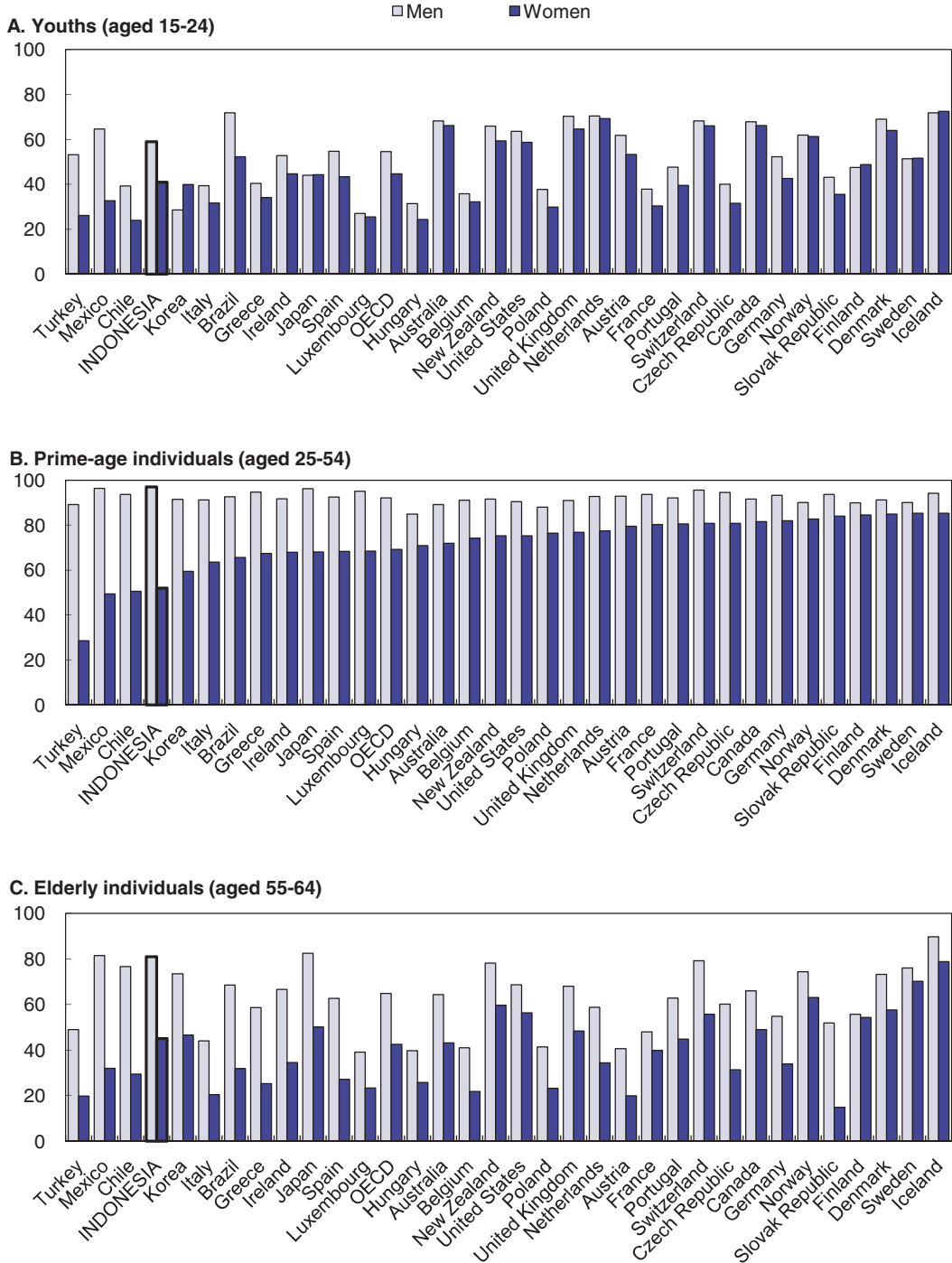
difficult for women with young children to reconcile household and professional activities. Moreover, the participation rate is higher in rural than in urban areas, reflecting the tendency for all household members to work in family plots. Finally, labour supply also tends to rise with educational attainment, as it does in OECD countries.


Employment patterns are comparable to those of labour supply. It tends to be higher for males than females, for residents of rural areas than urban dwellers, and among prime-age individuals than youths and elderly workers. Employment also rises with educational attainment. Moreover, there was a slight fall in employment rates during 1996-2004, except for the most educated individuals. In any case, labour mobility does not appear to be constrained by the proliferation of regulatory barriers among the local jurisdictions since decentralisation in 2001 (discussed in Chapters 1 and 2).

Unemployment is particularly high for youths, workers with secondary education and women. It increased substantially during 1996-2004, albeit from a small base, for older workers and for the least educated individuals (i.e. those with no schooling). By contrast, although it remains high, unemployment fell significantly among individuals with tertiary education, reflecting a rising demand for skilled labour to the detriment of less educated workers. To a certain extent, high unemployment among the workers who would otherwise be best equipped to find a job in the formal sector suggests that these individuals may be reticent to work in the informal sector. When faced with a job loss, they

Figure 3.1. **Labour force participation by age and gender: Cross-country comparisons, 2004**

Countries ranked by participation rate for prime-age females



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Source: Sakernas, INE for Chile, IBGE for Brazil, OECD (Labour Force Statistics) and OECD calculations.

Box 3.1. Social security in Indonesia

The current system

Formal social-security arrangements are in their infancy in Indonesia. A programme launched in 1992 (*Jamsostek*) offers old-age pensions, life and health insurance, and job-related disability and illness compensation to private-sector workers (and their families) employed in firms with more than 10 employees or payroll of more than one million *rupiah*. Participation in health insurance is optional, if the enterprise has alternative arrangements. Separate mandatory regimes are in place for civil servants (*Taspen*) and for the police and armed forces (*Asabri*).

The largest mandatory programme, *Jamsostek*, is financed predominantly through employers' contributions. Coverage for disability, life and health insurance is financed entirely by employers' contributions (7.24-11.74% of gross monthly earnings, depending on job-related disability coverage), while old-age pensions are financed jointly by employers and employees. Employees contribute 2% of gross monthly earnings. Contributions are paid into a fund managed entirely by a State-owned company, while health care can be provided by private institutions, so long as they are able to at least match the coverage of services provided publicly.

The main shortcomings of *Jamsostek* are that it covers only formal-sector workers and that compliance is very low. Because the vast majority of Indonesian workers have informal-sector jobs and/or are employed in small firms, they are not covered by the scheme. According to the Ministry of Manpower and Transmigration, only about one-fifth of the employed population was enrolled with *Jamsostek* in 2002. Also, the ILO estimates that only about one-half of employers required to enrol in the scheme are actually enrolled.

The value of old-age pensions financed through *Jamsostek* is also low. Leechor (1996) estimates that the average replacement rate is only about 7-11% of a worker's final basic salary after 35 years of active work (against 100% for *Taspen* retirees). More recent estimates show that the gross replacement rate for male average earners with 35 years' contributions was 15.4% in 2006 (OECD, 2008a). Another study conducted by ILO found that the annual average value of a *Jamsostek* pension is only about 5.5 months of average basic salary or 8.5 times the minimum monthly wage (International Labour Organisation, 2003).

The 2004 Social Security Law (*Jamsosnas*)

A National Social Security Law was enacted in 2004, but its relevant provisions have not yet been regulated.* The law extends contributory social security-arrangements to informal-sector workers and the self-employed. The scheme would be publicly-run and cover old-age and survivors' pensions, as well as death and disability insurance. Contributions would be subsidised for poor individuals, defined as those whose income is below the minimum wage. A minimum pension would be set at 70% of the statutory minimum wage. The retirement age would be only 55 years, and workers would be eligible for a pension after as little as 15 years of contribution. Contribution rates are not yet known.

Although the main provisions of *Jamsosnas* have yet to be regulated, several of its provisions appear to be overly generous. The retirement age and the length of contribution required for eligibility for an old-age pension would put considerable strain on the budget, as well as the cost of the contribution subsidy for poor individuals. It is also uncertain whether or not the benefit of social security coverage would create strong enough incentives for informal-sector workers and the self-employed to participate in the scheme.

* See Arifianto (2004) for more information.

may prefer to wait for a formal job, instead of working informally, so long as they can support themselves and their families in the meantime.

Labour informality is widespread. Of course, there is no universally accepted definition of informality (Box 3.2). But for the purpose of the empirical analysis to be reported below, only individuals aged 15-65 years and working as dependent employees will be treated as formal. The self-employed and unpaid workers will therefore be considered informal. Other definitions of informality also include salaried workers in

Box 3.2. Defining labour informality in Indonesia

There is no universally accepted definition and measurement of labour informality, even in the OECD area. In some countries, the concept of informality is closely related to social security coverage.* In others, informality is defined on the basis of the worker's labour market status and occupation. Definitions are therefore typically country-specific and are not without shortcomings.

A definition based on social-security coverage is often used in countries that already have relatively well developed social insurance mechanisms. This approach is nevertheless problematic for the purpose of cross-country comparisons, because there is considerable variation across countries in the generosity of social-protection entitlements. These include severance payment obligations, unionisation rights, workplace safety regulations, and health and unemployment insurance, among others. In some cases, for example, access to social security is universal. In others, including Indonesia, entitlements are closely linked to labour-market status.

According to the definition of informality based on labour-market and occupational status, workers are considered informal if they are employed in low-productivity, precarious jobs. Employees of small-scale, often family-based enterprises, as well as the self-employed, are therefore typically considered informal. The problem with this definition is that it would treat own-account white-collar professionals as informal, while these individuals are likely to be well educated and to work in high-productivity occupations. For example, the International Labour Organisation (2003) treats as informal the employees of small, private, non-agricultural, unregistered, unincorporated enterprises with less than five paid workers producing at least part of their output for sale or barter.

In the case of Indonesia, a social-security-based definition of informality would make little sense, because the country has only very limited formal retirement schemes and no unemployment insurance. A definition based on labour-market status would therefore be more appropriate. For the purpose of the empirical analysis reported in this chapter, all self-employed (own-account, with or without assistance) individuals aged 15-65 are considered informal. This definition is somewhat more general than that used by Suryahadi *et al.* (2003), who treat as informal all self-employed workers, except for those who are assisted by permanent or non-permanent employees (except in agriculture). A slightly more restrictive definition is that of BPS, according to which the self-employed without assistance and working in professional, leadership and managerial jobs are treated as formal-sector workers.

Despite these differences in definition, informality is widespread. According to the definition used in this chapter, informality accounted for about 65% of employment in 1996, against about 62% on the basis of the definition used by Suryahadi *et al.* (2003).

* See OECD (2004a and 2007a), Maloney (2004) and Gasparini and Tornarolli (2007) for more information.

agriculture, a sector that accounts for the bulk of employment (Table 3.2). In any case, based on the definition used in this chapter, nearly 70% of the employed population would be considered informal in 2004. Informality is less widespread among men than women, workers living in rural than urban areas, and among prime-age individuals. As expected, informality declines with educational attainment.

Table 3.2. Composition of employment by occupation, 1996 and 2004

In per cent

	1996	2004
Professionals	4.0	4.3
Management	0.3	0.4
Public administration	6.2	5.9
Sales and trade	18.6	18.5
Services	4.7	6.6
Agriculture	41.9	41.4
Production	24.1	23.0
Other	0.4	0.0

Source: Sakernas and OECD calculations.

Empirical evidence on the determinants of employment and earnings

Empirical evidence confirms that employment is strongly affected by educational attainment. The empirical evidence reported in Annex 3.A1 is based on data available from *Sakernas* for 1996 and 2004. The analysis takes labour informality into account by considering that workers may face three labour-market outcomes: unemployment or no participation, employment in the informal sector and employment in the formal sector. The empirical analysis shows that a worker's probability of working in the formal sector rises with educational attainment, an effect that became stronger in 2004 relative to 1996. Age and marital status are additional powerful predictors of an individual's employment status. Older workers and married individuals are more likely to be employed in the formal sector and less likely to be unemployed or outside the labour force than their younger, single counterparts. Living in rural areas strongly reduces the probability of working in the formal sector and of being unemployed or outside the labour force. Regional effects are also important, although they changed somewhat during the period because of shifting patterns of economic activity within the country.

As in the case of employment, human capital is a strong determinant of earnings too. The analysis reported in Annex 2.A1 sheds additional light on the determinants of earnings by taking into account the "selection bias" that arises from the possibility that individuals may opt for working in the informal sector. The results of the estimations show that formal-sector earnings are strongly affected by the worker's educational attainment. Gross returns to education, measured by the marginal increment in earnings associated with additional academic qualifications, also appear to have risen over time, at least for individuals with tertiary education on the basis of comparisons of the regression results for 1996 and 2004. The results from the earnings equation are as follows: wages rise with age (albeit in a non-linear manner); women are paid less than men, although this effect seems to have waned during 1996-2004; being married is associated with a wage premium in the labour market; workers are better paid in industry than in agriculture or services;

there are important regional effects on earnings; and living in rural areas is detrimental to a worker's earnings prospects.

