

# Labour and Social Trends in ASEAN 2008

**Driving Competitiveness and Prosperity  
with Decent Work**

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# Foreword

This fourth issue of the *Labour and Social Trends* report, a regular publication of the ILO Regional Office for Asia and the Pacific, focuses on the Association of Southeast Asian Nations (ASEAN). The report has three main aims. The first is to present an update in major trends in employment and social conditions in the dynamic ASEAN region, while also drawing attention to key policy challenges posed by these trends. In particular, the report looks ahead to 2015 with some informed projections, likely scenarios and policy implications. The target year of 2015 corresponds with that of the Millennium Development Goals (MDGs), the Asian Decent Work Decade (which was launched by the ILO's tripartite constituents in Asia and the Pacific), as well as the establishment of the ASEAN Community.

The second aim of the report is to advance the development of internationally comparable, gender- and age-specific labour market statistics across the ASEAN region and beyond. Reliable and up-to-date labour market statistics are critical for businesses, workers and job-seekers as well as for policy-makers to monitor, design and implement policies. Quality statistics are also essential in identifying policy gaps and measuring progress in achieving the MDGs, realizing decent work, and establishing the ASEAN Community.

The third aim of the report is to provide analysis and policy recommendations to the discussion on progressive labour practices at the ASEAN Human Resource Summit, to be held in Singapore in October 2008. The report highlights the important role that labour productivity, education and migration play in shaping the region's competitiveness, growth and development and emphasizes that effective mechanisms for dialogue and cooperation between workers and employers provide a key route not only to shared benefits but also to increased competitiveness and productivity.

As ASEAN Member Countries collectively continue to build a people-orientated ASEAN Community, decent work provides the foundation for sustained economic growth, shared prosperity and social progress. Decent work is a goal, meaning not just whether women and men have any job, but rather productive employment that provides an adequate income to keep them and their families out of poverty, security in times of adversity, good working conditions and a voice in the decisions that affect their lives and livelihoods. This involves many opportunities and challenges including protection from external shocks, improving competitiveness and productivity, promoting skills development, addressing issues related to labour migration, and "greening the workplace" to protect the environment. The ILO and ASEAN are already collaborating in many areas – including initiatives related to occupational safety and health, HIV/AIDS, labour market reforms and industrial relations, youth employment, vocational training, social security, labour migration and labour market information systems – on the basis of the Cooperation Agreement that was signed by the ASEAN Secretary-General and the ILO Director-General in 2007.

The report was produced by a team led by Gyorgy Sziraczki, and that included Phu Huynh, Steven Kapsos and Kee Beom Kim. Chapter 6 of the report was prepared by Manolo Abella and Jeff Ducanes of the ILO/EU Asian Programme on the Governance of Labour Migration. Ivanka Mamic contributed to the analysis of the social impact of soaring commodity prices. Charles Bodwell prepared a background study on HRD practices.

Special mention should be given to Somsward Punkrasin for administrative and logistical support, and the editing and design of the manuscript, to Karen Emmons for language editing support and to Guy Thijs, Bill Salter, Sara Elder, Theo Sparreboom, Ray Grannall, Urmila Sarkar and Tsuyoshi Kawakami for their helpful comments on the draft report. Collaboration on data and related technical matters with ILO units in Headquarters in Geneva, including the Bureau of Statistics and the Employment Trends Team, is also acknowledged.

I hope that this report will contribute to strengthening the social dimension of ASEAN integration and to better practices in efforts to realize decent work in the region.

**Sachiko Yamamoto**

Regional Director

Asia and the Pacific Region

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# Overview

The ten countries within the Association of Southeast Asian Nations (ASEAN)<sup>1</sup> are integrating competitively into regional and global markets with their goods, services and investment, building up a strong economic foundation as the region changes. Given ASEAN's sizeable consumer market (the principal driver of growth in 2007) and its large, export-oriented production base, the region is attractive to foreign investment. In fact, in 2007, foreign direct investment (FDI) to the region rose to approximately US\$60 billion, representing a 14.3 per cent increase over 2006. In terms of FDI per worker, ASEAN attracted double that of China and nearly six times that of India. However, continued growth and prosperity in ASEAN is not guaranteed due to emerging challenges that require policy attention.

At a summit meeting in January 2007, the ASEAN leaders committed themselves to accelerating integration between Member Countries, with the ultimate aim of establishing an ASEAN Community by 2015.<sup>2</sup> They envisaged that greater integration within the region will help to narrow the gaps in development between Member Countries and allow each to maximize their productivity, competitiveness and individual development potential. At the same time, all stand to benefit from the many advantages that a large, single market would offer. Greater integration would create a protective environment, offering security, stability, shared prosperity and social progress.

As this report makes clear, crucial challenges to achieving greater integration entail accelerating productivity growth, investing in human capital and managing talent, strengthening the social dimension of integration and supporting a gradual transition in the workplace to “clean production” and “green jobs” needed for sustainable development.

## *ASEAN'S integration challenge*

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1 Brunei Darussalam, Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, Myanmar, Singapore, Philippines, Thailand and Viet Nam.

2 The ASEAN Community will comprise the ASEAN Economic Community, the ASEAN Security Community and the ASEAN Socio-Cultural Community as highlighted in the ASEAN Charter.

Productivity in particular is central to the region's integration process and its economic and social objectives. Productivity is a vital determining factor in the competitiveness of both national economies and individual enterprises. All other things being equal, higher labour productivity increases competitiveness, which in turn attracts investment and fuels economic growth and employment generation. This can be a virtuous circle that influences the number of jobs and their quality; productivity gains can be shared with workers through higher wages, shorter working hours, improved conditions at the workplace, as well as through investment in skills upgrading – all of which contribute to further productivity gains. Productivity growth in ASEAN countries in lower stages of development is particularly important for narrowing the region's development gaps, a strategic priority for the ASEAN leaders.

Investing in human capital and managing talent are two increasingly important drivers of competitiveness. Until now, many low- and medium-income ASEAN countries have pursued a growth strategy based on high savings rates, fixed investment, abundant labour supplies and export promotion. However, this formula is becoming less and less appropriate as competition from China, India and other emerging economies is mounting and labour force growth in some countries is slowing down. Moreover, this approach to growth is unsustainable in the long term because it tends to neglect the intangible assets of economic competitiveness, such as innovation and creativity.<sup>3</sup> As these countries begin to focus on developing more efficient production processes and improving product quality, competitiveness becomes increasingly driven by the quality of the workforce and by the ways in which human resources are managed at the workplace. For other ASEAN countries moving into, or already at, a higher stage of development, the only way to sustain economic growth and social development is to compete through innovation in products, processes and technologies, using well-educated workers and progressive workplace practices.

Building “a people-oriented ASEAN” in which everyone can participate and benefit from the process of integration and community building is another contemporary challenge. Rising income inequalities in the region are already eroding social cohesion. Most recently, soaring food prices and their adverse impact on living standards have compounded the challenge. Widespread vulnerability among the region's workers and their families resulting from low levels of social protection could potentially undermine their support for needed reforms.

The time has come to gradually strengthen the social dimension of regional integration through improved access to basic health care, protection for children, the elderly and people with disabilities, social assistance for people who are poor or unemployed and other features that vary according to country needs and stages of development. Building such a “social floor” is crucial to ensure people's security and a sense of community. Equally important is that an effective social floor can reduce the costs of adjustment to changing economic conditions (for both workers and businesses), thereby improving market efficiency in an integrated ASEAN Economic Community.

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3 PricewaterhouseCoopers: World Economic Forum on East Asia, briefing material, Singapore, 24-25 June, 2007, p. 11.

In the long term, ASEAN's future is dependent upon its ability to protect the environment and cope with the consequences of climate change. Rapid economic growth and urbanization have led to severe environmental degradation and growing risk to human health in many countries where high energy intensity and runaway industrial pollution are threatening economic sustainability. Regional leadership is critical to address these problems; but the business sector also has a fundamental role to play in "greening the workplace" through low-costs ways of improving the energy efficiency of its facilities and equipment and through new technologies and newly redesigned jobs. Investing in people and skills development is going to be essential to increase energy and resource efficiency, to reduce emissions and to introduce new technologies successfully.

The success in addressing these challenges will much depend on whether the tripartite partners – governments, employers and workers – can engage in an effective partnership that will allow them to collectively pursue their goals. Importantly, all three share the common fundamental goal of achieving sustainable growth and social progress. To realise this goal, businesses will require productivity growth and upward mobility in the value chain to ensure long-term competitiveness; and workers will require access to decent work, meaning opportunities through productive employment creation, empowerment through the recognition of their fundamental rights, security through social protection, and an effective voice through democratic institutions and social dialogue.

Good mechanisms for dialogue, combined with mutual understanding between government, businesses and workers, can foster cooperation and innovation, allowing them to find negotiated solutions in dynamic labour markets. This could, in turn, support not only an environment conducive to investment and growth; it could also become a unique source of the region's competitiveness in the years to come.

The remainder of this chapter highlights some of the main employment and social trends that are discussed in greater detail in the subsequent chapters of the report.