Overall, the empirical findings suggest that individuals perceive informality as an alternative to unemployment or to staying out of the labour force. Those workers with the best qualifications in terms of schooling and experience (measured on the basis of age) are most likely to find a job in the formal sector. They are also least likely to be unemployed or outside the labour force and most willing to accept a job in the informal sector instead of being unemployed. Their earnings capabilities are also highest. Duality in the labour market is likely to affect labour utilisation adversely by constraining the ability of less-educated workers to break away from a vicious circle of low productivity, low social protection and low earnings. To the extent that a large share of the working-age population is trapped in this vicious circle, the scope for raising and sustaining long-term economic growth through productivity gains is severely constrained.

Duality in the labour market is also detrimental to equity and the business climate. There are several reasons why this is so. *First*, informality creates challenges for the design of social protection programmes, because it makes it difficult to reach informal workers through social assistance and active labour market policies. This is an important consideration in a country such as Indonesia, which is beginning to strengthen its formal safety nets and social protection programmes, and where unemployment has been stubbornly high. *Second*, labour-market duality complicates the design of tax policy, because it narrows tax bases, resulting in a shift of the tax burden onto formal enterprises and individuals. This tax-shifting effect is at odds with efforts to improve the business climate, discussed in Chapters 1 and 2. *Finally*, because informal-sector workers also tend to work in unregistered enterprises, the link that often exists between business and labour informality is strengthened further. Typically, informal enterprises do not have access to the financial system on comparable terms to their formal-sector counterparts, which results in a low level of physical capital used in production and correspondingly low productivity and wages.

Employment protection legislation

The 2003 Manpower Law

Enactment of the Manpower Law of 2003 was a landmark in Indonesia's labour relations.¹ The Law deals with a broad range of issues, including employment protection legislation (EPL), labour training and social security. It also consolidates previous legislation, making the labour code more transparent and systematic. The provisions of the Manpower Law that are most likely to affect the restrictiveness of EPL are related to dismissal procedures, severance pay, temporary work arrangements and minimum wage entitlements. In particular:

- Employers are required to seek authorisation for dismissals from the local Manpower Department (Institution for Settlement of Industrial Relations Disputes). In the case of dismissals due to violations of work rules, bargaining agreements or the terms of individual contracts, employers must issue three warnings within six months of each other before applying for a dismissal authorisation. There are no additional requirements for collective dismissals.
- Severance and long-term service payments are due to workers as compensation for layoffs associated with economic reasons, enterprise bankruptcy, voluntary dismissals

following an enterprise takeover, minor offenses, retirement, death, and disability or chronic illness. No severance and long-service pay is due in the case of dismissals due to major offenses (i.e. theft, violent behaviour, drunkenness, etc.). The standard severance pay is calculated as one month of salary per year of service (capped at 9 months). In the case of dismissals for economic reasons, retirement, death or disability, severance pay entitlement is doubled. Long-term service pay is calculated as one month of salary for every three years of service, starting with two months' pay for the first three years of service. Total compensation is capped at 10 months' pay after 24 years of service, because compensation for over 21 years of service is also calculated as two months' pay every three years of service.²

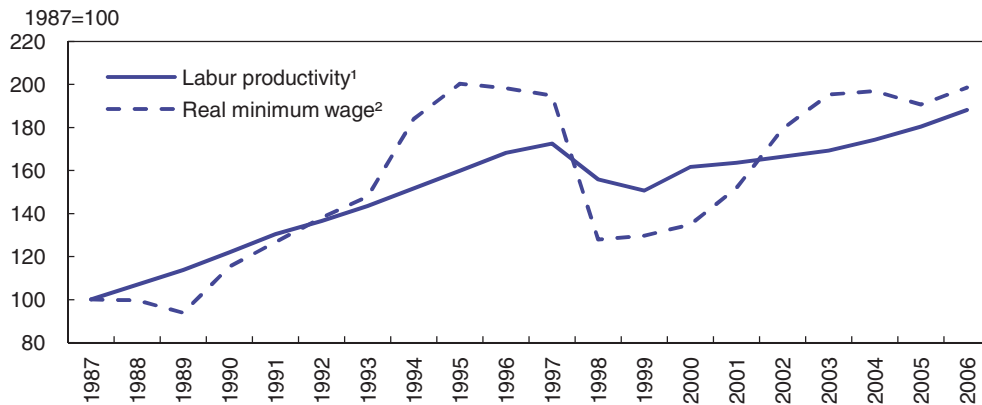
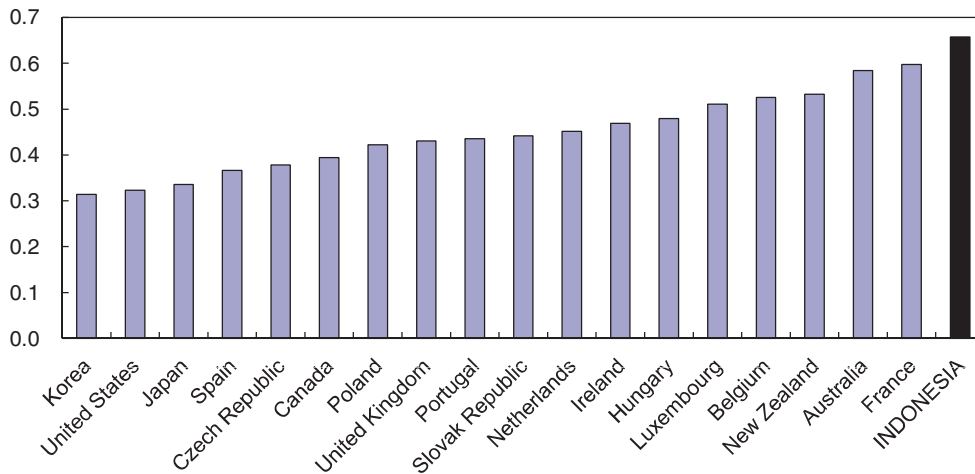
- Flexible work arrangements (temporary work, fixed-term contracts and sub-contracting) are limited. Temporary work is allowed for three months, which is the statutory duration of probation in long-term contracts. Fixed-term contracts are limited to three years, comprising an initial two-year contract plus a single one-year extension. Sub-contracting is also limited to three years and for workers performing non-core activities. It is also allowed for workers performing one-off tasks or engaged in seasonal work or in jobs related to the introduction of new projects/products.


Minimum wage entitlements

The minimum wage is applicable for regular, full-time work. It is set on an annual basis at the province level on the basis of an estimated cost of living indicator (KHL), which is used as an initial benchmark. This indicator was introduced in the late 1990s and is defined in terms of caloric intake. Since decentralisation in 2001, the level of the minimum wage has been calculated at the local government level (*kapupaten/kota*) and then proposed to the provincial government by a tri-partite wage council, including representatives from labour, government and the private sector. Typically, the lowest minimum wage proposed by the local governments in a province's jurisdiction is chosen by the provincial government.³

Minimum wage provisions have been tightened over time. Prior to decentralisation, the minimum wage used to be set nationally by the central government on the basis of an estimated needs indicator (KHM), which corresponds to a lower caloric intake benchmark than that implied by KHL (2 600 as opposed to 3 000 calories per day in the case of KHL). The value of the minimum wage has also risen substantially in real terms on average over the years, especially during 2000-03, having now exceeded its pre-crisis levels (Figure 3.2). The minimum wage also rose faster in real terms than value added per employee, especially during the 1990s and 2000-03. As a result of this increase, the minimum wage is now very high in relation to the median wage in comparison with the countries in the OECD area.

The devolution of minimum-wage setting to the local governments has had a bearing on the relative value of the minimum wage across the country. Until 2000 there appears to have been a process of gradual reduction in disparities in the value of the minimum wage, with higher real increases in the local governments and provinces where the minimum wage had the lowest values in 1988. However, decentralisation seems to have put a halt to this process of convergence (Figure 3.3). The rate of change in the value of the minimum wage in real terms no longer correlates strongly with the level of the minimum wage in the post-2001 period.

Figure 3.2. **Minimum wage trends****A. Trends in minimum wage and labour productivity, 1987-2006****B. Ratio of minimum wage to median wage, 2004³**

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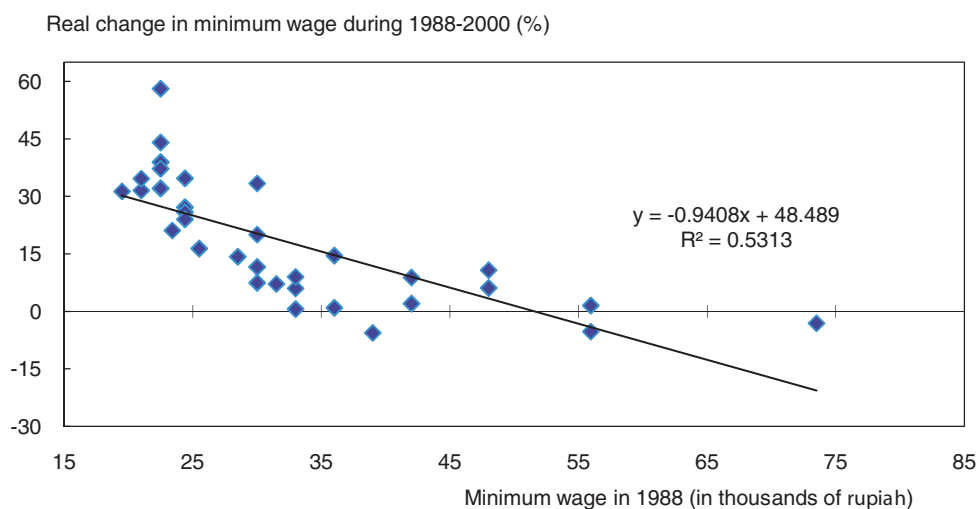
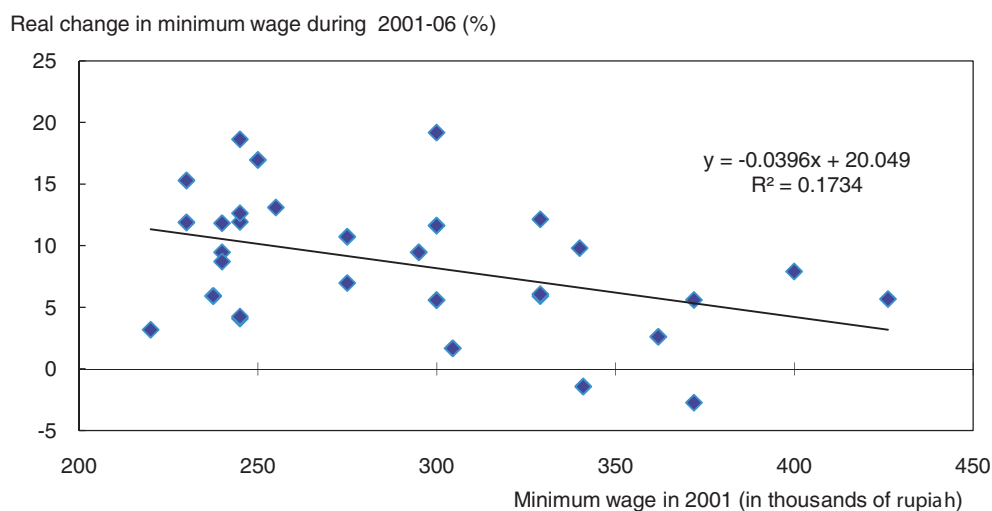
1. Defined as gross value added divided by total employment deflated by the GDP deflator.
2. Defined as the simple average of the province/district-level minimum wages deflated by the GDP deflator.
3. For Indonesia, the median wage is calculated for all individuals aged 15-65 working at least 40 hours per week.


Source: Ministry of Manpower, World Bank (World Development Indicators) and OECD calculations.

Assessing the restrictiveness of Indonesia's labour legislation**Calculating the OECD EPL indicator**

The OECD methodology for constructing an index of EPL strictness focuses on regular employment, collective dismissals and regulations of temporary work (Box 3.3). The estimates for Indonesia are based on responses by the Indonesian government to a standard questionnaire and additional information available from other sources (summarised above). In addition to the OECD countries reported in Table 3.3, the methodology has been applied to date to four countries outside the OECD area (Chile, Brazil, India and South Africa).

On the basis of the OECD methodology, the Indonesian labour code is characterised by restrictive provisions on regular contracts – arising predominantly from bureaucratic

Figure 3.3. **Minimum-wage setting and decentralisation, 1988-2006****A. Before decentralisation¹****B. After decentralisation¹**

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1. The diamonds refer to the minimum wage at the provincial level. Average yearly changes are deflated by the GDP deflator.

Source: Ministry of Manpower; World Bank (World Development Indicators); Sakernas and OECD calculations.

dismissal procedures and costly severance-pay requirements – and a lack of flexibility in the use of temporary and fixed-term contractual arrangements (Table 3.3). In particular, the need for authorisation from a third party and lengthy notification procedures create considerable procedural delays for the termination of regular contracts. On the other hand, unlike a number of OECD countries, the Indonesian labour code does not impose additional constraints on the termination of employment contracts in the event of collective dismissals.

Box 3.3. The OECD methodology for assessing EPL restrictiveness

The OECD methodology for constructing an index of strictness of employment protection legislation (EPL) focuses on regular employment, collective dismissals and regulations of temporary work. The EPL index ranges between 0 and 6, with 0 indicating the lowest and 6 the highest level of rigidity. The methodology used to calculate the EPL index is based on OECD (1999 and 2004a).