## 1.1 Recent labour market trends

The region's strong economic performance in 2007 had a positive impact on its labour markets. Employment in ASEAN countries increased from 260.6 million in 2006 to 268.5 million in 2007, an increase of 3 per cent, or 7.9 million additional jobs. Employment growth was particularly strong in Singapore (6.6 per cent) and Indonesia (4.7 per cent). The Philippines also experienced buoyant employment growth of 2.4 per cent.

Some 72 per cent of the region's job growth in 2007 took place in industry and services. This played a role in lifting the regional productivity level by 3 per cent because labour productivity is higher in both industry and services than in agriculture. And yet, agriculture still accounts for 44.5 per cent of ASEAN's total employment, albeit with considerable variation across countries, ranging from less than 1 per cent in Singapore to over 80 per cent in the Lao's People Democratic Republic.

*Healthy employment growth*

*Employment continues to shift towards the industrial and services sectors*

*Wage employment expands, but vulnerable employment remains massive*

About 64 per cent of the region's employment growth in 2007 was in the form of increased wage employment, which indicates a possible expansion in formal employment opportunities. Despite this positive trend, the number of vulnerable workers, measured by own-account workers and unpaid family members – many of whom work in the informal economy – remained massive. An estimated 161 million workers, or about 60 per cent of the ASEAN workforce in 2007, were characterized as vulnerable. Women constitute a disproportionately large share of these vulnerable workers, reflecting their limited employment opportunities.

The regional average also masked significant variation by country. The share of own-account workers and contributing family workers in total employment, for example, ranged from over 70 per cent in Cambodia, the Lao People's Democratic Republic and Viet Nam to around 50 per cent in Thailand and below 10 per cent in Singapore.

*Unemployment declines*

Unemployment shrank by about 550,000, or 3.2 per cent, easing to 16.5 million in 2007. The region's unemployment rate declined from 6.1 per cent in 2006 to 5.8 per cent in 2007. Much of the improvement comes from positive developments in Indonesia and the Philippines – two populous countries with high unemployment rates in recent years. Unemployment in Indonesia dropped sharply from 10.3 per cent in 2006 to 9.1 per cent in 2007. In the Philippines it declined from 7.3 per cent to 6.3 per cent.

*Young workers benefit, but too many remain unemployed*

Young women and men aged 15–24 gained the most from the strong demand for labour. In 2007, the number of unemployed youth dropped by 5.4 per cent, or approximately 530,000, accounting for 97 per cent of the decline in the total unemployment figure in ASEAN. Consequently, the region's very high youth unemployment rate eased from 17.2 per cent in 2006 to 16 per cent in 2007. However, youth unemployment remains high in Malaysia, the Philippines and especially in Indonesia. Young women are more affected than young men, and educated youth make up a disproportionate share of the unemployed, which means an immense loss of productive potential for national economies and the ASEAN region.

*Labour productivity is critical*

Given the region's strong export orientation, productivity growth is critical to ASEAN. Productivity growth is one of the main determinants of a country's overall competitiveness. It is also essential for creating quality jobs and reducing poverty: Increased labour productivity can lead to higher wages, better working conditions and more investment in human resources.

In recent years, China has overtaken ASEAN in terms of output per worker, while the gap between India and ASEAN has markedly narrowed. This trend highlights a serious competitive challenge confronting the ASEAN region today – particularly for more developed economies: Not only are average labour costs comparatively low in China and India, rapid increases in labour productivity in the two countries are further boosting their international competitiveness.

Significant disparities between ASEAN countries are evident: Singapore's productivity level was nearly 12 times that of Cambodia, 9 times that of Myanmar and 8.5 times that of Viet Nam.

Small and medium-sized enterprises (SMEs) provide jobs for the majority of workers in the region (ranging from more than 50 per cent in Singapore to more than 90 per cent in Indonesia). But their productivity, competitiveness and export performance considerably lag behind those of large companies. Creating better conditions to help SMEs move from survival to sustainability is a prudent route for expanding domestic markets and improving the productivity and competitiveness of the overall economy. It is also a path for moving from the informal to the formal economy.

While young people have benefited from improved access to basic education, universal primary education has not been achieved due to poor school quality and child labour concerns in some Member Countries. In addition, educational attainment at the secondary level is still limited in parts of the region, and few students are pursuing pathways into technical and vocational education and training. Access is an issue, as is quality. Many education and training institutions are constrained by ineffective and irrelevant curricula, a shortage of qualified instructors and inadequate links with the business community. At the tertiary level, the education system has not produced enough graduates with the technical and soft skills needed to fill the professional and managerial positions that are in high demand in competitive economies.

Growing skills shortages at the high end of an economy raise concerns about the quality and relevance of tertiary education in the region. Many countries have been suffering from a shortage of managers and technical and professional staff, indicating a mismatch between the supply of workers with appropriate education and skills and the demand for those types of workers. Importantly, skills shortages are no longer limited to multinational enterprises. They also affect the growing number of domestic companies that are trying to move up the value chain and expand into international markets.

If these skills shortages are not addressed, they will constrain enterprise competitiveness and ASEAN's future development. Enterprises can provide a critical opportunity for raising skill levels through the provision of in-house training and on-the-job learning.

An estimated 1.5 million ASEAN workers leave their home countries each year to work abroad, including within the ASEAN region. Intra-ASEAN migration has helped address the labour shortage in the region's receiving countries, contributing to both increased productivity and economic growth. For sending countries, remittances from their migrant workers can spur investment in economic and local development. But the large and growing number of irregular migrants raises concerns related to managing migration and ensuring migrants' protection.

The ASEAN Declaration on the Protection and the Promotion of the Rights of Migrant Workers (2007) means that Member Countries recognize their needs and responsibilities in this area and that, if properly managed, the mobility of the region's human resources can become a unique comparative advantage in the global marketplace.

*The potential of small and medium-sized enterprises remains largely untapped*

*Access to basic education expands, but pathways to secondary and vocational education remain limited*

*Skills shortages at the high end are a top business concern*

*Intra-regional migration supports growth and development*

*Emerging challenges: surging inflation and slowing economic growth*

The surge in energy and food prices over the past year has pushed inflation higher and has raised concerns about its potential impact on the poor as well as on business competitiveness. The landless poor and the growing number of urban poor have been hit the hardest. Mitigating the adverse effect of high commodity prices on the poor is a priority for governments in the short term. With rapid rises in food prices and growing apprehension about food security, a renewed focus on agriculture and rural development is needed, especially in ASEAN countries with a high share of workers still engaged in agriculture.

Weakening external and domestic demand in the ASEAN region, according to projections, will moderately reduce economic growth in 2008 and 2009. The slowdown is likely to be more pronounced in countries with higher trade exposure and stronger financial links with the United States and the Euro zone. The ASEAN regional unemployment rate could rise from 5.8 per cent in 2007 to as high as 6.1 per cent in 2008 and 6.2 per cent in 2009, though the most developed countries are likely to experience the largest relative increase in unemployment rates.

## 1.2 Looking ahead to 2015

The prospects for successful economic integration, improved competitiveness and more productive employment in the coming years are significantly influenced by demographic factors, labour force trends, rapid technological change and global competition.

*An expanding labour force, but some countries ageing fast*

ASEAN's labour force is massive and still growing. In 2007, it stood at about 285 million and is expected to increase by around 40 million, or 14.1 per cent, between 2007 and 2015. The fastest labour force growth is projected to occur in countries with the greatest numbers of people who are poor and the largest informal economies, among them Cambodia, the Lao People's Democratic Republic and the Philippines. And yet, the rate of labour force growth is slowing in other ASEAN countries (Singapore and Thailand) primarily due to demographic trends and ageing populations. In the coming years, these countries will increasingly need to address labour shortages and the related economic and social consequences, including the growing importance of skills development and adequate social security coverage.

*Shift towards services sector*

Globalization, technological change and accelerated ASEAN integration, among other factors, will continue to spur further structural transformation. By 2015, the services sector is expected to be the largest sector in terms of employment in the region, accounting for over 41 per cent of total employment – up from 36.5 per cent in 2007. Underlying this trend, employment in ASEAN's services sector will increase by a projected 28 million between 2007 and 2015, with employment in industry growing by 17.6 million and employment in agriculture declining by 7.1 million.<sup>4</sup>

*Vulnerable employment remains massive*

The share of those vulnerable in total employment will remain enormous. In 2015, more than 55 per cent of ASEAN's workers are likely to be characterized as vulnerable, although this represents a decrease from 60.1 per cent in 2007. Importantly, vulnerability is not only restricted to own-account workers and

4 ILO: Global Employment Trends Model, 2008.



contributing family members but also wage workers who are in casual, part-time or temporary employment and other forms of atypical employment.

By 2015, most of ASEAN's population will reside in urban areas. Aside from natural increases, rural-to-urban migration is expected to continue or even escalate. Between 2007 and 2015, the region's urban population will grow by an estimated 64.1 million, or nearly 25 per cent. The rural population will shrink by 9 million, or 2.9 per cent. In terms of the urban population growth rate, the most dramatic shifts will take place in Cambodia, Indonesia, the Lao People's Democratic Republic and Viet Nam. Countries experiencing such rapid urban population growth will have to cope with the challenge of creating decent and environmentally friendly jobs in their bulging and increasingly polluted cities.