The OECD EPL index aims at quantifying the burden of regulatory provisions on employers in a cross-country comparable manner. It is mostly based on labour legislation but also tries to take into account judicial practices and court interpretations of legislative and contractual rules. Employment protection is assessed according to 18 elementary items covering three areas: i) employment protection of individual workers against individual dismissal; ii) specific requirements for collective dismissals; and iii) regulations of temporary employment (fixed-term contracts and temporary work agencies). The main component of the EPL index is on the protection of employees with permanent contracts against individual dismissal, because it is the most common employment arrangement in OECD countries.

On the basis of information on a country's labour legislation, which is collected by sending a standard questionnaire to the country authorities and complemented from additional sources, a four-step procedure is used to compile cardinal summary indicators of EPL strictness. The 18 elementary items, expressed in different units (*i.e.* time or a score on an ordinal scale), are converted into cardinal scores ranging from 0 to 6. Subsequently the detailed scores are weighted to calculate three sets of summary indicators as more aggregated measures of EPL rigidity. In the final step, an overall summary indicator is calculated based on the three underlying groups: regulations of permanent contracts, rules on temporary contracts and collective dismissals. The latter is attributed a lower weight than the former two (2/12 compared to 5/12, respectively), as collective dismissals reflect only additional employment protection linked to the collective nature of the dismissal.

The EPL scoring methodology does not cover a number of aspects of employment protection that are difficult to quantify. This is the case of the length of trial or probationary periods, which is often not provided in individual contracts or collective agreements. Probationary and notice periods, as well as severance compensation, can be extended by contractual arrangements in many cases. The experience of OECD countries suggests that contractual provisions are likely to play a key role in countries with low levels of statutory employment protection, in particular with regard to severance pay provisions. Judicial practices also affect the outcome of labour disputes, which can deviate from legal provisions, therefore affecting the stringency of labour legislation. The role of trade unions and collective agreements in shaping labour relations is also difficult to gauge. Finally, aspects related to non-wage costs and minimum wage legislation are not taken into account in the EPL index.

The Indonesian legislation is also comparatively stringent with regard to temporary and fixed-term contracts. This is because of ceilings on the duration and number of extensions of such contracts, in addition to restrictions on the nature of the activities and occupations for which such flexible arrangements can be used. Minimum wage provisions are not covered by the OECD methodology for assessing the restrictiveness of a country's EPL, but Indonesia's are shown below to be costly.

Table 3.3. Employment protection legislation: Cross-country comparisons¹
Scores (0-6), countries are ranked from lowest to highest overall rigidity

	Termination of indefinite contracts				Collective dismissals (additional procedures)	Temporary jobs ⁴	Overall score ⁵
	Procedural inconveniences ²	Notice and severance pay	Difficulty of achieving dismissal ³	Average			
United States	0.0	0.0	0.5	0.2	2.9	0.3	0.7
South Africa	0.8	1.3	2.0	1.4	0.2	0.6	1.0
United Kingdom	1.0	1.1	1.3	1.1	2.9	0.4	1.1
Canada	1.0	1.0	2.0	1.3	2.9	0.3	1.1
New Zealand	2.0	0.4	2.7	1.7	0.4	1.3	1.3
Ireland	2.0	0.8	2.0	1.6	2.8	0.6	1.4
Australia	1.5	1.0	2.0	1.5	2.9	0.9	1.5
Switzerland	0.5	1.5	1.5	1.2	3.9	1.1	1.6
Slovak Republic	2.0	2.7	2.8	2.5	2.5	0.4	1.6
Hungary	1.5	1.8	2.5	1.9	2.9	1.1	1.7
Japan	2.0	1.8	3.5	2.4	1.5	1.3	1.8
Chile	1.0	2.8	3.3	2.3	0.0	2.0	1.8
Denmark	1.0	1.9	1.5	1.5	3.9	1.4	1.8
Korea	3.3	0.9	3.0	2.4	1.9	1.7	2.0
Netherlands	3.0	1.9	3.0	2.6	3.0	1.2	2.1
Czech Republic	3.5	2.9	2.8	3.1	2.1	1.1	2.1
Finland	2.8	1.0	2.8	2.2	2.6	1.9	2.1
Austria	2.5	0.9	3.8	2.4	3.3	1.5	2.2
Brazil	0.0	2.2	2.0	1.4	0.0	3.9	2.2
Poland	3.0	1.4	2.3	2.2	4.1	1.8	2.3
Italy	1.5	0.6	3.3	1.8	4.9	2.1	2.4
Spain	2.0	3.5	3.3	2.9	3.1	1.8	2.5
Germany	3.5	1.3	3.3	2.7	3.8	1.8	2.5
Belgium	1.0	2.4	1.8	1.7	4.1	2.6	2.5
Norway	2.0	1.0	3.8	2.3	2.9	2.9	2.6
Sweden	3.0	1.6	4.0	2.9	4.5	1.6	2.6
Indonesia	6.0	2.5	1.5	3.3	0.0	3.4	2.8
France	2.5	1.9	3.0	2.5	2.1	3.6	2.9
Greece	2.0	2.2	3.0	2.4	3.3	3.3	2.9
India	4.5	2.5	2.3	3.1	5.8	2.0	3.1
Mexico	1.0	2.1	3.7	2.3	3.8	4.0	3.2
Portugal	3.5	5.0	4.0	4.2	2.9	2.8	3.4
Turkey	2.0	3.4	2.3	2.6	2.4	4.9	3.5
Luxembourg	2.5	2.0	3.3	2.6	5.0	4.8	3.9
<i>Memorandum items:</i>							
OECD average	2.0	1.7	2.7	2.1	3.0	1.8	2.1
OECD emerging-market average ⁶	2.3	2.2	2.7	2.4	2.8	2.1	2.4

1. Refers to the state of legislation in 2006 for all countries, 2003 for Chile, 2004 for Brazil and 2007 for India, Indonesia and South Africa.

2. Refers to procedures and delays before giving notice.

3. Refers to valid reasons, possible probationary period before new workers are entitled to protection, compensation for unjustified dismissal, extent of reinstatement.

4. Refers to fixed-term contracts and temporary-work agencies. For Chile and Mexico, the scores estimated for fixed-term contracts are taken to apply to temporary-work agencies as well.

5. The following weights are used: indefinite contracts: 5/12; collective dismissals: 2/12; and temporary jobs: 5/12.

6. Includes Czech Republic, Hungary, Korea, Mexico, Poland, Slovak Republic and Turkey.

Source: OECD (2003, 2004a, 2004b, 2007b and 2008b) and OECD calculations.

Table 3.4. EPL stringency, 2008
2008 *Doing Business* indicators, country ranks in ascending order of stringency

	Difficulty of hiring index	Rigidity of hours index	Difficulty of firing index	Rigidity of employment index	Non-wage labour cost (% of salary)	Firing costs (weeks of wages)
Indonesia	72.0	0.0	60.0	44.0	10.0	108.0
OECD	25.2	39.2	27.9	30.8	20.7	25.7
Regional benchmarks						
East Asia and Pacific	19.2	20.8	19.2	19.7	9.4	37.8
South Asia	23.6	17.5	40.0	27.0	6.7	66.0
ASEAN ¹	24.0	22.2	27.8	24.8	8.7	53.4
<i>India</i>	0.0	20.0	70.0	30.0	17.0	56.0
<i>China</i>	11.0	20.0	40.0	24.0	44.0	91.0

1. Includes Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand and Vietnam. Source: World Bank (*Doing Business*, 2008).

Comparison with alternative indicators of EPL stringency

The Indonesian labour code is also considered to be stringent in comparison with regional peers and OECD countries on the basis of the World Bank's *Doing Business* indicators (Table 3.4). These comparisons highlight the cost of severance compensation (for a worker having 20 years of service), which is much higher in Indonesia than in any country grouping, although it is also relatively high in China and India. Non-wage labour costs are nevertheless low in relation to OECD countries, but not against regional comparators, with the exception of China and India. The cross-country comparisons also point to a difficulty of hiring workers in Indonesia in relation to OECD countries and regional peers.

Indonesia's labour code is more restrictive than those of regional peers in terms of the duration of the working week and statutory overtime compensation. For example, the country's statutory 40-hour working week is shorter than in most comparator countries in Southeast Asia, where 44-48 hours tend to be standard (Asian Development Bank, 2005). Overtime pay, currently at 150% of the regular hourly remuneration for the first overtime hour and 300% thereafter, is also onerous by comparison with regional peers.

EPL over time

EPL is an important instrument to protect workers in the event of dismissal in countries that do not have comprehensive unemployment insurance. But, the main consideration in Indonesia is that provisions have been tightened over time. Also, the increase in the minimum wage over the years (discussed below) has also raised the cost of severance pay financed by the employer, because severance and long-term service pay is often based on the minimum wage. The labour code was due to be reviewed in 2005-06, but no progress has been made on this matter.

Notwithstanding this increased stringency, compliance with the labour code is likely to have increased over time. Evidence in this area is essentially anecdotal, given that, by definition, it is very difficult to ascertain the level of compliance. But greater protection of trade union rights since the 2000 law that regulates trade union activities,⁴ the 2004 law on industrial relations⁵ and enhanced efforts on the part of the labour authorities to enforce the legislation are believed to have contributed (Manning and Roesad, 2007).

The impact of minimum wage legislation on earnings and employment

Earnings

In theory, the minimum wage truncates the earnings distribution. It brings those workers whose wages were previously below the minimum statutory level up to it and possibly creates spillover effects for workers who earn more, but not much more than, the minimum wage. In practice, these effects can be gauged by comparing the earnings density functions for employees in 1996 and 2004 using *Sakernas* data.⁶ Both distributions are similar, but the peak around the ratio of actual earnings to the minimum wage appears to have shifted slightly to the right (Figure 3.4). At the same time, the share of workers earning less than the minimum wage seems to have fallen. These findings are consistent with the hypotheses of increased compliance over the years and of the existence of spillover effects on those workers whose incomes are just above the minimum wage. Evidence of a positive impact of the minimum wage on earnings is also reported by Rama (2001) and Suryahadi *et al.* (2003).

The extent to which minimum wage legislation affects earnings varies according to gender and age. Male employees earn more than females and are less affected by the minimum wage. This is because the mode of the earnings distribution, depicted in Figure 3.4, is above the minimum wage for males and below it for females. Likewise, prime-age and older individuals (aged 25-65) are better paid and less affected by the minimum wage than youths (aged 15-24). In addition, there are more females than males and more youths than older workers earning less than the statutory minimum. This finding does not imply *per se* that women are discriminated against in the labour market. But the evidence reported in Annex 3.A1 on the basis of household survey data does suggest that women appear to have a negative wage premium, even after controlling for other observable individual and labour-market characteristics that influence earnings.

With regards to educational attainment, the minimum wage appears to have a stronger impact on the earnings distribution for less educated individuals. Again, the spike in the earnings distribution coincides with the minimum wage in the case of less educated employees (*i.e.* those having completed up to lower-secondary education), which suggests a stronger impact of the minimum on earnings than in the case of better educated individuals. Because human capital is strongly correlated with occupation, those individuals working in relatively labour-intensive sectors, such as construction, are more likely to be affected by the minimum wage than their counterparts in sectors whose production requires higher skilled labour.

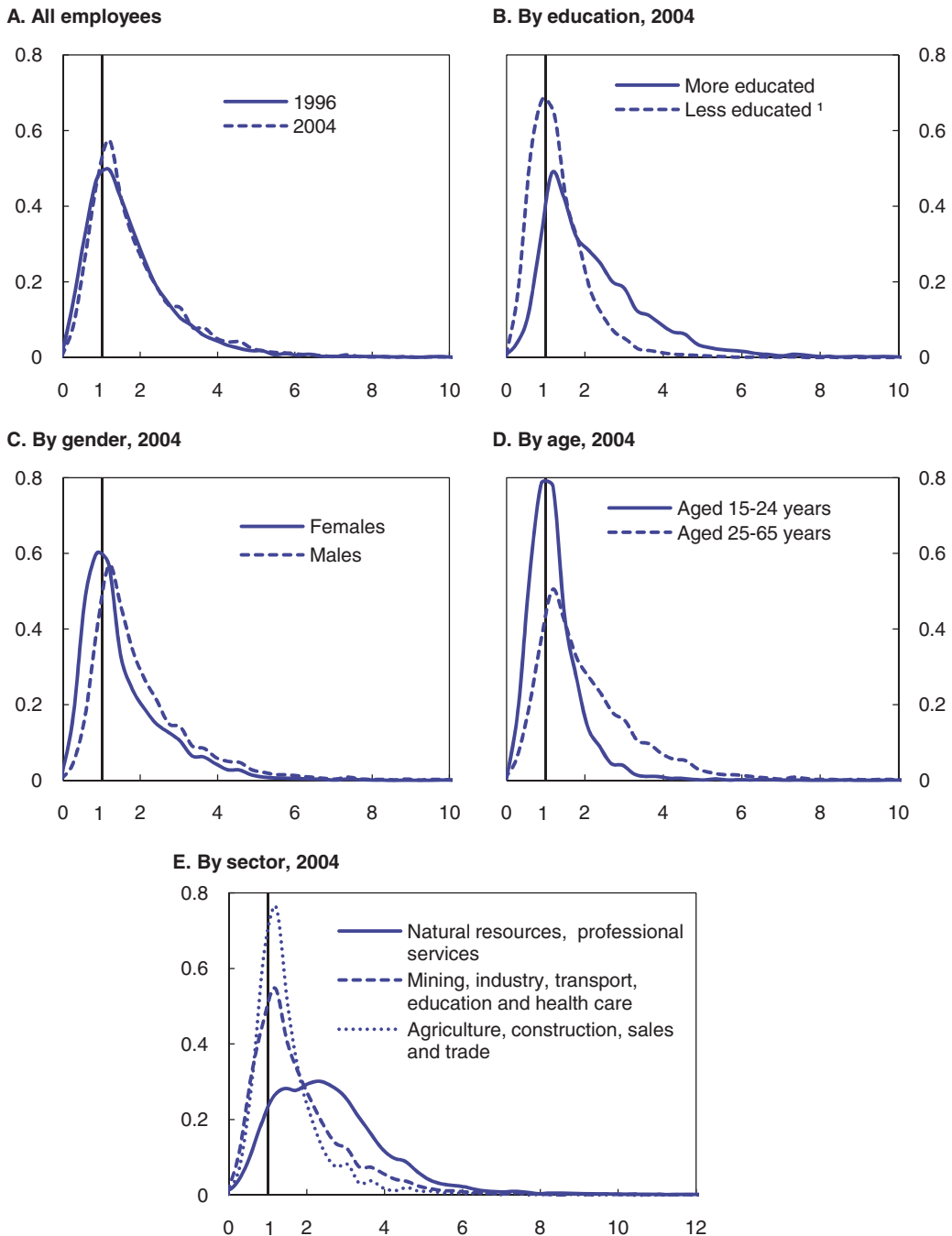
Employment

The literature suggests that individuals with weak attachment to the labour market are most likely to be affected adversely by minimum wage legislation. Females, less educated individuals, those working in labour-intensive sectors and youths are often more at risk of job losses or of being trapped in the informal sector in the event of sharp increases in the minimum wage. In theory, the minimum wage would lead to job losses if it were set above a market-clearing level. Displaced workers would remain unemployed, if they had other means of supporting themselves, such as access to unemployment insurance; otherwise, they would work informally.

There is nevertheless considerable controversy over the expected impact of minimum wage legislation on employment on both theoretical and empirical grounds. To a certain

Figure 3.4. **The minimum wage and earnings distribution, 1996 and 2004**

Density functions, in multiples of the minimum wage for all employees working at least 30 hours per week



1. Employees having completed up to lower-secondary education are considered less educated.

Source: Sakernas and OECD calculations.

extent, this reflects differences in legal provisions and compliance across countries. This is the case in the OECD area too, where there are important variations in the level of the minimum wage in relation to average wages, the coverage of minimum wage provisions across sectors and age groups, the mechanisms for indexation, and the role of social

partners and the government in setting the statutory minimum wage (OECD, 1998). In any case, there is fairly general agreement that the effect of the minimum wage on employment in OECD countries should be stronger, the higher its level in relation to average/median wages. It appears that individuals, such as youths, are most vulnerable to job losses due to a high minimum wage. But empirical evidence is much less conclusive for women and part-time workers (OECD, 1999).

In the case of Indonesia, there is some evidence that minimum wage legislation has had a negative effect on urban formal-sector employment. The early empirical studies tend to find only a relatively modest impact (Islam and Nazara, 2000; Rama, 2001), if at all, possibly because they focused on the period prior to the substantial increase in the real value of the minimum wage, which took place after 2000-01. More recent evidence nevertheless suggests that there may indeed be a negative employment effect, particularly for those individuals with the most precarious attachment to the labour market, such as females, youths and the less educated (Suryahadi *et al.*, 2003). This evidence is in line with the hypothesis that employers may substitute capital and skilled labour for unskilled labour as a means of mitigating the impact of increases in the real value of the minimum wage on their production costs and profit margins. This is also the experience of some countries in the OECD area (OECD, 2007a).

To shed more light on this matter, the hypothesis that minimum wage legislation, especially the sharp increase in the real value of the minimum wage before and after decentralisation in 2001, has had a bearing on unemployment was tested in Annex 3.A2. The empirical findings on the basis of local government-level data suggest that the increase in the minimum wage during 1996-2004 was associated with a rise in unemployment, controlling for other determinants of unemployment. On the basis of the estimated parameters, if the minimum wage were to be raised by 100 000 *rupiah*, for example, the unemployment rate of the population aged 15-65 would rise by 0.4 percentage points.

It should be acknowledged that, by displacing low-productivity workers, higher minimum wages may lead to productivity gains. But the extent to which this effect arises from stronger incentives for workers and employers to invest in training or from a substitution of skilled for unskilled labour is unclear. Empirical evidence is limited in this regard, even for OECD countries. In any case, the effect of minimum wage legislation on labour productivity, even if found to be strong, would need to be weighed against the welfare losses associated with lower employment opportunities for unskilled workers.

Trends in poverty and income distribution

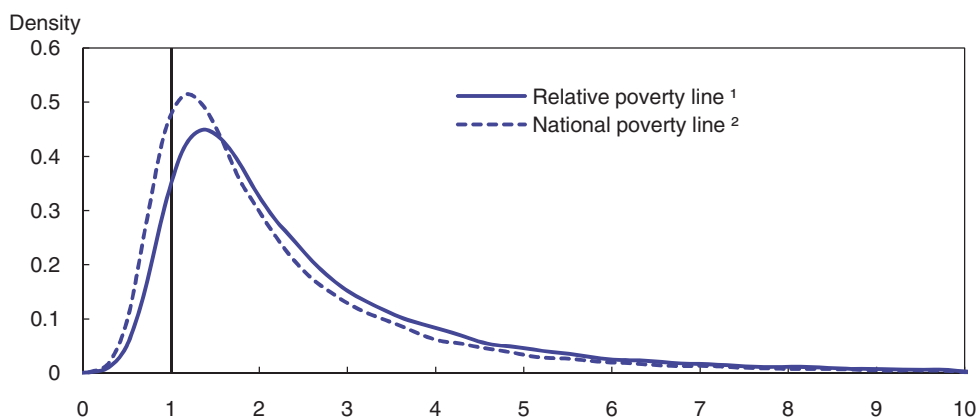
On the basis of Indonesia's national poverty line, which is set at the provincial level for urban and rural households separately, the incidence of poverty has fallen steadily since the 1997-98 financial crisis, despite an uptick in 2006, which was essentially due to an increase in the price of rice, rather than the concomitant reduction in fuel-price subsidies. By 2004, the incidence of poverty had returned to its pre-crisis level. The poverty headcount ratio fell from a peak of just over 23% in 1999 to nearly 18% in 2006. Based on this incidence rate, nearly 40 million people still lived below the poverty line in 2006. Empirical evidence shows that an individual is most likely to be poor when he/she works in the informal sector and is poorly educated (World Bank, 2006). The incidence of poverty also varies significantly between rural and urban communities and across provinces, given Indonesia's marked disparities in living standards (discussed in Chapter 1).

Table 3.5. **Poverty and income inequality indicators, 1996 and 2005**

	1996	2005
Poverty incidence¹		
Poverty headcount (%)	7.7	9.6
Income gap ² (%)	15.9	19.1
Poverty gap ² (%)	1.2	1.8
Aggregate poverty gap (million rupiah)	21.0	132.8
Income distribution		
Gini coefficient	0.36	0.41
Ratio of income shares of highest to lowest income deciles	4.4	5.2
Ratio of income shares of highest to lowest income quintiles	2.6	2.9
Memorandum item:		
Poverty headcount based on national poverty lines (%)	17.6	16.0

1. Based on a poverty line of one-half of median household consumption per capita (28 493 rupiah per capita per month in 1996 and 111 973 rupiah per capita per month in 2005).
2. The income gap ratio is the average per capita consumption shortfall of the population below the poverty line. It is defined as $IG = \frac{z - \bar{c}}{z}$, where z is the poverty line and \bar{c} is average per capita consumption of the population below the poverty line. The poverty gap ratio is the sum of the income gap ratios for the population below the poverty line divided by total population. It is defined as $PG = \frac{1}{n} \sum_{i=1}^q \frac{(z - c_i)}{z}$, where n is total population, c_i is per capita consumption of household i and q is the population below the poverty line. Therefore, the poverty gap ratio can be calculated as the product of the income gap ratio and the headcount ratio.
3. Source: Susenas and OECD calculations.

An alternative measure of poverty, defined as one-half of median household consumption per capita, points to a lower incidence of poverty relative to that calculated on the basis of the national poverty line (Table 3.5). Comparison of the incidence of poverty associated with both poverty lines in 2005 shows that there is a concentration of individuals around the national poverty threshold (Figure 3.5). This is confirmed by the

Figure 3.5. **Poverty incidence, 2005**

1. Defined as one-half of median household consumption per capita (111 973 rupiah per capita per month in 2005).
2. The BPS poverty line is the weighted average of the rural and urban poverty lines.

Source: Susenas and OECD calculations.

associated income and poverty gap ratios, which are fairly low, suggesting that the

consumption level of the average poor individual is close to that implied by the national poverty line. On the basis of this alternative measure of poverty, both the headcount ratio and inequality (as gauged by the Gini coefficient and relative income shares) rose between 1996 and 2005.

The incidence of poverty has been affected by developments in the labour market. Job creation has slowed down in the formal sector since the 1997-98 financial crisis. Until then, a reduction in poverty was closely associated with a substantial shift out of agriculture and the informal sector. Poverty rates fell by close to one percentage point per year. By contrast, the reduction in poverty after the crisis has been less than one-half of a percentage point per year during 2002-07, when the official poverty rate fell from 18.2 to 16.6% of the population on the basis of the national poverty line.

Policy considerations

The overall policy message

Indonesia's labour code is rigid in relation to most comparator countries in the OECD area, and particularly against regional peers. It has also become more restrictive over time, especially after enactment of the Manpower Law of 2003. To a large extent, this trend needs to be assessed against a background of a newly enfranchised labour movement with the return to democracy after the fall of the Suharto government in 1998. It also reflects growing demands for enhanced social protection against adverse economic shocks, such as those brought about by the 1997-98 financial crisis, especially for the most vulnerable social groups. In this context, the strengthening of severance and long-service compensation rights in the case of regular contracts is understandable. So are the efforts to restore the purchasing power of the minimum wage following the rise in inflation and the job losses associated with crisis-induced output volatility over the last ten years.

Nevertheless, in an environment of already widespread labour informality, strict EPL is likely to exacerbate segmentation in the labour market, which is undesirable, instead of strengthening effective social protection for the needy, which would be welcome. It should also be recognised that a restrictive labour code secures protection for formal-sector workers, who are typically better educated and more able to fend for themselves against adverse economic shocks, to the detriment of those in the informal sector and with the most tenuous attachment to the formal labour market, such as women and youths. Therefore, to the extent that burdensome labour laws penalise vulnerable workers instead of protecting them, their use as a social protection device should be reconsidered.

Policy action could therefore focus on making labour legislation more flexible for both regular and temporary/fixed-term contracts. A review of the 2003 Manpower Law – which was planned for 2005-06 but did not come to fruition – would provide an invaluable opportunity for making progress in this important policy area. Several options are proposed below for achieving this goal, while bearing in mind the need to strengthen Indonesia's social protection programmes. The authorities' efforts to create formal safety nets since the 1997-98 crisis through community-based and targeted income transfers to vulnerable and poor individuals are commendable. Additional policy options for further improvement in this area are also discussed below.

Making the labour code more flexible

The provisions of Indonesia's EPL that are least conducive to improvements in labour-market outcomes are related to dismissal procedures, severance compensation entitlements, restrictions on flexible work arrangements and minimum-wage setting. Reform in these areas is therefore likely to yield important dividends in terms of improved labour-market performance. A few options (listed below) could be considered.

Procedures for dismissals in the case of regular contracts could be simplified. The need for recourse to a third party for approval of dismissals is not unique to Indonesia's labour code. This is also the case in a few countries in the OECD area. But the Indonesian procedures are very time-consuming, especially because of the need for the employer to send three letters to the employee to be dismissed within intervals of at least six months between letters. There is therefore considerable scope for simplifying these procedures.

The burden of severance pay on employers could be reduced. A case can be made for maintaining somewhat generous severance compensation entitlements, because unemployment insurance is not yet available in Indonesia. But there are options for making these entitlements less burdensome on employers. For example, the requirement to double the amount of severance pay that currently exists for certain types of separation, such as dismissal for economic reasons, retirement and death/invalidity, could be scrapped. Another option would be to cap the level of severance pay at a lower number of months of pay (against nine months for nine or more years of service, as in the current system).