Changing demographics and slowing labour force growth have significant implications for future economic growth and development prospects. Most significantly, for countries likely to experience a considerable slowdown in labour force growth in the years ahead, accelerating labour productivity growth will be essential to sustaining healthy economic growth rates and promoting future economic development and increased living standards.

If labour productivity growth does not accelerate in the ASEAN region as a whole, its economic growth rate is projected to slow. To maintain the same historical gross domestic product (GDP) growth rate of 5.6 per cent during the 2000–2006 period, the region will need to accelerate productivity growth from 3.3 per cent to around 4.1 per cent over the 2007–2015 period.

While the shift of workers from agriculture to industry and services in some low- and medium-income ASEAN countries will continue to support productivity growth, the pressure to innovate and improve efficiency within sectors will become increasingly important.

Nowhere is the need for increased productivity more acute than in the region's agricultural sector. If recent productivity trends persist, the region will be on track to producing US\$27 billion (33 per cent) in additional agricultural output by 2015. However, if average annual growth in agricultural labour productivity were to accelerate by just 1 per cent over the 2007–2015 period, it would generate an additional \$10 billion per year in value added by 2015. Boosting agricultural productivity could put downward pressure on food prices while at the same time improving rural incomes, thereby raising living standards and helping to reduce poverty in the region.

*Need for urban  
employment creation*

*Productivity growth  
is essential*

*Agricultural  
productivity could  
reduce poverty*

### 1.3 Report structure and data sources

This report examines the significant economic, labour market and social trends and related policy issues in ASEAN, with statistical sources (explained in box 1.1). Although it is not possible to discuss all of the economic and social challenges looming over ASEAN's labour markets, the report highlights several challenges and emerging trends.

Chapter 2 provides a labour market update with a focus on the most recent trends and emerging policy challenges, including the social impact of soaring commodity prices. It also presents an employment outlook for 2008 and 2009.

Chapter 3 highlights the important role that labour productivity plays in shaping the competitiveness of firms, national economies and the ASEAN region, followed by a discussion of the primary challenges for enhancing productivity and maintaining competitiveness in the region in the years ahead.

Chapter 4 investigates the productivity effect of the employment shift from agriculture to industry and services. It also examines ways to promote productivity in small firms, which are a major source of employment in the region across all economic sectors and in both less-developed and more-developed ASEAN Member Countries.

Chapter 5 looks at the link between education and training and enterprise competitiveness in ASEAN from two complementary perspectives: labour supply and labour demand. The latter concentrates on the growing problem of skills shortages, their impact on productivity at the workplace and the ways companies are responding to these problems.

Chapter 6 examines the contribution of labour migration to productivity and growth, focusing mainly on Malaysia, Singapore and Thailand, which are the three major labour-receiving countries in the ASEAN region. The impact of migration on sending countries is briefly highlighted, as is the critical challenge of managing intra-regional labour migration more effectively and fairly.

Chapter 7 presents demographic and economic trends and labour market scenarios for 2015, by which date ASEAN plans to have created a common market.

Finally, Chapter 8 offers some recommendations and policy suggestions. The report also includes a comprehensive Statistical Annex that provides recent and historical economic, demographic and labour market indicators.



### Box 1.1 Main data sources

In providing a broad picture of the ongoing labour market and economic trends, this report draws from a number of international and national data sources. Wherever possible, internationally comparable data have been used. But cases may arise in which the data are not perfectly comparable across countries. The tables provided in the Statistical Annex include detailed references on data sources. The data presented in the chapters are drawn in large part from this annex.

The report draws from a number of international data repositories. Unless otherwise cited, GDP growth data hail from the International Monetary Fund's (IMF) **World Economic Outlook April 2008 Database**. Population data, including total, urban and rural population figures, are taken from the United Nation's **World Population Prospects 2006 Revision Database**. Labour force figures are from the ILO's **Economically Active Population Estimates and Projections, Sixth Edition Database**. Labour productivity figures are taken from the Groningen Growth and Development Centre's **Total Economy January 2008 Database**. Country-level labour market data are from the ILO's **Key Indicators of the Labour Market, Fifth Edition Database** and the **ILO LABORSTA Database of Labour Statistics**.

Regional aggregates of employment, unemployment, employment by sector and status are derived from the ILO's **Global Employment Trends Model, 2008**. The report also uses data from ASEAN's **Trade Statistics and Foreign Investments Databases**, the World Bank's **World Development Indicators Database**, and the Economist Intelligence Unit's **Country Reports**. The cut-off date for data used in the report was September 2008.

The report also draws from four enterprise-level **Workplace Practices Surveys**, which were conducted by national employers' organizations and leading research institutes and survey organizations with technical and financial support of the ILO. Further details on these surveys are provided in Annex I.



# Labour market update

## 2007–2008

The ILO's *Labour and Social Trends in ASEAN 2007* report presents a detailed overview of the major employment developments between 2000 and 2006 and discusses some key policy issues related to those developments.<sup>1</sup> This chapter takes a look at the most recent trends and emerging policy challenges since that report was published, including the social impact of soaring commodity prices. The chapter also provides an employment outlook, with discussion on the estimated effect of the ongoing economic slowdown in ASEAN on its labour markets for 2008–2009. It concludes by highlighting some key policy priorities.

### 2.1 Recent labour market performance

In 2007, ASEAN Member Countries achieved robust growth of 6.4 per cent, up from 6 per cent in 2006 (table 2.1). The pace was the highest in over a decade and occurred despite increasing concerns about the potential impact of the economic slowdown in the United States, rising volatility in global financial markets and soaring commodity prices, especially fuel and food. The main driving force for growth was domestic demand, although exports to Asian and European markets provided additional stimulus. Consumer spending accelerated in most of the region's economies, and growth in business investment was particularly strong in Indonesia (12.1 per cent) and Viet Nam (20.8 per cent).<sup>2</sup>

*Robust economic growth in 2007*

GDP growth was fastest in Cambodia (9.6 per cent) and Viet Nam (8.5 per cent), driven by domestic consumption and thriving private investment. Singapore recorded remarkable growth of 7.7 per cent, continuing its strong performance for a developed, high-income country where the average annual growth rate has exceeded 8 per cent since 2003. Growth was also rapid in the Lao People's Democratic Republic (7.5 per cent).

The Philippines' economy expanded by 7.3 per cent – its highest growth rate in three decades – largely on greater public investment and private consumption. The main drivers for Indonesia's economic growth of 6.3 per cent included robust employment growth, external demand, private investment and consumer spending.

1 ILO: *Labour and Social Trends in ASEAN: Integration, Challenges and Opportunities* (Bangkok, 2007), pp. 11–20.

2 World Bank: *Global Development Finance* (Washington, DC, July 2008), pp. 121–125.

Malaysia's GDP also grew by 6.3 per cent in 2007, up from 5.9 per cent in 2006; the increase was supported by domestic demand that compensated for slower export growth.

GDP in Thailand expanded by 4.8 per cent, down from 5.1 per cent in 2006. The only country in the region with weak performance was Brunei Darussalam: Its economy barely grew, rising at a rate of 0.4 per cent in 2007, down from the 5.1 per cent in 2006.

*Expanding labour supply in most countries, but some ageing fast*

Economic growth is critical for job creation. But demographic dynamics and labour supply, among other factors, influence employment growth. Driven by rapid working-age population growth and an increase in labour force participation rates from 72.1 per cent in 2006 to 72.7 per cent in 2007, the ASEAN regional labour force increased by 7.3 million, from 277.7 million in 2006 to 285 million in 2007, or 2.6 per cent (Statistical Annex, tables I.1.1 and I.2.1). This well exceeds the average annual labour force growth rate of 1.9 per cent observed between 2000 and 2006, indicating that the robust economic growth in 2007 pulled some previously discouraged workers into labour markets. Countries experiencing the most rapid labour force growth included the Philippines, Cambodia, Indonesia and the Lao People's Democratic Republic. In Thailand, labour force growth was less than 1 per cent, reflecting an ageing population.

*Healthy employment growth*

The region's strong economic performance in 2007 had a positive impact on its labour markets. Employment in ASEAN Member Countries increased from 260.6 million in 2006 to 268.5 million in 2007 – an increase of 3 per cent, or 7.9 million additional jobs. Employment growth was particularly strong in Indonesia (4.7 per cent), Malaysia (2.6 per cent), Singapore (2.5 per cent among the resident population, with a much higher rate of 6.6 per cent when non-residents are included) and the Philippines (2.4 per cent).

**Table 2.1: GDP growth (2006-2008) and employment growth (2006-2007) in selected ASEAN Member Countries**

	GDP growth rate (%)			Employment growth rate (%)
	2006	2007	2008p	2006-2007
ASEAN	6.0	6.4	5.6	3.0
Indonesia	5.5	6.3	6.1	4.7
Malaysia	5.9	6.3	5.0	2.6
Philippines	5.5	7.3	5.8	2.4
Singapore	8.2	7.7	4.0	6.6
Thailand	5.1	4.8	5.3	2.1

*Note:* Indonesia national employment data are based on August reference period, which differs from reference period utilized in ASEAN regional aggregates. "p" denotes projection.

*Source:* GDP growth: IMF, World Economic Outlook Database, April 2008. Employment growth: ILO, Global Employment Trends Model, April 2008 and national statistical office data (Indonesia, Malaysia, Philippines, Singapore and Thailand).

While strong employment growth in the ASEAN Member Countries is a welcome development, the labour market performance of the region cannot be assessed solely on the basis of employment creation. The quality of jobs, such as working conditions, wages and benefits, is also important. Job quality, in turn, significantly depends on the growth of labour productivity: Part of the productivity gains can be distributed to workers through better remuneration, improved working conditions or investment in human resources, which could contribute to further improvements in productivity and competitiveness.

*Job quality critical  
for productivity and  
competitiveness*

However this “virtuous circle” of higher productivity through improved working conditions and higher wages is not automatic. It largely depends on the quality of industrial relations. Where effective mechanisms for social dialogue exist, based on the fundamental principles and rights at work, and where employers and workers seek cooperation and mutual understanding, they can find negotiated solutions to a broad range of issues while fostering creativity and innovations at the workplace. Such an industrial relation system – built with the goal of promoting decent work – is not only about ensuring a fair distribution of productivity gains – it could also become a source of competitive advantage for the ASEAN region. This issue is discussed in greater detail in subsequent chapters.

What is important to emphasize here is that the shifting composition of job growth indicates a move towards more productive employment in the region, reflected in increased productivity and improved competitiveness. In 2007, employment in industry and services expanded by 5.1 and 3.3 per cent respectively, whereas job growth in agriculture was only 1.9 per cent (table 2.2). As a result, 72 per cent of the region’s employment growth took place in industry and services. This played a role in lifting the regional productivity level by 3 per cent (labour productivity is higher in both industry and services than in agriculture). Yet, agriculture still accounts for 44.5 per cent of ASEAN’s total employment, although there is considerable variation across countries, ranging from less than 1 per cent in Singapore to over 80 per cent in Lao People’s Democratic Republic (see Statistical Annex, table II.5.1).

*Shift towards  
industry and services*

**Table 2.2: Employment growth by sector (2006–2007) and employment by sector (2007) in ASEAN**

	Agriculture	Industry	Services
Employment growth ('000s)	2 235	2 484	3 163
Employment growth (%)	1.9	5.1	3.3
Share of total employment (%)	44.5	19.0	36.5

Source: ILO, Global Employment Trends Model, April 2008.

*Wage employment  
expands,  
but vulnerable  
employment remains  
massive*

The number of wage earners increased by an impressive 5.2 per cent, whereas vulnerable employment – measured by the number of own-account and unpaid family workers – grew by only 1.9 per cent.<sup>3</sup> As a result, about 64 per cent of the region's employment growth in 2007 was in the form of increased wage employment, indicating a possible expansion in formal employment opportunities for the region's workforce.<sup>4</sup> This also contributed to productivity growth due to formal-sector jobs tending to be more productive than employment in the informal economy.<sup>5</sup>

Despite this positive trend, the number of vulnerable workers remained massive, accounting for an estimated 161 million workers, or about 60 per cent of the ASEAN workforce in 2007. Vulnerable employment in ASEAN has a female face, with a larger share of women (65 per cent) in vulnerable employment than men (56 per cent), indicating that women tend to have more limited employment opportunities. The regional average, once again, masks significant variation by country. The share of own-account workers and contributing family workers in total employment, for example, ranged from over 70 per cent in Cambodia, the Lao People's Democratic Republic and Viet Nam to around 50 per cent in Thailand and below 10 per cent in Singapore (see Statistical Annex, table II.6.1).

*Dipping  
unemployment rates*

Declining unemployment figures (table 2.3) also reflect improvement in labour market conditions. According to ILO estimates, unemployment in the region shrank by about 550,000, or 3.2 per cent, easing to 16.5 million in 2007. The region's unemployment rate declined from 6.1 per cent in 2006 to 5.8 per cent in 2007 – though this remained well above the corresponding jobless rates in many other parts of Asia and the Pacific. Both female and male rates declined: from 6.8 per cent in 2006 to 6.5 per cent in 2007 for females and from 5.7 per cent to 5.3 per cent for males over the same period.

3 ILO: Global Employment Trends Model, April 2008. The newly defined indicator of vulnerable employment, which is MDG Indicator 1.7, calculates the sum of own-account workers and contributing family workers as a share of total employment. Contributing family workers and own-account workers are less likely to have formal work arrangements, which allows for the usage of the indicator on vulnerable employment to confirm or refute claims of an increasing informalization of labour markets. If the proportion of vulnerable workers is sizeable, it may be an indication of widespread poverty. The poverty connection arises because workers in the vulnerable statuses lack the social protection and safety nets to guard against times of low economic demand and often are incapable of generating sufficient savings for themselves and their families to offset these times. These two groups carry a higher economic risk. Some limitations of the indicator are: 1) that there might be people that carry a high economic risk despite the fact that they have a wage and salary job 2) that unemployed people are not covered even though they are vulnerable 3) that there could be people in the two vulnerable status groups who do not carry a high economic risk. Despite these limitations, vulnerable employment shares are indicative for informal economy employment, especially for the less developed economies and regions. However, vulnerable employment numbers should be interpreted in combination with other labour market indicators such as unemployment and working poverty. For more details see ILO, Key Indicators of the Labour Market, 5th Edition, Geneva, 2007.

4 While the remarkable increase in the number of wage earners, coupled with rapid job growth in industry, is a positive development, one has to be cautious about the extent to which this trend reflects the expansion of the formal economy. Wage employment does not necessarily mean a job with a secure contract, workers' benefits and social protection.

5 The informal economy typically offers low-quality, unproductive and poorly remunerated employment opportunities. Moreover, these jobs often are not recognized or protected by law, offer little or no social protection and are typically characterized by the absence of rights at work and a lack of representation and voice in the workplace. Figure 4.2 in Chapter 4 presents evidence on the correlation between the share of vulnerable employment – an indicator closely related to informal employment – and the level of labour productivity in the ASEAN region.

**Table 2.3: Unemployment and youth unemployment in selected ASEAN Member Countries, 2006 and 2007**

	Unemployment rate (%)		Youth unemployment rate (%)		Ratio of youth to adult unemployment rates
	2006	2007	2006	2007	2007
ASEAN	6.1	5.8	17.2	16.0	5.0
Indonesia	10.3	9.1	30.6	25.1	5.1
Malaysia	3.3	3.2	10.9	10.9	7.8
Philippines	7.3	6.3	16.9	14.9	3.8
Thailand	1.2	1.2	4.8	4.5	6.9

*Note:* Youth defined as those aged 15-24; adults defined as those aged 25+.

*Source:* ILO, Global Employment Trends Model, April 2008 and national statistical office data (Indonesia, Malaysia, Philippines, and Thailand).

Much of the improvement comes from positive developments in Indonesia and the Philippines – two populous countries with high unemployment rates in recent years. These two countries account for about three-quarters of the region's total unemployed. Unemployment in Indonesia dropped sharply from 10.3 per cent in 2006 to 9.1 per cent in 2007. Meanwhile, the unemployment rate in the Philippines decreased from 7.3 per cent to 6.3 per cent. Unemployment rates for 2007 were much lower in other ASEAN Member Countries, such as Malaysia (3.2 per cent), Singapore (3 per cent) and Thailand (1.2 per cent), each showing only moderate changes over the previous year. The positive trend observed in Indonesia last year continued into early 2008 due to the rate of unemployment declining to 8.5 per cent by February.

Young women and men aged 15–24 gained the most from the strong demand for labour. In 2007, the number of unemployed youth dropped by 5.4 per cent, or approximately 530,000, accounting for 97 per cent of the decline in the total unemployment figure. Consequently, the region's very high youth unemployment rate eased from 17.2 per cent in 2006 to 16 per cent in 2007. Yet, unemployed youth still accounted for about 57 per cent of the region's total jobless population. And with adult unemployment rates of 3.2 per cent, the region's ratio of youth to adult unemployment rates of 5.0 is alarming. Despite some progress, youth unemployment remained high in Malaysia, the Philippines and especially in Indonesia. Moreover, young women were more negatively affected than young men,<sup>6</sup> and educated youth make up a disproportionate share of the unemployed, which means an immense loss of productive potential for national economies and the ASEAN region.

Given the high rates of youth unemployment, addressing their root causes continues to be a main policy preoccupation in the region. However, policy-makers should bear in mind that while educated youth – those with secondary and tertiary education – often account for more than 50 per cent of the total unemployed

*Benefit to young workers, but too many remain unemployed*

6 In Indonesia, for example, the female youth unemployment rate stood at 27.3 per cent, compared with the male youth unemployment rate at 23.7 per cent in 2007. See ILO: *Labour and Social Trends in Indonesia 2008: Progress and Pathways to Job-rich Development* (Jakarta, 2008), p. 9.



youth and that they typically come from families with higher levels of income, there are millions of underemployed young women and men and young working poor who cannot afford to stay in education or remain jobless once they have entered the labour market. Policies that improve the employability of both groups could go a long way towards promoting productive employment, enterprise competitiveness and economic growth in the region.