Long-term service compensation also imposes a financial burden on employers, which could be alleviated. To achieve this goal, the cap on compensation could be reduced from the current level of 10 months for workers with at least 24 years of service. Entitlement to this compensation could also be tightened by raising the number of years of service (from currently three years) before a worker can claim long-term service pay in the event of separation. In any case, it could be argued that the burden of this entitlement could be shifted to the employee, or at least shared between employers and employees. This is because the requirement for employer-financed severance compensation already addresses the question of protecting workers against job losses in the absence of unemployment insurance. Additional protection on the grounds of length of service, if sought, could be financed privately.

Regardless of the level of severance and long-term service compensation, employers should be better prepared to deal with contingencies associated with these entitlements. There is no easy solution to this problem in a country with a still relatively thin insurance market. But a number of remedial actions can be considered. One option is to require employers to pre-finance such contingencies by depositing a share of their payroll expenses into a reserve fund. In doing so, they would accumulate a financial asset for the enterprise that could be used to finance severance-related expenses, should these contingencies materialise. Of course, a number of technical questions would need to be addressed. For example, the level of this "levy" would need to be calibrated, and prudential regulations for fund management, which could be administered privately or publicly, would need to be set, preferably by the monetary authorities.

Work arrangements could be made more flexible. Policy initiatives in this area could focus on extending the duration of temporary work, which is currently limited to three months (the probation period for regular contracts), and fixed-term contracts, which are

currently limited to three years. The option of allowing an initial fixed-term contract to be drawn for three years and extended once, resulting in a maximum of six years' duration, as was the case prior to 2003, could be considered. It would also be desirable to broaden the range of activities for which fixed-term employment is permitted, beyond those of a seasonal, one-off and short-term nature. Sub-contracting could be permitted for workers performing all activities, rather than just non-core ones, provided that labour standards are maintained. These proposals are in line with those put forward by the Labour Ministry in 2006 when reviewing the 2003 Manpower Law.

Further increases in the real value of the minimum wage should be resisted. The mechanism for setting its value against benchmarks of basic consumption needs is welcome, and greater involvement of the statistics authorities in the calculation of the district-level consumption baskets and relevant price indices is a step in the direction of rendering minimum wage setting as technically sound as possible. The option envisaged by the labour code, but allegedly scarcely utilised, to allow deviations of the minimum wage from the benchmarks in periods of adverse economic conditions is also appropriate as a means of ensuring flexibility in an otherwise rigid procedure. But, at about 65% of the median wage, the minimum wage is already relatively high in Indonesia in comparison with OECD countries. At the same time, it is a poor instrument for fighting poverty, because it is not binding in the informal sector, where incomes are likely to be lower. Increases in the minimum wage are also likely to displace vulnerable workers, whose attachment to formal-sector jobs is most tenuous, in addition to pushing up prices, which tends to affect poor households more adversely than the non-poor.⁷

Therefore, the option of capping minimum wage hikes should be considered so as to alleviate the adverse impact of high minimum wages (in relation to the median) on employment, especially for low-skilled individuals, and to facilitate the formalisation of labour relations. For example, further increases in the real value of the minimum wage could be capped by increases in measured value added per worker so as to prevent increases in the real value of the minimum wages that would be out of step with productivity trends. This, or, if it were possible, a gradual reduction over time would help to alleviate the adverse employment impact of such a high minimum wage on labour-market outcomes, provided that compensatory measures could be put in place to boost social protection (discussed below).

Boosting social protection while making EPL more flexible

Restrictive labour laws have often been justified as a surrogate safety net in countries with minimal social protection programmes. Undoubtedly, there is a strong link between poverty and labour-market outcomes, given that those individuals with a precarious labour-market status are overrepresented among the poor.⁸ However, a stringent labour code provides an inadequate safety net to the extent that it perpetuates segmentation in the labour market and fails to protect vulnerable workers. A policy shift would therefore be welcome: emphasis could be placed on building effective social assistance programmes while making the labour code more flexible. This policy strategy would be laudable in its own right and could help to overcome resistance to reforms, notably to the liberalisation of the labour code. In any case, enhanced social protection should seek to strengthen the incentives for workers to seek formal-sector jobs.

Once other social protection programmes have been adequately costed and implemented, unemployment insurance could be introduced over the longer term in lieu

of onerous dismissal/severance compensation entitlements. The design of unemployment insurance varies significantly across countries, and several reform options are available for consideration. Nevertheless, international experience suggests that, for such a programme to be affordable and to encourage the formalisation of labour relations, it should meet a number of requirements. In particular, the duration of benefits should be limited (and possibly declining during the spell), eligibility should be conditional on a minimum duration of employment, and the programme's financial burden should be shared between employers and employees. Moreover, the need for capacity building to design and administer a cost-effective unemployment insurance, including through the enforcement of job-search requirements, should not be underestimated.

Participation in *Jamsostek* could be extended to the self-employed and to employees in smaller enterprises on an optional basis, as was recommended at the time the scheme was created in 1992. This initiative, which was taken into account in the new Social Security Law (*Jamsosnas*) enacted in 2004, would go in the direction of strengthening social insurance by broadening the array of options for saving for retirement and by facilitating access to health insurance for a larger number of workers and their families, especially those working in the informal sector. But the programme currently suffers from a lack of credibility, as evidenced by high non-compliance even among large-company employees, for whom enrolment is compulsory. Effort should therefore be put into enhancing enforcement and creditability in the programme so as to increase compliance and to encourage individuals who can afford to, but currently prefer not to participate. Of course, the attractiveness of membership depends ultimately on the perceived benefits of coverage and the affordability of contributions, which may be a significant constraint for individuals on low incomes. As a result, there is no guarantee that the workers who are currently ineligible for membership would be interested in contributing once access restrictions have been relaxed. But the exclusion of own-account workers and employees in small enterprises does impose an undue constraint on the expansion of membership.

Tackling informality, which is closely related to precariousness in the labour market and poverty, requires action in different policy areas. Informality is a multi-dimensional phenomenon, but low human capital tends to be a key determinant on the basis of the empirical evidence reported in this chapter. In most countries, informality is associated with low human capital, because the productivity of unskilled workers is too low to compensate for the costs borne by employers arising from taxation and compliance with the labour code. Efforts to boost human capital, through the educational system, labour training and skill certification, as discussed elsewhere in this *Economic Assessment*, would therefore also address this root cause of informality. The authorities are fully aware of the need to make progress in this area. In addition, policy actions that would make for a better business environment (discussed in Chapter 2), including through the removal of restrictions on business registration and of constraints to entrepreneurship in general, would also go in the same direction.

Greater conditionality could be introduced in social assistance programmes. Indonesia already has a number of formal, government-financed safety nets (Box 3.4). The newer programmes tend to be better designed and managed, and more tightly targeted than the earlier initiatives, which focused on income support to alleviate the hardships associated with economic crises, such as that of 1997-98. Emphasis is now shifting towards enhancing social assistance by equipping vulnerable individuals to pull themselves out of poverty, as in the case of *Program Keluarga Harapan*. Several programmes, such as Brazil's *Bolsa Família*,

Box 3.4. Poverty alleviation programmes in Indonesia: An overview

Most poverty alleviation programmes were put in place at the time of the 1997-98 financial crisis to shield vulnerable social groups from the income losses associated with a severe contraction in economic activity. A second generation of programmes was implemented more recently to protect vulnerable individuals from the rise in fuel prices and headline inflation due to the reduction in fuel subsidies in 2005.¹

The Rice for Poor Families programme

Rice for Poor Families (RASKIN) is Indonesia's main income transfer programme. It was put in place during the 1997-98 crisis to alleviate poverty through the distribution of a regular ration of subsidised rice to vulnerable households. About one-third of the population benefitted from the programme at the time of the crisis. RASKIN accounts for a substantial portion of the government's development expenditures (excluding transport and distribution costs).

The programme is estimated to be relatively well targeted: nearly 85% of the subsidy accrues to households deemed needy by village leaders. RASKIN's impact on the incidence of poverty is therefore strong: it is estimated that the poverty gap would have been 20% higher in the absence of the programme. RASKIN was also used as an additional compensatory mechanism for protecting the poor against fuel price hikes in 2002-03: one-tenth of RASKIN rations were provided as compensation for an increase in administrative fuel prices.

The Fuel Subsidy Reduction Compensation Fund (PKPS-BBM)

In October 2005, a programme was launched to compensate poor households for a reduction in fuel subsidies. Fuel-price hikes were substantial in response to the increase in the price of oil, which put the public finances under considerable strain. The reduction in the fuel subsidies also resulted in a sharp rise in consumer-price inflation. The ensuing savings to the budget were used to finance the provision of four targeted poverty-reduction programmes through the *Fuel Subsidy Reduction Compensation Fund* (PKPS-BBM). The programmes comprised targeted transfers to poor households to finance basic health care and insurance against income losses, a School Operational Fund (BOS), financing for the development of infrastructure at the local level and unconditional cash transfers.

Unconditional cash transfers were disbursed from October 2005 through the postal service in quarterly instalments of about USD 30 per household to 15.5 million households. Programme design and implementation has been strengthened over time, including through improvements in the cadastre of beneficiaries, payment procedures and mechanisms for dealing with grievances.

Programme evaluation

Assessments of Indonesia's major targeted income transfer programmes are by and large positive.² Targeting deficiencies have been identified as having resulted from the need for swift implementation in times of crisis and against a background of data constraints. But other specific features of the programmes have compensated for these targeting shortcomings. For example, identification of the targeted population has been carried out with the assistance of village leaders, who command respect among the recipient population. A preference for self-targeting methods, according to which potential beneficiaries select themselves for benefits, as well as a focus on the provision of basic necessities goods, such as low-quality rice, and workfare programmes paying below-market wages, have contributed to reducing leakages. Moreover, there is little evidence to suggest that these programmes are contributing to the creation of poverty traps, which would discourage work effort.

Box 3.4. Poverty alleviation programmes in Indonesia: An overview (cont.)**The next steps**

The initial assessment of PKPS-BBM also proposed the introduction of conditionality in income transfer programmes so as to require beneficiaries to keep their children at school and to pay regular visits to health clinics. A pilot programme was put in place in 2007 in a few provinces. The programme is expected to be extended to other provinces in the near term.

Other social assistance programmes are under way. For example, emphasis is being placed on targeted support for increasing health insurance coverage among poor households. The programme is expected to benefit 76.4 million individuals in 2008. Scholarships have also been introduced for students from disadvantaged backgrounds for a target population of nearly 38 million. Other initiatives include infrastructure development at the local level of government, potentially benefiting 60-70 million individuals, and facilitated access to credit for poor individuals.

1. See Asian Development Bank (2006) for more information.
2. See Perdana and Maxwell (2004), Sumarto *et al.* (2004) and World Bank (2006) for more information.

Chile's *Chile Solidario* and Mexico's *Progresa/Oportunidades*, show that conditionality is a key to effectively linking social protection to durable improvements in social outcomes. Eligibility requirements related to school enrolment and visits to health clinics are among the most effective requirements.

Fuel and electricity subsidies could be reduced further. As discussed in Chapter 1, based on official projections, outlays on subsidies are expected to account for nearly 20% of government expenditure in 2008. Fuel subsidies alone are projected to account for the bulk of this amount, despite the large increase in domestic prices that took place in May. Price subsidies are undesirable for a number of reasons, as discussed elsewhere in this *Economic Assessment*. Because they are on balance poorly targeted, these subsidies reduce the overall progressivity of social spending and divert scarce budgetary resources to the financing of programmes that do not reach the most vulnerable segments of society. A capping of the electricity subsidy to the level of consumption of low-income individuals could therefore be considered as a means of improving the incidence of government spending on this programme. Also, the introduction of an explicit mechanism for setting domestic prices in line with international prices would release pressure from the budget at times of surging international fuel prices. In both cases, the attendant budgetary savings could be used to increase appropriations for the better-targeted, conditional income-support programmes discussed above, as well as for human capital accumulation and infrastructure development.

An important, more fundamental policy consideration is how to finance social protection over the longer term. As Indonesia's formal safety nets are broadened and strengthened, they will exert growing pressure on the budget. The tradeoffs associated with different funding instruments will therefore become increasingly prominent in the policy debate. Most countries rely on a combination of general taxation and social contributions to finance social protection. But the impact of these different instruments on employment and welfare differs considerably, depending on the tax wedge they impose on labour income. OECD experience suggests that the negative employment effects of the tax

wedge are especially strong for low-paid employment, notably in the presence of a binding minimum wage.

A summary of policy considerations is presented in Box 3.5.

Box 3.5. Summary of policy considerations for improving labour-market outcomes

Options for making the labour code more flexible

- Procedures for dismissals could be simplified in the case of regular contracts.
- The burden of severance pay could be reduced, and the cost of long-term service compensation could be shared between employees and employers.
- A mechanism could be created for employers to pre-fund contingencies associated with severance compensation entitlements.
- The maximum duration of fixed-term contracts could be extended, and the range of activities for which temporary work contracts are allowed could be broadened.
- Real increases in the minimum wage could be capped so as not to exceed labour productivity gains.

Options for boosting social protection while making EPL more flexible

- Once other social protection programmes have been adequately costed and implemented, unemployment insurance could be introduced over the longer term in lieu of onerous dismissal/severance compensation entitlements.
- Once *Jamsostek* has been strengthened and credibility in the institution has been bolstered, participation in *Jamsostek* could be extended to the self-employed and employees in smaller enterprises on an optional basis.
- Conditionality could be enhanced in social assistance programmes (*Program Keluarga Harapan*).
- Fuel and electricity subsidies could be reduced further and the associated budgetary savings could be used to finance more meritorious social programmes (social protection and human capital development) and infrastructure development (discussed in Chapters 1 and 2).