## 2.2 Soaring inflation and its labour market impact

The surge in consumer prices over the past year has pushed inflation higher and has raised concerns about the potentially adverse impact on the poor as well as on business competitiveness and economic growth. Recognizing the challenges imposed by rising energy and food prices on household welfare and economic development, ASEAN Ministers called for regional and international efforts to ensure the efficient functioning of market forces and, in regards to the issue of food prices, for “all countries to do away with price-distorting export subsidies and other protectionist policies and to provide market access to competitive food exports.”<sup>7</sup>

Inflationary pressures in the ASEAN region started to build in the second half of 2007 due to rising energy and food prices. Price increases in the spring of 2008 became more broad-based, leading to record high rates of inflation in many countries. In August 2008, year-on-year headline inflation in Viet Nam hit 28.3 per cent, the highest in ASEAN (table 2.4). The year-on-year consumer price inflation in Indonesia and the Philippines in August soared to 13.3 per cent and 12.5 per cent, respectively. Increasing rates of inflation also were reported for several other ASEAN Member Countries, including Malaysia where headline prices rose 8.5 per cent compared with the previous July. The August year-on-year food consumer price inflation rose even faster everywhere: nearly 15 per cent in Thailand, close to 20 per cent in Indonesia and the Philippines and over 40 per cent in Viet Nam.

Higher global prices for fuel and food have significantly contributed to rising inflation in the ASEAN region.<sup>8</sup> In addition to the inflation stemming from the soaring global commodity prices, some country-specific factors also played a role, especially where prices grew at double-digit rates. In Viet Nam, for example, adverse weather conditions, large capital inflows and rapid money and credit expansion further contributed to the rising inflation.

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7 Joint Communique of the 41st ASEAN Ministerial Meeting, “One ASEAN at the Heart of Dynamic Asia”, Singapore 21, July 2008, available at: <http://www.aseansec.org/21771.htm>.

8 The price of a barrel of crude oil rose from around US\$55 in January 2007 to \$86 in December 2007 and climbed further to \$147 in July 2008. (Source: US Department of Energy, Energy Information Administration, <http://www.eia.doe.gov>) The price of rice – a staple food for half of the world’s population – jumped from around \$330 per ton in November 2007 to nearly \$1,000 per ton in May 2008, fuelling inflation and escalating fears of an unprecedented food crisis (Source: Food and Agriculture Organization, World Food Situation, see: <http://www.fao.org/worldfoodsituation/foodpriceindexes/en>).



**Table 2.4: Consumer price inflation, selected ASEAN Member Countries, 2006-2008 (%)**

	2006	2007	Year-on-year (August 2008)
<b>Headline consumer price inflation</b>			
Indonesia	6.6	6.6	13.3
Malaysia	3.6	2.0	8.5
Philippines	6.2	2.8	12.5
Thailand	4.7	2.2	6.4
Viet Nam	7.5	8.3	28.3
<b>Food consumer price inflation</b>			
Indonesia	12.9	11.3	19.9
Malaysia	3.4	3.0	11.5
Philippines	5.5	3.3	17.2
Thailand	4.6	4.1	14.3
Viet Nam	8.7	11.2	44.2

Notes: Year-on-year inflation for August 2008, except Malaysia (year-on-year, July 2008); food consumer price inflation includes food, beverage and tobacco in the Philippines and food and beverage in Thailand.

Source: National statistical offices of Indonesia, Malaysia, Philippines and Viet Nam; Thailand Ministry of Commerce; IMF, World Economic Outlook Database, April 2008; and World Bank: *East Asia & Pacific Update: East Asia: Testing times ahead* (Washington, DC, April 2008), p. 25.

The sharp rise in food prices has had a large impact on the living standards of the population, especially in low- and middle-income economies where food expenditure represents a much larger share of the consumption basket of the average population than in their industrial counterparts. For example, while the share of food expenditure in the consumption of the average household in the United States is around 15 per cent, it ranges between 31 and 50 per cent in developing ASEAN Member Countries: 31 per cent in Malaysia, 36 per cent in Thailand, 40 per cent in Indonesia, 43 per cent in Viet Nam and 50 per cent in the Philippines.<sup>9</sup> The share of food expenditure in total consumption is even higher among the poorer households: 63 per cent in Indonesia and 64 per cent in the Philippines.<sup>10</sup>

It is important to recognize that even among the poor, different groups have been affected differently. Rising food prices may lead to income gains for net food producers who live in rural areas. On the other hand, many poor small-landholders who are net food buyers are under mounting pressures. However, it is the landless rural poor and the growing urban poor in expanding cities and industrial centres who appear to be the hardest hit.

*The poor are hit the hardest*

9 World Bank: *East Asia & Pacific Update: East Asia: Testing times ahead* (Washington, DC, April 2008), p. 20.

10 These data refer to the 20 per cent of the population with the lowest per capita expenditures in the two countries. See Asian Development Bank: *Food Prices and Inflation in Developing Asia: Is Poverty Reduction Coming to an End?* ADB Economic and Research Department (Manila, April 2008), p. 13.

*Government responses to mitigate the impact of rising prices*

To address the adverse impact of rising food prices on the poor, governments have implemented various policies (see box 2.1). They include taxes, subsidies, administrative measures and safety-net programmes, such as cash transfers. According to the Asian Development Bank (ADB), one of the most popular measures introduced by governments in ASEAN Member Countries has been price controls on food and oil.<sup>11</sup> The problem with these short-run interventions aimed at lowering domestic food prices is that they can be more costly for an economy in the long run because they displace the balance between demand and supply while disrupting the food supply chain.

**Box 2.1**  
**Examples of policy responses to rising food prices**

Countries have responded to the food crisis in different ways:

- ◆ Introducing price controls or consumer subsidies;
- ◆ Reducing import duties and other taxes;
- ◆ Placing restrictions on exports and raising export taxes;
- ◆ Using reserves and building of stockpiles;
- ◆ Providing cash transfers to the poor; and
- ◆ Supporting employment programmes.

For example, in Indonesia where the food share of the consumer price index is 40 per cent, the Government introduced several initiatives to mitigate the impact of increased international food prices, particularly rice, and fuel prices. These included increasing the monthly quotas for subsidized rice for poor households, increasing the government purchase price of rice at the producers' level, eliminating import tariffs on flour and soybeans and providing a price subsidy for small-scale producers of processed soybeans. It also introduced a programme to provide subsidized cooking oil to poor households while removing value-added tax on cooking oil and increasing export tax on palm oil. This was coupled with an increase in the supply of rice from government stocks and the piloting of a conditional cash transfer programme aiming to provide access to basic health and education services while providing a safety-net against the high costs of fuel and food to 500,000 vulnerable families.

Increases in international prices of rice set off panic in the region, particularly in the Philippines, which imports most of its subsidized rice. To respond to escalating prices in the first quarter of 2008, the Philippine Government asked the Vietnamese Government to guarantee the supply of 1.5 million tonnes of rice and then tapped into the emergency regional rice reserve. It also strongly encouraged an expansion of the scope of the ASEAN Food Security Reserve mechanism, which includes an emergency rice reserve, to take account of unusual market conditions. The Philippine Government also announced a ban on converting farmland to other uses in an effort to cut imports of rice and to become self-sufficient in the production of rice and other food crops.

*Source:* Luc Christiaensen: "Rising Food Prices in East Asia: Challenges and Policy Options", Presentation at the World Bank "Managing Vulnerability in East Asia" workshop, Bangkok, 25–26 June, 2008, available at [www.worldbank.org/eap/vulnerability](http://www.worldbank.org/eap/vulnerability); World Bank: *East Asia & Pacific Update: East Asia: Testing times ahead* (Washington, DC, April 2008), p. 20; and T. Y. Wicaksono and P. Karitka: "Indonesia's Rice Policy: No Need to Panic", *Asia Views*, May-June 2008, pp. 10–11.

11 ADB: *Asia Economic Monitor* (Manila, July 2008), p. 60.

Targeted cash transfers and employment programmes are generally regarded as the most effective way for governments to support the purchasing power of vulnerable households and ensure their access to food without undermining domestic incentives for food production. If these transfers are linked to a certain condition, such as low income, occupation or location, or to a mandated behaviour, such as sending children to school and not to work or attending health clinics, they can lead to double dividends for policy-makers. In the short term, such transfer programmes provide effective social safety nets in response to spiralling food costs; in the longer term, they can help reduce inter-generational poverty traps in developing countries and help maintain the purchasing power of the poor and vulnerable. However, there may be high administrative costs associated with a cash-transfer scheme, including the need to properly identify targeted groups and to monitor the required conditions.

Other targeted policy options for governments include feeding programmes, which can provide direct assistance to specific groups (such as women and children), and food/cash-for-work programmes, which can both provide essential commodities (such as money and food) while creating much-needed employment opportunities in local public works projects. Although the effect of these policies on poverty rates in the region remains to be seen, it seems likely that progress in poverty reduction will slow down in 2008 and 2009.

Inflation has also affected businesses: producer prices have picked up sharply, reflecting higher costs for energy and other raw materials. The increase has been particularly pronounced in ASEAN, where producer price inflation rose from less than 8 per cent in August 2007 to 20 per cent in December 2007 and continued to soar until early 2008.<sup>12</sup> As a result, producer prices in many ASEAN Member Countries have risen faster than consumer prices, with consequent downward pressure on profit margins, especially in energy-intensive sectors. One reason for this trend is that commodity price increases have had a greater impact on the low- and medium-income ASEAN Member Countries because of their large agricultural and energy-intensive manufacturing sectors than on high-income economies, which tend to have larger services sectors than manufacturing sectors.

Inflation has impacted businesses through the “wage channel”. Rising inflation undermines workers’ purchasing power, which, in turn, leads to demands for higher wages. Adjustments in minimum wages play an important role in mitigating the negative impact of rising inflation on low-income workers. However, if they spill over to industries with higher wages, this can result in a so-called “wage-price” spiral, characterised by a progressively higher rate of inflation as well as a deteriorating climate for industrial relations. Indeed, in some countries where wages rose sharply, the increase was negated by inflation just a few months later. The net result has been a rise in worker strikes and increasing concerns by employers about the ability to remain competitive in the face of higher production costs, including energy and labour costs. The most affected sectors are typically labour-intensive, export-oriented industries with small profit margins. These industries have also been badly affected by the appreciation of national currencies and the weakening demand for their export goods.

*High inflation also affects businesses*

12 International Monetary Fund: *Regional Economic Outlook: Asia and Pacific* (Washington, DC, April 2008), p. 4.

To maintain both competitiveness and living standards, it is essential that wage adjustments are settled through appropriate negotiations that take into consideration the interests of both employers and workers. Equally important is to keep in mind that this double objective cannot be achieved without improvements in labour productivity in the medium and long term.

Of course, the combined impact of high energy prices and mounting wage pressure varies across industries, and this might lead to a reallocation of resources and labour. The extent of such a reallocation is likely to depend on both the ability of industries to adjust and the future trends in commodity prices.

## 2.3 Employment outlook

The global slowdown in growth, which started in the United States in mid-2007 and then spread to the European Union and other industrialized countries in the first half of 2008, is expected to continue throughout the year, with only a gradual recovery in 2009. The weakening external demand indicates that ASEAN Member Countries are not immune to adverse developments elsewhere. In addition, there are signs that the recent, rapid increase in inflation has eroded living standards and, as a consequence, domestic demand is softening in a number of countries. The expected moderation of growth in China, from nearly 12 per cent in 2007 to around 10 per cent in 2008–2009, also will affect the region.

As a result, economic growth in ASEAN countries in 2008 and 2009 will be adversely impacted, though current forecasts suggest that the slowdown will not be great. Growth is projected to ease from 6.3 per cent in 2007 to around 5.6 per cent in 2008, and it is expected to remain below 6 per cent in 2009.<sup>13</sup> Among ASEAN Member Countries, the projected impact is larger for countries with higher trade exposure and stronger financial links with the United States and the Euro zone. This is the case in Singapore and to a lesser extent in Malaysia and Viet Nam.

This deceleration of growth in ASEAN Member Countries will have an impact on labour markets predominantly through a reduction in either employment growth or labour productivity growth, or some combination of the two. Table 2.5 shows the results of two scenarios that were constructed to gauge the potential impact of the projected deceleration in economic growth on the ASEAN labour market. In the first scenario, the deceleration fully manifests itself through changes in employment and is therefore assumed to have no impact on productivity. In the second scenario, the opposite is assumed – that the deceleration only impacts productivity and employment growth is assumed to remain stable. Taken together, these provide upper- and lower-bound estimates for the potential impact of the expected slowdown on employment and productivity in the region.

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13 IMF: *World Economic Outlook Update* (Washington, DC, July 2008).

**Table 2.5: Employment, productivity and unemployment scenarios, 2007, 2008 and 2009**

		2007	2008p	2009p
<b>Scenario 1:</b>	Employment growth ('000s)	7 881	6 307	7 038
<b>Stable productivity</b>	Productivity growth (%)	3.0	3.0	3.0
	Unemployment rate (%)	5.8	6.1	6.2
<b>Scenario 2:</b>	Employment growth ('000s)	7 881	8 178	8 488
<b>Stable employment</b>	Productivity growth (%)	3.0	2.2	2.4
	Unemployment rate (%)	5.8	5.4	5.1

*Note:* Scenario 1 assumes that country productivity growth rates remain at 2007 rates in 2008 and 2009. Scenario 2 assumes that country employment growth rates remain at 2007 rates in 2008 and 2009. Both scenarios assume country labour force growth rates remain at 2007 rates in 2008 and 2009. “p” denotes projection.

*Source:* Authors’ calculations based on IMF, World Economic Outlook Database, April 2008; Economist Intelligence Unit Country Forecasts; ADB Outlook 2008; Groningen Growth and Development Centre, Total Economy Database.

In the first scenario, the ASEAN economies generate 1.57 million fewer additional jobs in 2008 compared with 2007, leading to an increase in unemployment from 5.8 to 6.1 per cent. This is thus the maximum expected impact on employment. In scenario 2, annual productivity growth falls by 0.8 percentage points to 2.2 per cent, which represents the maximum potential impact on productivity, given current growth forecasts.

The most likely scenario is a combination of reduced employment growth and reduced labour productivity growth. In low- and middle-income countries with large informal economies, labour market adjustments typically occur through changes in wages and living standards, especially in the informal economy rather than through changes in unemployment levels. Most working poor<sup>14</sup> and those vulnerable to poverty simply cannot afford to be unemployed.

On the other hand, unemployment levels in more developed economies tend to mirror economic cycles. Therefore, it is not surprising that when looking at historical country-level employment elasticities for the previous five-year period, together with the growth forecasts, the largest projected increases in unemployment rates are in Singapore and Brunei Darussalam – the two most-developed countries in the region.

The employment outlook also should take into consideration expected trends in commodity prices, especially in energy and food. Although the global price of some major commodities had stabilized or even fallen by the end of August,<sup>15</sup> according to recent International Monetary Fund (IMF) projections, oil and food prices in the near future are likely to remain high and volatile.<sup>16</sup>

14 “Working poor” refers the number of employed persons from households whose members are estimated to be living below the purchasing power parity (PPP) poverty line of US\$1 or \$2 per person, per day.

15 Since March 2008, the FAO’s Global Food Price Index has been stable, with the price of cereals, dairy and sugar slightly down but the price of meat and some other products marginally higher. In addition, since July 2008, the price of a barrel of crude oil nosedived (from US\$147 on 11 July to around \$115 in late August), as demand from China moderated and growth in the largest economies of the European Union came to a standstill.

16 IMF: *World Economic Outlook Update* (Washington, DC, July 2006).

## 2.4 Policy priorities

Given this scenario, mitigating the adverse impact of high commodity prices on the poor should remain the first or a primary policy concern for governments in the short term. The reason is simple: increased poverty could undermine social stability and the drive for productive employment, improved competitiveness and economic growth – the very foundation for the planned ASEAN Community.

Policy-makers also need to address the broader issue of vulnerability to poverty – keeping in mind such susceptibility arises not only from soaring food prices but also from many other aspects of current labour market and economic developments. Despite a massive reduction in income poverty, vulnerability to poverty remains high in many low- and middle-income ASEAN Member Countries, reflecting the fragility of past gains.<sup>17</sup> Economic shocks, like the recent sharp rise in prices, don't always affect only the poor; they could push millions more temporarily below the poverty line. Moreover, vulnerability to shocks is exacerbated by the breakdown of traditional family-support systems due to rapid industrialization and massive migration and to flexible urban labour markets in some countries. To maintain social cohesion, governments need to design policies and programmes that mitigate the risks to vulnerability in the medium term, such as social protection systems, safety nets and other measures. For such programmes to be effective and enjoy broad-based support, tripartite dialogue and close cooperation with employers' and workers' organizations are critical.

Soaring food prices also have highlighted the importance of agricultural development and agricultural productivity – an issue taken up in Chapters 4 and 7. Finally, ASEAN's future will depend on its ability to protect the environment, cope with the consequences of climate change and move forward on a sustainable development path. With high commodity prices, the cost of rapid industrialization based on high energy intensity is mounting. But it may accelerate the shift towards cleaner and more energy-efficient production, which would have far-reaching consequences for labour markets. Shifting to sustainable production patterns will require investment in new skills and adjustment in employment – two areas that will become increasingly important in the medium- and long-term.

All these issues point to the need for the region to move towards a development path that is economically, socially and environmentally sustainable and that will become the source of competitiveness, growth and prosperity in the future.

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17 World Bank: Addressing Vulnerability in East Asia: A Regional Study, available at [www.worldbank.org/eap/vulnerability](http://www.worldbank.org/eap/vulnerability).



# Productivity and competitiveness: Recent trends and future challenges

Recent macroeconomic and labour market trends provide clear evidence that the increased productivity of ASEAN's workforce has been an essential driver of economic growth in the region: Between 2002 and 2007, growth in labour productivity accounted for approximately two-thirds of ASEAN's total economic growth. The remaining one-third was due to an increase in the number of workers in the region's labour market.<sup>1</sup> Given the current backdrop of sharp increases in inflation in many ASEAN Member Countries and heightened volatility and uncertainty in global markets, it is important to note that increased productivity was a key factor underpinning the region's recovery from the Asian financial crisis: The significant acceleration in economic growth that has taken place in the ASEAN region occurred hand-in-hand with a tremendous increase in annual labour productivity growth.