Notes

1. See Manning and Roesad (2007) for a comprehensive overview of the 2003 Manpower Law and other labour-related legislation, as well the information reported on the website of the International Labour Organisation (www.ilo.org/public/english/dialogue/ifpdial/info/termination/countries/indonesia.htm).
2. The Law also requires payment of compensation for unused annual leave, transport costs to the worker's place of domicile prior to taking up employment, and, where applicable, housing allowance, and medical and health care at a rate of 15% of the standard severance and long-term service compensation.
3. Until end-2000, there were different minimum wages within a few provinces (Riau, South Sumatra, West Java, East Java and Bali), and for selected sectors of activity.
4. The 2000 law sets the conditions for the creation of trade unions and their organisational structure (e.g. minimum membership requirements for enterprise unions, federations and confederations). Currently, there are three major union confederations representing some 10 million workers, or around 25-30% of formal-sector workers. A plethora of smaller confederations cover about 5 million workers representing specific industries and having greater influence in certain regions,

such as East Java and North Sumatra. Less than one-half of non-agricultural salaried workers are unionised, and probably around one-half of these workers do not pay their union dues on a regular basis.

5. The industrial relations law replaced the Disputes Councils, which used to be administered by the provinces and the central government with trade union and employer representation, by civil courts for labour disputes.
6. Unfortunately, *Sakernas* does not report earnings for non-employees. This lack of information on earnings for individuals whose employment status is most likely to be correlated with informality makes it impossible to test empirically for the presence of possible spillovers from formal-sector wage setting on the informal sector. In some countries, such as Brazil, for example, there is evidence that, to different degrees, the effects of changes in the minimum wage on the earnings distribution are not limited to the formal sector.
7. The simulations reported by Bird and Manning (2005) show that about one-half of the benefits from the hike in the minimum wage in 2003 would accrue to non-poor households. Despite an increase in earnings, poor households also suffer from a minimum wage-induced rise in inflation and attendant job losses, especially among the unskilled.
8. See Alisjahbana and Manning (2006) for more discussion.

Bibliography

- Alisjahbana, A.S. and C. Manning (2006), "Labour Market Dimensions of Poverty in Indonesia", *Bulletin of Indonesian Economic Studies*, Vol. 42, pp. 235-61.
- Arifianto, A. (2004), "Social Security Reform in Indonesia: An Analysis of the National Social Security Bill (RUU *Jamsosnas*)", *Working Paper*, SMERU, Jakarta.
- Asian Development Bank (2005), *Labour Markets in Asia: Promoting Full, Productive, and Decent Employment*, Key Indicator Series, Asian Development Bank, Manila.
- Asian Development Bank (2006), *From Poverty to Prosperity: A Country Poverty Analysis for Indonesia*, Asian Development Bank, Manila.
- Bird, K. and C. Manning (2005), "Minimum Wages and Poverty in a Developing Country: Simulations from Indonesia's Household Survey", unpublished manuscript, Australian National University, Canberra.
- Bourguignon, F., M. Fournier and M. Gurgand (2001), "Selection Bias Correction Based on the Multinomial Logit Model", *CREST Working Paper*, 2001.
- Gasparini, L. and L. Tornarolli (2007), "Labour Informality in Latin America and the Caribbean: Patterns and Trends from Household Survey Microdata", *Working Paper*, No. 0, CEDLAS, Universidad Nacional de La Plata, La Plata, Argentina.
- Heckman, J. (1979), "Sample Selection Bias as a Specification Error", *Econometrica*, Vol. 47, pp. 153-61.
- Hill, A. (1983), "Female Labour Force Participation in Developing and Developed Countries. Consideration on the Informal Sector", *Review of Economics and Statistics*, Vol. 65, pp. 459-68.
- International Labour Organisation (2003), *Social Security and Coverage for All: Restructuring the Social Security Scheme in Indonesia – Issues and Options*, International Labour Organisation, Jakarta.
- Islam, I. and S. Nazara (2000), "Minimum Wage and the Welfare of Indonesian Workers", *Occasional Discussion Paper*, No. 3, International Labour Organisation, Jakarta.
- Jaffe, A.J. and K. Azumi (1960), "The Birth Rate and Cottage Industry in Underdeveloped Countries", *Economic Development and Cultural Change*, Vol. 9, pp. 52-63.
- Leech, C. (1996), "Reforming Indonesia's Pension System", *Policy Research Working Paper*, No. 1677, World Bank, Washington, D.C.
- Maloney, W. (2004), "Informality Revisited", *World Development*, Vol. 32, pp. 1159-78.
- Manning, C. and K. Roesad (2007), "The Manpower Law of 2003 and Its Implementing Regulations: Genesis, Key Articles and Potential Impact", *Bulletin of Indonesian Economic Studies*, Vol. 43, pp. 59-86.
- OECD (1998), *OECD Employment Outlook*, OECD, Paris.
- OECD (1999), *OECD Employment Outlook*, OECD, Paris.

- OECD (2003), *OECD Economic Survey of Chile*, OECD, Paris.
- OECD (2004a), *OECD Employment Outlook*, OECD, Paris.
- OECD (2004b), *OECD Economic Survey of Brazil*, OECD, Paris.
- OECD (2007a), *OECD Employment Outlook*, OECD, Paris.
- OECD (2007b), *OECD Economic Survey of India*, OECD, Paris.
- OECD (2008a), *Pensions at a Glance – Asia/Pacific*, OECD, Paris.
- OECD (2008b), *OECD Economic Assessment of South Africa*, OECD, Paris.
- Perdana, A.A. and J. Maxwell (2004), “Poverty Targeting in Indonesia: Programs, Problems and Lessons Learned”, *Economics Working Paper*, No. 83, Centre for Strategic and International Studies (CSIS), Jakarta.
- Rama, M. (2001), “The Consequences of Doubling the Minimum Wage: The Case of Indonesia”, *Industrial and Labour Relations Review*, Vol. 54, pp. 864-81.
- Sugiyarto, G., M. Oey-Gardiner and N. Triaswati (2006), “Labour Markets in Indonesia: Key Challenges and Policy Issues”, in J. Felipe and R. Hasan (eds.), *Labour Market Issues in Asia*, Asian Development Bank, Manila.
- Sumarto, S., A. Suryahadi and W. Widyanti (2004), “Assessing the Impact of Indonesian Social Safety Net Programs on Household Welfare and Poverty Dynamics”, *Working Paper*, SMERU, Jakarta.
- Suryahadi, A., W. Widyanti, D. Perwira and S. Sumarto (2003), “Minimum Wage Policy and Its Impact on Employment in the Urban Formal Sector”, *Bulletin of Indonesian Economic Studies*, Vol. 39, pp. 29-50.
- World Bank (2006), *Making the New Indonesia Work for the Poor*, World Bank, Washington, D.C.

ANNEX 3.A1

The determinants of employment and earnings

This Annex reports the estimation of employment and wage equations using data available from the National Labour Force Survey (*Sakernas*) carried out by BPS on an annual basis. *Sakernas* started to be collected in 1976 and focuses on the socio-economic and labour market characteristics of individuals and households. Two waves of *Sakernas* (1996 and 2004) are used in this empirical analysis.

Data

Data on earnings and employment are reported in *Sakernas* as follows. Each family member belonging to the working-age population (those aged 10 years and above until 1997, and 15 years and above since 1998) is classified as employed or unemployed depending on his/her activities during the previous week. Employed individuals are classified as employees (salaried workers), employers, self-employed or unpaid workers. While *Sakernas* data are considered to be good, there are two main issues that need to be dealt with in empirical analysis. *First*, earnings data are collected for employees only, thus excluding a large number of workers, including those in the informal sector. *Second*, to the extent that individuals working in the informal sector declare themselves to be employees, the true number of employees is likely to be overestimated. This is the case of agricultural workers, for example, since a non-negligible share of these workers declares themselves as employees, when in fact they are likely to work informally.

The results

Wage and employment equations

Table 3.A1.1 reports the results of the estimation of a standard OLS wage equation for 1996 and 2004 separately for a sample of individuals aged 15-65 years who have worked at least one hour as salaried workers over the previous week. The dependent variable is the logarithm of individual hourly wages.¹ The results are as expected: wages rise with educational attainment and age (albeit for age in a non-linear manner), women are paid less than men, being married is associated with a wage premium in the labour market, workers are better paid in industry than in agriculture or services, and there are important regional effects on earnings. Family background matters, given that wages rise with the average years of schooling of other household members. Moreover, comparison of the results for 1996 and 2004 is instructive. The returns to education (*i.e.* the marginal effect of education on earnings) appear to have increased for the individuals with at least tertiary education. On the other hand, the negative wage premium associated with women seems

to have weakened. Some of the provincial effects also changed, possibly reflecting changes in the geographical distribution of economic activity and growth.

Although intuitive, these results are likely to suffer from a selection bias, which needs to be corrected. This is because all *Sakernas* respondents are asked their employment status (self-employed, employer, employee or unpaid worker), but information on earnings is collected only for employees, as mentioned above. Since it is unlikely that individuals sort themselves into the different employment statuses at random, a selection bias may arise if a standard Mincerian wage equation is estimated with earnings data for employees only. In fact, there may be significant differences between employees and workers with different job statuses.² In particular, an estimation bias occurs if selection into the different job statuses is related to unobservable covariates that help to explain the dependent variable (hourly wages).

A standard sample-selection correction technique is proposed by Heckman (1979), who defines the selection-bias problem as one arising from omitted variables. A method for correcting this bias consists of inserting the omitted variable in the form of the inverse Mills ratio (i.e. the ratio of the probability density function over the cumulative density function of a distribution) into the wage equation. We use instead a generalisation of this technique using as the selection equation the multinomial logit model proposed by Bourguignon, Fournier and Gurgand (2001). Accordingly, the set of labour force alternatives is expanded to three possibilities: working as an employee, working but not as an employee, and not working at all. The category “working but not as an employee” includes the self-employed, employers and unpaid workers, who can be considered as informal-sector workers. Therefore, this characterisation of the employment statuses is consistent with a decision tree according to which workers sort themselves between the formal and informal sectors.

Tables 3.A1.2 and 3.A1.3 report the results of the estimations of the selection equation and the wage equation corrected for multinomial selection bias, respectively. In Table 3.A1.2, the results from the selection equation are reported for the unemployed and for formal-sector workers, given that the outcome “working but not as an employee” is the reference category. The sample includes all individuals aged 15-65 years. To fulfil the exclusion restrictions, the dependency ratio and its interaction with gender (female) are not included in the selection-corrected equation. The estimation results suggest that the probability of working as an employee rises with educational attainment, an effect that was stronger in 2004 than in 1996. Age, marital status and household educational attainment are additional powerful predictors of an individual’s employment status. Living in rural areas strongly reduces the probabilities of working in the formal sector and of being unemployed. As in the wage equations, regional effects are also strong and changed in some cases during 1996-2004. In particular, these results suggest that better educated, married and older (in a non-linear manner) individuals are more likely to work in the formal sector than in the informal sector and to be unemployed.

Table 3.A1.3 reports the results of the estimation of the selection-corrected wage equation. Comparison of the results reported in Tables 3.A1.1 and 3.A1.3 reveals important differences. For example, once the selection bias has been corrected, the effect of living in rural areas on earnings becomes negative, which is more intuitive on the basis of the lower incidence of poverty in urban areas. Likewise, the effects of attending school and the interaction term *female*married* also turn negative, as expected. This evidence strongly

supports the hypothesis of a selection bias in the wage equations: since rural individuals, students and married females are less likely to work as employees, it is necessary to correct for the selection bias arising from the presence of these individuals in the sample in order to obtain consistent estimates of the determinants of earnings on the basis of a survey that only reports earnings for salaried workers.

Notes

1. Respondents are asked the number of hours worked during the previous week and their average monthly wage as employees. For those employees who are temporarily out of work at the time the survey is conducted, the number of hours worked in the previous week is computed as the mean of the sample distribution.
2. In developing economies it is common practice to consider self-employed and family workers as working in the informal sector and employees as working in the formal sector (Jaffe and Azumi, 1960; Hill, 1983). However, this may not be true in our sample, because individuals working independently in the informal sector may define themselves as employees. Therefore, the true number of employees reported may be overestimated in *Sakernas*.

Table 3.A1.1. **Wage equations, 1996 and 2004**¹
(Dep. Var.: Logarithm of hourly wage)

	1996	2004
Rural	0.0216*** (0.002)	0.002 (0.79)
Female	-0.303*** (0.000)	-0.214*** (0.000)
Age	0.0379*** (0.000)	0.0395*** (0.000)
Age_squared	-0.000323*** (0.000)	-0.000309*** (0.000)
Married	0.137*** (0.000)	0.0954*** (0.000)
Female*married	0.0757*** (0.000)	0.0328** (0.01)
Attending_school	0.049 (0.14)	0.0749** (0.014)
Schooling_primary	0.141*** (0.000)	0.129*** (0.000)
Schooling_low_secondary	0.322*** (0.000)	0.329*** (0.000)
Schooling_upp_secondary	0.643*** (0.000)	0.640*** (0.000)
Schooling_tertiary	1.068*** (0.000)	1.133*** (0.000)
Average_adult_schooling	0.00794*** (0.000)	0.0133*** (0.000)
Province 12	-0.0793*** (0.003)	-0.034 (0.27)
Province 13	-0.121*** (0.000)	-0.058 (0.13)
Province 14	0.041 (0.17)	0.165*** (0.000)
Province 15	-0.043 (0.17)	-0.028 (0.54)
Province 16	-0.039 (0.18)	-0.044 (0.24)
Province 17	-0.139*** (0.000)	-0.197*** (0.000)
Province 18	-0.314*** (0.000)	-0.164*** (0.000)
Province 19		0.182*** (0.000)
Province 31	0.0924*** (0.000)	0.111*** (0.000)
Province 32	-0.0699*** (0.003)	-0.0636** (0.033)
Province 33	-0.291*** (0.000)	-0.256*** (0.000)
Province 34	-0.320*** (0.000)	-0.308*** (0.000)
Province 35	-0.296*** (0.000)	-0.200*** (0.000)
Province 36		0.107*** (0.001)
Province 51	-0.143*** (0.000)	-0.012 (0.71)

Table 3.A1.1. **Wage equations, 1996 and 2004**¹ (cont.)
(Dep. Var.: Logarithm of hourly wage)

	1996	2004
Province 52	-0.288*** (0.000)	-0.317*** (0.000)
Province 53	-0.363*** (0.000)	-0.100** (0.016)
Province 61	0.024 (0.44)	0.04 (0.25)
Province 62	0.008 (0.82)	0.198*** (0.000)
Province 63	-0.041 (0.18)	0.0663* (0.058)
Province 64	0.119*** (0.000)	0.144*** (0.000)
Province 71	-0.249*** (0.000)	0.0934** (0.011)
Province 72	-0.334*** (0.000)	-0.048 (0.29)
Province 73	-0.178*** (0.000)	-0.016 (0.68)
Province 74	-0.112*** (0.001)	-0.101** (0.046)
Province 75		-0.136** (0.01)
Province 81	-0.0893*** (0.008)	0.0864** (0.04)
Province 82	0.258*** (0.000)	0.235*** (0.001)
Province 94	0.228*** (0.000)	0.474*** (0.000)
Sector: Agriculture-mining	-0.141*** (0.000)	0.107*** (0.000)
Sector: Industry	0.0174** (0.029)	0.229*** (0.000)
Sector: Trade-services	-0.0576*** (0.000)	0.0930*** (0.000)
Constant	5.629*** (0.000)	6.566*** (0.000)
No. of observations	45 241	38 505

1. All models are estimated by OLS. Statistical significance at the 1%, 5% and 10% levels is denoted by (***), (**) and (*), respectively. Heteroscedasticity-corrected standard errors are reported in parentheses.

Source: Sakernas and OECD estimations.

Table 3.A1.2. **Multinomial selection employment equations, 1996 and 2004¹**
(Dep. Var.: Not working or working as an employee)

	1996		2004	
	Not working	Working as an employee	Not working	Working as an employee
Rural	-0.1297 *** (0.003)	-0.0833 *** (0.002)	-0.1102 *** (0.003)	-0.0954 *** (0.002)
Female	0.0928 *** (0.005)	-0.0052 (0.004)	0.1208 *** (0.005)	0.0467 *** (0.004)
Age	-0.0487 *** (0.001)	0.0174 *** (0.001)	-0.0561 *** (0.001)	0.0147 *** (0.001)
Age_squared	0.0006 *** (0.000)	-0.0003 *** (0.000)	0.0007 *** (0.000)	-0.0002 *** (0.000)
Married	-0.3599 *** (0.006)	0.1092 *** (0.003)	-0.3713 *** (0.006)	0.0972 *** (0.003)
Dependency_ratio 15_65	-0.0866 *** (0.006)	0.0244 *** (0.003)	-0.1201 *** (0.010)	0.0179 *** (0.005)
Female*married	0.5402 *** (0.005)	-0.2567 *** (0.003)	0.5616 *** (0.005)	-0.2348 *** (0.003)
Female*dependency_ratio 15_65	0.1231 *** (0.006)	-0.0472 *** (0.004)	0.1596 *** (0.011)	-0.0813 *** (0.007)
Attending_school	0.5174 *** (0.005)	-0.2380 *** (0.002)	0.5524 *** (0.005)	-0.1761 *** (0.002)
Schooling_primary	-0.0384 *** (0.004)	-0.0099 *** (0.004)	-0.0568 *** (0.005)	0.0148 *** (0.005)
Schooling_low_secondary	-0.0117 ** (0.006)	0.0189 *** (0.005)	-0.0292 *** (0.006)	0.0341 *** (0.006)
Schooling_upp_secondary	-0.0159 ** (0.006)	0.1685 *** (0.007)	-0.0083 (0.008)	0.1464 *** (0.008)
Schooling_tertiary	-0.1173 *** (0.008)	0.4332 *** (0.011)	-0.1572 *** (0.008)	0.4354 *** (0.012)
Average_adult_schooling	0.0145 *** (0.001)	0.0046 *** (0.001)	0.0128 *** (0.001)	0.0094 *** (0.001)
Province 12	-0.0791 *** (0.008)	0.1102 *** (0.011)	-0.1018 *** (0.009)	0.0640 *** (0.010)
Province 13	-0.0382 *** (0.010)	0.0745 *** (0.012)	-0.0274 ** (0.012)	0.0097 (0.010)
Province 14	0.0522 *** (0.012)	0.0496 *** (0.011)	0.0744 *** (0.014)	0.0434 *** (0.011)
Province 15	-0.0043 (0.012)	0.0457 *** (0.013)	-0.0736 *** (0.013)	0.0089 (0.012)
Province 16	-0.0265 *** (0.010)	0.0531 *** (0.011)	-0.1032 *** (0.010)	-0.0148 (0.009)
Province 17	-0.1236 *** (0.010)	0.0118 (0.012)	-0.1411 *** (0.011)	-0.0159 (0.011)
Province 18	-0.0430 *** (0.010)	0.0638 *** (0.011)	-0.0643 *** (0.011)	-0.0167 * (0.009)
Province 19			-0.0318 ** (0.015)	0.1642 *** (0.017)
Province 31	0.0148 (0.010)	0.1437 *** (0.011)	0.0170 * (0.010)	0.1137 *** (0.009)
Province 32	0.0835 *** (0.009)	0.1339 *** (0.009)	0.0674 *** (0.011)	0.0636 *** (0.009)
Province 33	-0.0915 *** (0.007)	0.2084 *** (0.011)	-0.1133 *** (0.009)	0.0823 *** (0.010)
Province 34	-0.1488 *** (0.007)	0.1344 *** (0.012)	-0.1948 *** (0.008)	0.0762 *** (0.012)

Table 3.A1.2. **Multinomial selection employment equations, 1996 and 2004**¹ (cont.)
(Dep. Var.: Not working or working as an employee)

	1996		2004	
	Not working	Working as an employee	Not working	Working as an employee
Province 35	-0.0537 *** (0.008)	0.1810 *** (0.010)	-0.0737 *** (0.009)	0.0773 *** (0.009)
Province 36			0.0468 *** (0.013)	0.1050 *** (0.012)
Province 51	-0.1791 *** (0.007)	0.1519 *** (0.013)	-0.2173 *** (0.007)	0.1245 *** (0.013)
Province 52	-0.0820 *** (0.009)	0.0786 *** (0.012)	-0.1212 *** (0.010)	-0.0206 ** (0.009)
Province 53	-0.1001 *** (0.009)	0.0061 (0.010)	-0.1635 *** (0.009)	-0.0164 * (0.010)
Province 61	-0.0395 *** (0.010)	0.0446 *** (0.011)	-0.1091 *** (0.010)	0.0869 *** (0.012)
Province 62	-0.0971 *** (0.010)	-0.0159 (0.011)	-0.0924 *** (0.012)	-0.0350 *** (0.010)
Province 63	-0.0717 *** (0.010)	0.0337 *** (0.011)	-0.1392 *** (0.010)	0.0962 *** (0.013)
Province 64	0.0006 (0.012)	0.0830 *** (0.013)	0.0275 * (0.015)	0.0908 *** (0.014)
Province 71	0.0801 *** (0.013)	0.0267 ** (0.012)	0.0377 ** (0.015)	0.0259 ** (0.012)
Province 72	-0.0198 * (0.012)	0.0019 (0.011)	-0.0730 *** (0.013)	0.0149 (0.012)
Province 73	0.0853 *** (0.011)	-0.0227 ** (0.009)	0.0452 *** (0.012)	-0.0120 (0.009)
Province 74	-0.0602 *** (0.011)	0.0287 ** (0.012)	-0.1120 *** (0.012)	-0.0228 ** (0.010)
Province 75			0.1164 *** (0.018)	0.0119 (0.014)
Province 81	-0.0036 (0.012)	0.0182 (0.012)	0.0069 (0.016)	-0.0119 (0.012)
Province 82	-0.0648 *** (0.012)	0.0191 (0.013)	-0.0705 *** (0.017)	-0.0367 *** (0.013)
Province 94	0.0196 (0.015)	-0.0084 (0.013)	-0.1186 *** (0.013)	-0.0045 (0.013)
No. of observations	200 272	200 272	198 613	198 613

1. The models are estimated by multinomial logit, and the marginal effects are reported. Statistical significance at the 1%, 5% and 10% levels is denoted by (***), (**) and (*), respectively. Heteroscedasticity-corrected standard errors are reported in parentheses.

Source: Sakernas and OECD estimations.

Table 3.A1.3. **Selection-corrected wage equations, 1996 and 2004¹**
(Dep. Var.: Logarithm of hourly wages)

	1996	2004
Rural	-0.127*** (0.000)	-0.218*** (0.000)
Female	-0.291*** (0.000)	-0.147*** (0.000)
Age	0.0437*** (0.000)	0.0514*** (0.000)
Age_squared	-0.000470*** (0.000)	-0.000563*** (0.000)
Married	0.187*** (0.000)	0.144*** (0.000)
Female*married	-0.117*** (0.000)	-0.291*** (0.000)
Attending_school	-0.021 (0.65)	-0.337*** (0.000)
Schooling_primary	0.0957*** (0.000)	0.116*** (0.000)
Schooling_low_secondary	0.317*** (0.000)	0.357*** (0.000)
Schooling_upp_secondary	0.820*** (0.000)	0.880*** (0.000)
Schooling_tertiary	1.450*** (0.000)	1.623*** (0.000)
Average_adult_schooling	0.0186*** (0.000)	0.0323*** (0.000)
Province 12	-0.006 (0.8)	0.0447* (0.086)
Province 13	-0.0500* (0.068)	-0.049 (0.1)
Province 14	0.0936*** (0.001)	0.267*** (0.000)
Province 15	-0.005 (0.86)	-0.019 (0.59)
Province 16	-0.023 (0.38)	-0.106*** (0.001)
Province 17	-0.178*** (0.000)	-0.237*** (0.000)
Province 18	-0.299*** (0.000)	-0.207*** (0.000)
Province 19		0.403*** (0.000)
Province 31	0.227*** (0.000)	0.302*** (0.000)
Province 32	0.0751*** (0.003)	0.0627** (0.012)
Province 33	-0.147*** (0.000)	-0.158*** (0.000)
Province 34	-0.267*** (0.000)	-0.235*** (0.000)
Province 35	-0.166*** (0.000)	-0.0933*** (0.000)
Province 36		0.291*** (0.000)
Province 51	-0.0596** (0.024)	0.121*** (0.000)

Table 3.A1.3. **Selection-corrected wage equations, 1996 and 2004**¹ (cont.)
(Dep. Var.: Logarithm of hourly wages)

	1996	2004
Province 52	-0.265*** (0.000)	-0.391*** (0.000)
Province 53	-0.399*** (0.000)	-0.155*** (0.000)
Province 61	0.0586** (0.028)	0.142*** (0.000)
Province 62	-0.04 (0.22)	0.141*** (0.000)
Province 63	-0.034 (0.22)	0.178*** (0.000)
Province 64	0.193*** (0.000)	0.298*** (0.000)
Province 71	-0.220*** (0.000)	0.140*** (0.000)
Province 72	-0.355*** (0.000)	-0.051 (0.15)
Province 73	-0.205*** (0.000)	-0.027 (0.35)
Province 74	-0.126*** (0.000)	-0.184*** (0.000)
Province 75		-0.0791* (0.056)
Province 81	-0.0905*** (0.003)	0.056 (0.15)
Province 82	0.261*** (0.000)	0.115** (0.026)
Province 94	0.254*** (0.000)	0.443*** (0.000)
Sector: Agriculture-mining	-0.145*** (0.000)	0.0989*** (0.000)
Sector: Industry	0.0179** (0.02)	0.222*** (0.000)
Sector: Trade-services	-0.0535*** (0.000)	0.0857*** (0.000)
_m0	-0.520*** (0.000)	-0.204*** (0.000)
_m1	0.0715** (0.013)	0.389*** (0.000)
_m2	-1.149*** (0.000)	-0.810*** (0.000)
Constant	4.730*** (0.000)	5.363*** (0.000)
No. of observations	45 241	38 505

1. Statistical significance at the 1%, 5% and 10% levels is denoted by (***), (**) and (*), respectively. Heteroscedasticity-corrected standard errors are reported in parentheses.