This chapter highlights the important role that labour productivity plays in shaping the competitiveness of enterprises, national economies and the ASEAN region. It examines recent productivity trends and provides an analysis of the relationship between productivity growth and employment growth in ASEAN Member Countries. The chapter concludes with a discussion of the fundamental challenges confronting the ASEAN region in terms of enhancing productivity, maintaining competitiveness in the global economy and promoting sustainable development.

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1 This does not include Brunei Darussalam and the Lao People's Democratic Republic. The figure is based on the difference between the actual economic growth rate over the period 2002–2007 and the rate that results from holding labour productivity constant at the 2002 level over that period and multiplying it by the actual increase in employment.

### 3.1 ASEAN's competitiveness: Key issues and trends

*Competitiveness a goal at the firm, national and regional levels*

What is meant by *competitiveness*? In the context of this report, competitiveness is a term that can be applied to individual enterprises, to national economies and to the ASEAN region.

At the enterprise level, a firm is competitive if it can profitably sell its goods in the marketplace while also investing in the capital and human resources needed to innovate and sustainably grow. Its competitiveness is effectively determined by the ability to attract quality workers, to equip them with the skills and capital needed for efficient production and to produce a product or provide a service that is in demand at a price that is both competitive and supportive of profitability.

At the national level, competitiveness is determined by several factors including: i) the quality of institutions and infrastructure; ii) the health status, education and skill level of the population and workforce; iii) the performance of the macroeconomy and labour market; iv) business sophistication and innovation; and v) the ability of workers and enterprises to adopt new forms of technology.<sup>2</sup> These factors do not ensure competitiveness, but together they contribute to the development of more competitive economies. National competitiveness can be assessed on the basis of these factors in conjunction with “outcome” indicators, such as the ability to attract investment and to produce sustainable increases in economic growth and living standards.

Regional competitiveness is clearly important for ASEAN, which is seeking the creation of a common market and production base that is highly competitive.<sup>3</sup> The European Commission, emphasizing the role played by labour markets in shaping competitiveness, defines regional competitiveness as “the ability of a region to generate, while being exposed to external competition, relatively high income and employment levels. In other words, for a region to be *competitive*, it is important to ensure both quality and quantity of jobs.”<sup>4</sup> Thus, regions such as ASEAN compete on the basis of their aggregate economic performance (economic growth, which is driven by employment generation and productivity growth) as well as on their ability to attract investment and skilled workers.

However, aggregate indicators for measuring regional competitiveness may mask substantial differences in competitiveness among individual economies within a region. It is therefore necessary to look at both aggregate regional trends and at national patterns in order to identify laggards and the factors inhibiting their competitiveness. In addition, as regional competitiveness requires that countries within the region are economically integrated through the flow of trade, investment,

2 The World Economic Forum classifies 12 pillars of competitiveness: institutions, infrastructure, macroeconomic stability, health and primary education, higher education and training, goods market efficiency, labour market efficiency, financial market sophistication, technological readiness, market size, business sophistication and innovation. Country rankings in the Global Competitiveness Index are based on scores in these areas. *The Global Competitiveness Report 2007–2008* (Geneva, 2007).

3 ASEAN Charter, Article 1, Paragraph 5.

4 European Commission: *Sixth periodic report on the social and economic situation and development of the regions in the community* (Brussels, 1999). [http://ec.europa.eu/regional\\_policy/sources/docgener/informat/irmo\\_en.pdf](http://ec.europa.eu/regional_policy/sources/docgener/informat/irmo_en.pdf)



capital, labour and through similar regulations, closer integration will be essential for the ASEAN Member Countries to effectively compete as a region.

Table 3.1 contains the most recent regional and country-level data on net FDI per worker, which is an outcome indicator of competitiveness (because more competitive economies tend to attract more foreign investment). As well, the table lists the rankings of the region's countries in the World Economic Forum's Global Competitiveness Index. The rankings reflect a country's relative stage of development, with countries divided into those that are i) factor driven (competition is likely to be based on low wages and a ready supply of unskilled labour); ii) efficiency driven (more efficient production processes are needed to produce higher-quality, higher-value-added goods); and iii) innovation driven (the ability of economies to compete and sustain higher wages is based upon innovation and highly sophisticated production processes).<sup>5</sup>

Singapore is rated as the most-competitive economy in ASEAN, followed by Malaysia and Thailand. Singapore gets very high marks for infrastructure and technological readiness, while Malaysia gets high marks for innovation and Thailand's infrastructure is rated highly.

All three economies also score highly on labour market efficiency, which is measured with indicators such as stringency of labour regulation (including hiring and firing costs and flexibility of wage determination), cooperation in labour-management relations, reliance on professional management, total tax rates and female participation in labour markets.<sup>6</sup> The four other ASEAN Member Countries for which data are available have considerably lower competitiveness rankings. Indonesia receives relatively high marks on efficiency and innovation-related factors, and the Philippines scores well in higher education, training and business sophistication; but both countries receive low marks for infrastructure, health and primary education. The scores for Viet Nam and Cambodia indicate that improvements in basic health, education and infrastructure should be top-priority areas.

*Sources of competitiveness differ at different stages of development*

5 Sala-i-Martin et al. in World Economic Forum, *Global Competitiveness Report 2008*.

6 It should be noted that the World Economic Forum's Global Competitiveness Index does not include variables on areas such as fundamental rights at work and decent working conditions, which could lead to a country receiving a high score despite serious decent work deficits.

**Table 3.1: Net FDI per capita flows (2005–2007) and competitiveness rankings (2006–2007 and 2007–2008), selected economies**

	FDI per worker (constant 2000 US\$)			GCR competitiveness ranking	
	2005	2006	2007 <sup>p</sup>	2006–2007	2007–2008
Singapore	5 723	9 524	9 281	5	7
Malaysia	328	474	625	26	21
Thailand	221	255	219	35	28
Indonesia	75	43	45	54	54
Viet Nam	42	46	125	77	68
Philippines	51	61	71	71	71
Cambodia	49	59	100	103	110
Brunei Darussalam	1 508	2 137	1 214	-	-
Lao PDR	9	58	95	-	-
Myanmar	8	14	8	-	-
ASEAN	137	173	187	-	-
ASEAN ex-Singapore	90	92	109	-	-
China	66	90	82	35	34
India	12	13	31	42	48

Note: 2007 FDI figures are preliminary estimates. “p” denotes projection.

Sources: FDI figures are ILO estimates based on ASEAN Secretariat, ASEAN Foreign Direct Investment Database and national employment estimates. GCR rankings derived from World Economic Forum, Global Competitiveness Report 2007–2008.

### *Positive relationship between FDI and competitiveness*

There is a clear, positive relationship between economies’ competitiveness – as measured by the World Economic Forum ranking and the net FDI per worker received. ASEAN as a whole attracted more than twice the amount of FDI per worker as China in 2007 and six times more FDI per worker than India. However, there is a large gap in FDI levels within ASEAN, with Singapore attracting more than US\$9,000 per worker while Myanmar only received \$8 per worker, Indonesia \$45, the Philippines \$71, the Lao People’s Democratic Republic \$95, Viet Nam \$125 and Thailand \$219. If the total excluded Singapore, the FDI per worker for ASEAN in 2007 was \$109.

FDI per worker increased from 2005 to 2007 in six countries in the region (Cambodia, the Lao People’s Democratic Republic, Malaysia, Philippines, Singapore and Viet Nam), remained roughly constant in two countries (Myanmar and Thailand) and declined in two countries (Brunei Darussalam and Indonesia).

## 3.2 Links between productivity and competitiveness

Broadly speaking, *productivity* is a measure of the efficiency with which inputs such as labour, capital, land, energy and less-tangible resources (managerial expertise and physical infrastructure) are used to produce goods and services. Some ways in which enterprises and national economies can increase their productivity include investing in fixed capital or better infrastructure, enhancing the education and skill levels of the workforce, advancing innovation and technology, improving workers' safety and health, and adopting better business practices.<sup>7</sup> Productivity and competitiveness are thus intricately linked concepts.

*Labour productivity* refers to the level of output per worker (or output per hour worked) and therefore serves as the key metric of the efficiency of a country's workforce.<sup>8</sup> At the enterprise level, if labour productivity increases, holding all else constant, a business becomes more profitable. This can (but not necessarily will) lead to some combination of higher wages for the enterprise's workers, lower prices for the enterprise's goods (which benefits consumers) and increased profits for the enterprise's owners. A common and sometimes justified critique argues that increased productivity also can enable enterprises to produce the same amount of output or more with fewer workers, which can lead to a reduction in employment and increased job insecurity.

Productivity growth may destroy jobs, but it is also essential for creating new ones. The crucial issue is how to prepare workers to minimize the adverse effects of the "creative destruction". This requires an emphasis on building workers' skills through training so that they are prepared to take up emerging employment opportunities.