Source: Sakernas and OECD estimations.

ANNEX 3.A2

The impact of minimum wage legislation on unemployment

This Annex tests the hypothesis that minimum wage legislation affects unemployment in Indonesia using data from two rounds of *Sakernas*, 1996 and 2004, one before and one after the devolution of responsibility over minimum-wage setting to the local governments and the sharp increase in the real value of the minimum wage in 2000-01. As opposed to the analysis reported in Annex 3.A1, emphasis is now placed on local government-level, instead of individual-level, data.

The methodology

The dependent variable used in the reduced-form unemployment regressions is defined as change in the unemployment rate of individuals aged 15-65 during 1996-2004. The independent variable of interest is the change in the nominal value of the minimum wage (in millions of *rupiah*) during 1996-2004. Additional variables are also included in the regressions to control for initial conditions, such as the unemployment rate, the shares of population with no schooling and having attained upper-secondary education, the rate of labour force participation, all computed for population aged 15-65 and for 1996. Also the employment shares by sector (agriculture and industry) in 1996, and total industrial value added in 1997 (in ten trillions of *rupiah*) are included among the controls. Data are available from *Sakernas* and *Statistik Industri* (in the case of industrial value added). The sample includes 262 local governments with complete data for both 1996 and 2004.*

The findings

The regressions were estimated by weighted OLS, where the weights are inversely proportional to the variance of district population in 1996. The results, reported in Table 3.A2.1, show that the increase in the minimum wage over the period of analysis by about 100 000 *rupiah* in nominal terms was associated with a rise in unemployment by 0.4 percentage points. There is no evidence that this association is driven by a possible

* Indonesia also underwent a major administrative restructuring during the period of analysis. The procedure for coding district-level data therefore involved some judgment. For the several districts that were split between 1996 and 2004, the newly-formed districts were labelled under the original name. Whenever two jurisdictions had the same name in 1996, as in the case of *kabupaten* and *kota* with the same name, they were merged in one single jurisdiction for simplicity. All variables of interest were subsequently averaged (weighted by population) for each district.

endogeneity bias: changes in the minimum wage were found to be exogenous on the basis of the Durbin-Wu-Hausman test.

The controls are signed by and large as expected: unemployment tends to have increased less in districts with a better educated labour force and with higher informality, proxied by the share of resident population engaged in agricultural activities, which is likely to absorb displaced formal-sector workers. Also, the rise in unemployment tends to be less severe in districts with a higher share of resident population employed in industry. Finally, unemployment rose faster in the larger districts, where value added is concentrated.

Although they do not seem to suffer from an endogeneity bias, these findings should be interpreted with some caution. The estimations were carried out for district-level data, which raises econometric issues related to identification and potential selection biases, which can only be appropriately addressed using individual-level data.

Table 3.A2.1. Effect of minimum wage of unemployment, 1996-2004¹
(Dep. Var.: Change in unemployment during 1996-2004)

Regressors	Coefficients
Change in the value of the minimum wage (1996-2004)	0.04 ** (0.021)
Unemployment (1996)	-0.79 *** (0.077)
Share of population with no schooling (1996)	-0.06 *** (0.019)
Share of population with upper-secondary education (1996)	-0.14 *** (0.036)
Share of population working in agriculture (1996)	-0.09 *** (0.017)
Share of population working in industry (1996)	-0.06 * (0.034)
Labour force participation rate (1996)	-0.10 *** (0.033)
Industrial value added (1997)	0.05 *** (0.013)
Intercept	0.19 *** (0.024)
R-squared	0.3975
Number of observations	250

1. Statistical significance at the 1%, 5% and 10% levels is denoted by (***), (**) and (*), respectively. Heteroscedasticity-corrected standard errors are reported in parentheses.

Source: Sakernas, Statistik Industri and OECD estimations.

List of acronyms

AFTA	ASEAN Free Trade Agreement
ASEAN	Association of Southeast Asian Nations
BI	Bank Indonesia <i>Bank Sentral Republik Indonesia</i>
BKPM	Investment Co-ordinating Board <i>Badan Koordinasi Penanaman Modal</i>
BPS	Statistics Indonesia <i>Badan Pusat Statistik</i>
DAU	General Allocation Grant <i>Dana Alokasi Umum</i>
DAK	Special Allocation Grant <i>Dana Alokasi Khusus</i>
Jamsostek	State Social Insurance Fund <i>Jaminan Sosial Tenaga Kerja</i>
KKPPI	National Committee on Policy for Accelerating Infrastructure Provision <i>Komite Kebijakan Percepatan Penyediaan Infrastruktur</i>
KPTPK	Commission for Eradication of Corruption <i>Komisi Pemberantasan Tindak Pidana Korupsi</i>
LPEM-FEUI	Institute for Economic and Social Research, Faculty of Economics, University of Indonesia <i>Lembaga Penyelidikan Ekonomi dan Masyarakat, Fakultas Ekonomi, Universitas Indonesia</i>
PLN	State electricity company
PPTAK	Financial Transactions and Analysis Centre <i>Pusat Pelaporan dan Analisa Transaksi Keuangan</i>
Sakernas	National Labour Force Survey <i>Survei Tenaga Kerja Nasional</i>
Susenas	National Socioeconomic Survey <i>Survei Sosial Ekonomi Nasional</i>
Statistik Industri	Large and Medium-Size Manufacturing Survey <i>Statistik Industri</i>

Table of contents

Executive summary	8
Chapter 1. Growth performance and policy challenges	15
Recovery from the 1997-98 crisis	16
What drives Indonesian growth?	18
The macroeconomic policy setting	26
Policy challenges for enhancing growth performance	34
Notes	46
Bibliography	47
Annex 1.A1. Estimating Indonesia's potential GDP	49
Annex 1.A2. Gauging Indonesia's regional diversity	52
Annex 1.A3. Assessing the restrictiveness of Product Market Regulations	56
Chapter 2. Improving the business and investment climate	59
Trends in investment and an assessment of the business climate	60
Indonesia's FDI regime: International comparisons	66
Dealing with infrastructure bottlenecks	68
Enterprise access to credit	71
Policy considerations	74
Notes	79
Bibliography	81
Annex 2.A1. Infrastructure investment and economic growth	83
Annex 2.A2. Enterprise expenditure on royalties, R&D and labour training: Firm-level evidence	86
Chapter 3. Improving labour market outcomes	89
Labour-market trends	90
Employment protection legislation	96
The impact of minimum wage legislation on earnings and employment	103
Trends in poverty and income distribution	105
Policy considerations	107
Notes	113
Bibliography	114
Annex 3.A1. The determinants of employment and earnings	116
Annex 3.A2. The impact of minimum wage legislation on unemployment	125
List of acronyms	127

Boxes

1.1. <i>Visi Indonesia 2030</i> : The main elements	21
1.2. Growth accounting in Indonesia: A summary of the literature	22
1.3. Indonesia's trade regime and performance: An overview	24
1.4. Fiscal decentralisation in Indonesia: Achievements and challenges	28
1.5. Inflation targeting in Indonesia	32
2.1. The 2007 Investment Law	65
2.2. An overview of anti-corruption initiatives	66
2.3. The OECD methodology for calculating FDI regulatory restrictiveness	67
2.4. Efforts to encourage private-sector involvement in infrastructure development	72
2.5. Summary of policy considerations for improving the business and investment climate	79
3.1. Social security in Indonesia	93
3.2. Defining labour informality in Indonesia	94
3.3. The OECD methodology for assessing EPL restrictiveness	100
3.4. Poverty alleviation programmes in Indonesia: An overview	111
3.5. Summary of policy considerations for improving labour-market outcomes . . .	113

Tables

1.1. Indonesia: Selected macroeconomic indicators, 2001-07	20
1.2. Budget operations: Central government, 1990-2007	30
1.3. Indonesia: Selected financial and monetary indicators, 2001-07	34
1.4. Education and health indicators: Cross-country comparisons, 1990, 2000 and 2005	35
1.5. Product market regulations: Cross-country comparisons	41
1.A2.1. Provincial economic activity indicators, 1975-2007	54
1.A2.2. Provincial development indicators, 1975-2007	55
2.1. Selected infrastructure indicators, 1990, 2000 and 2005	69
2.2. Indonesia: Access to infrastructure by income level, 2005	70
2.3. Financial-sector indicators: Cross-country comparisons, 2003	73
2.A1.1. Infrastructure development and economic activity: Co-integration tests, 1970-2006	85
2.A2.1. The determinants of expenditure on royalties, R&D and labour training, 1997	87
3.1. Trends in labour-force participation, unemployment and employment, 1996 and 2004	91
3.2. Composition of employment by occupation, 1996 and 2004	95
3.3. Employment protection legislation: Cross-country comparisons	101
3.4. EPL stringency, 2008	102
3.5. Poverty and income inequality indicators, 1996 and 2005	106
3.A1.1. Wage equations, 1996 and 2004	119
3.A1.2. Multinomial selection employment equations, 1996 and 2004	121
3.A1.3. Selection-corrected wage equations, 1996 and 2004	123
3.A2.1. Effect of minimum wage of unemployment, 1996-2004	126

Figures

1.1. The Asian crisis and economic performance: Cross-country comparisons, 1990-2006	17
1.2. Indonesia's long-term growth performance	19

1.3. Trade protection, 1989-2006	23
1.4. Export concentration, 1979-2005	25
1.5. Labour productivity in manufacturing, 1999-2005	26
1.6. Inflation, monetary policy and exchange rates, 2000-08	33
1.7. Educational attainment and performance: Cross-country comparisons, 2006	36
1.8. Expenditure on education: Cross-country comparisons, 2006	37
1.9. Innovation indicators: Cross-country comparisons	38
1.10. Investment and FDI: Trends and cross-country comparisons	43
1.A1.1. Trend GDP growth: Cross-country comparisons, 1980-2006	50
1.A2.1. Map of Indonesia	53
2.1. Net FDI inflows in Southeast Asia, 1990-2006	61
2.2. Indonesia's main business constraints, 2003 and 2007	62
2.3. FDI legislation: Cross-country comparisons	67
2.4. Trends in credit and financial development, 2000-07	73
3.1. Labour force participation by age and gender: Cross-country comparisons, 2004	92
3.2. Minimum wage trends	98
3.3. Minimum-wage setting and decentralisation, 1988-2006	99
3.4. The minimum wage and earnings distribution, 1996 and 2004	104
3.5. Poverty incidence, 2005	106

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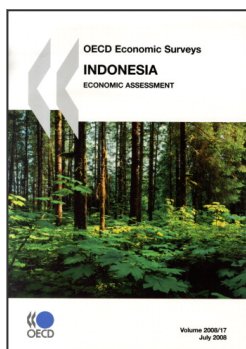
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BASIC STATISTICS OF INDONESIA (2007 unless noted)

THE LAND	
Area (thousands sq. km)	1 919
Total area (thousands sq. km, territorial and EEZ)	5 800
POPULATION	
Total (millions)	224.9
Inhabitants per sq. km	117.2
Net average annual increase during 2000-06 (in per cent)	1.3
Urbanisation rate (2006, in per cent)	49.0
Age distribution (2004, in % of total population)	
0-14	28.2
15-64	66.4
65+	4.9
EMPLOYMENT	
Working-age population (2006, in millions)	160.8
Total employment (2006, in millions)	95.5
Average annual labour force growth during 2000-06 (in per cent)	1.9
Labour force participation rate (2006, in per cent)	66.2
Unemployment rate (2006, BPS definition, in per cent)	10.3
Informality rate (<i>Economic Assessment</i> definition, in per cent, 2004)	69.6
GROSS DOMESTIC PRODUCT	
GDP at current prices and current exchange rate (USD billion)	432.8
Per capita GDP at current prices and market exchange rate (USD)	1 924.6
Average annual real growth over previous 5 years (in %)	5.5
Gross fixed capital formation (GFCF) in % of GDP	24.9
PUBLIC FINANCES (% of GDP)	
Revenue	17.9
Primary balance	19.1
Nominal balance	-1.2
Gross debt	35.0
INDICATORS OF LIVING STANDARDS	
Doctors per 1 000 inhabitants (2003)	0.13
Infant mortality per 1 000 live births (2005)	36.0
Life expectancy at birth (2005)	68.1
Human Development Index (2005)	69.6
Upper-secondary educational attainment (2006)	20.1
Literacy rate (2006, in per cent of 15+ population)	90.0
Income inequality (2005, Gini coefficient)	0.36
Poverty incidence (2006, national poverty line)	17.8
Internet users per 1 000 inhabitants (2005)	72.5
FOREIGN TRADE	
Exports of goods (USD billion)	118.0
In % of GDP	26.9
Average annual growth over previous 5 years (%)	14.9
Imports of goods (USD billion)	85.3
In % of GDP	19.5
Average annual growth over previous 5 years (%)	19.6



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