At the national level, the benefits of labour productivity growth echo those at the enterprise level. In the long run, labour productivity is the primary determinant of economic growth and sustainable increases in living standards. For any given level of employment in an economy, higher labour productivity results in a higher rate of economic growth. In addition, an increase in the average productivity level of a country's workforce can support an increase in real wages without fuelling inflationary pressures. It also can increase living standards through higher consumption or a reduction in working hours for the same or more remuneration.

Productivity growth is therefore a significant determinant of poverty reduction. Accordingly, labour productivity growth is one of four indicators corresponding to the first Millennium Development Goal of eradicating extreme poverty and hunger. And yet, the productivity growth–poverty reduction link is

*Productivity improvements are crucial for firms and national economies*

7 ILO: "Sustaining productivity and competitiveness on a foundation of decent work", background paper for Asian Employment Forum: Growth, Employment and Decent Work, Beijing, 13-15 Aug. 2007. <http://www.ilo.org/public/english/region/asro/bangkok/asiaforum/download/theme1b.pdf>

8 A related indicator is total factor productivity (TFP) growth, which refers to increases in output that are not due to increases in capital or labour. TFP growth is a measure of efficiency gains from factors such as technological progress, more efficient transport due to improvements in infrastructure, favourable weather, among others.

not automatic. For instance, if productivity improvements accrue disproportionately to the holders of capital, this outcome is not likely to have as great an impact on domestic demand and hence on economic growth and poverty reduction. Robust labour market institutions underpinned by effective tripartite dialogue between workers, employers and governments is essential for ensuring that productivity gains are distributed in an equitable and sustainable manner, thus maximizing their social benefit. Meaningful social dialogue in this respect can also become a source of competitiveness for the ASEAN region, as a more stable and harmonious work environment can help to attract additional foreign investment.

Before further analysing ongoing trends in labour productivity in ASEAN, there are two caveats<sup>9</sup> to the concept itself. First, labour productivity can grow because of a myriad of factors, including increased capital per worker, increased human capital (either in terms of the numbers of workers with higher levels of education or in the quality of that education), increased value of goods produced, a reallocation of workers from lower- to higher-value-added industries and a decline in employment. Viewing productivity trends in isolation will not necessarily shed light on the underlying factors driving the trends. Consequently, trends in related indicators, such as employment growth and the structure of employment, capital investment, education and training, should be taken into account.

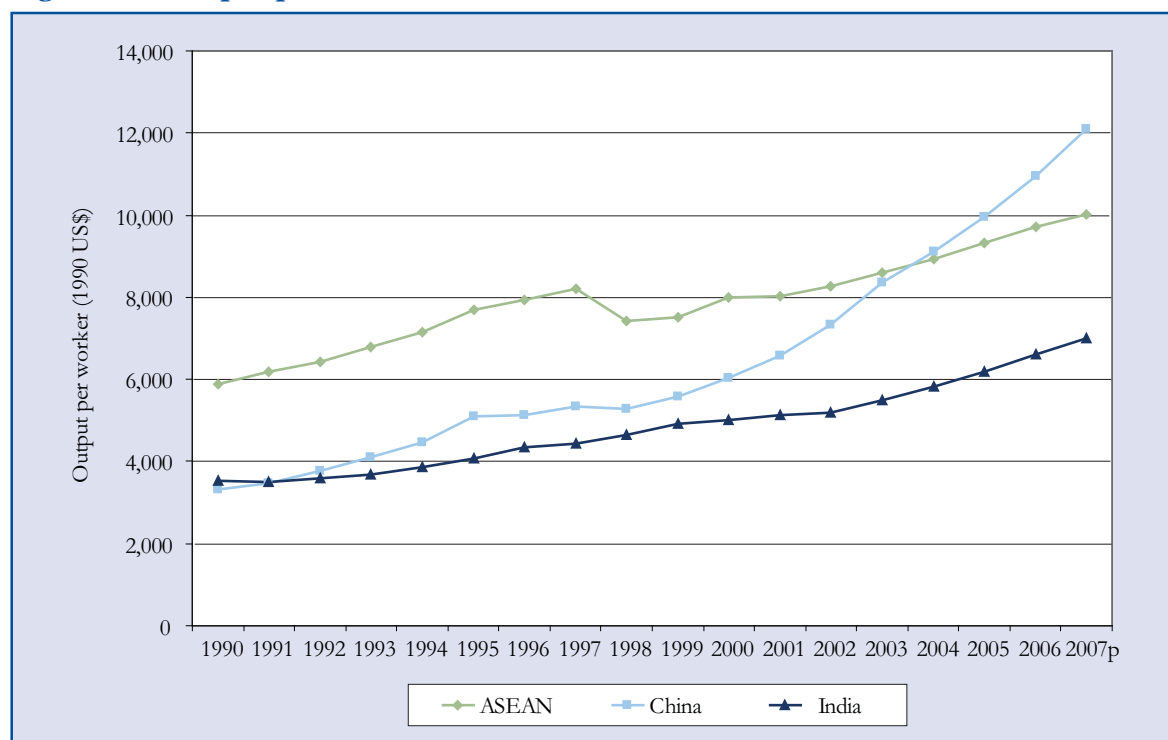
Second, although increased productivity is rightly viewed as a positive trend in the context of rapid economic growth and development in Asia, it may be accompanied by negative externalities, such as increased energy intensity of production and a corresponding increase in pollution and environmental degradation. The goal should be to achieve higher productivity but in a socially and environmentally sustainable way.

### 3.3 Labour productivity trends in ASEAN

*Increasing productivity in ASEAN, but China surges ahead*

Figure 3.1 depicts the trend in average labour productivity levels from 1990 to 2007 in the ASEAN region compared with China and India. In 1990, the level of output per worker in the ASEAN region was 77 per cent greater than in China and two-thirds greater than in India. But extremely rapid productivity growth in China has propelled the country ahead, with labour productivity there now approximately 20 per cent greater than the average for the ASEAN region. India is also catching up: average output per worker was 44 per cent lower in India in 2007 than in the ASEAN region.

<sup>9</sup> There is a third caveat also: The traditional indicator used to gauge productivity – output per worker – does not provide an indication of the intensity of work, which could be measured by the number of hours worked by an average worker in the economy. The output-per-hour-worked indicator is a better measure of labour productivity. However, insufficient data corresponding to this indicator limit its use for cross-country and regional comparisons.

**Figure 3.1: Output per worker in ASEAN, China and India, 1990–2007**

Notes: Productivity figures for 2007 calculated on the basis of official employment estimates produced by national statistical offices, and ILO calculated GDP figures based on 2006 observed values together with 2007 GDP growth rates from the IMF, World Economic Outlook April 2008 Database. “p” denotes projection.

Sources: The Conference Board and the Groningen Growth and Development Centre, Total Economy Database, January 2008, <http://www.conference-board.org/economics>.

This trend highlights a serious competitive challenge to the ASEAN region today – particularly for the more-developed economies. Not only are average labour costs comparatively lower in China and India, rapid increases in labour productivity in both countries are further boosting their international competitiveness. Because cross-country wage differentials are expected to lessen, in looking ahead, productivity will play an even greater role in determining international competitiveness (box 3.1).

### Box 3.1 The competitive challenge posed by China and India

In a McKinsey survey of executives at companies based outside China, 41 per cent of respondents indicated that they face more competition from China than from any other emerging market, while 22 per cent indicated that India is the most significant competitor. South-East Asia was selected by 11 per cent of respondents, placing it third in the survey. The figures highlight the clear competitive challenge that the rise of China and India poses to ASEAN-based companies today.

Some 77 per cent of respondents in the McKinsey survey said that the primary competitive advantage of Chinese companies is their low-cost production – although fewer respondents believed that China would maintain its cost competitiveness three years ahead. Yet, despite the likely increase in production costs in China, 61 per cent of respondents in the Asia and Pacific region indicated that competition from China would reduce revenues going forward, compared with only 30 per cent that claimed this as a challenge in the past three years.

A second McKinsey report cites three areas of focus for middle-income countries to effectively compete in the context of the rising stars of China and India: i) encourage a transition to higher-value-added activities; ii) identify and exploit comparative advantages; and iii) enact reforms that create more competition, encourage entrepreneurship and increase flexibility.

To nurture a transition to higher-value-added activities, governments should encourage positive spill-over effects from foreign investment in local industries. Often, this does not require direct government action but rather inaction: Avoiding stringent regulations, such as local content requirements or capping foreign ownership of domestic enterprises. With regard to exploiting comparative advantages, one clear edge cited in the report is the ASEAN region's huge potential common market that rivals the size of Europe. But greater integration of product and labour markets will be needed to realize the potential of the ASEAN market. In terms of pro-competition reforms, the report urges governments to improve infrastructure, such as power grids, information and communications technology and transportation networks, rather than concentrating on building special economic zones or providing preferential treatment to selected export industries.

Sources: "Competition from China: Two McKinsey surveys", *The McKinsey Quarterly* (2008); "Beyond cheap labor: Lessons for developing economies", *The McKinsey Quarterly* (2005).

*Large gaps in productivity levels among ASEAN Member Countries*

Table 3.2 provides a picture of national labour productivity trends and historical employment growth rates in ASEAN Member Countries, plus China, India and the Republic of Korea. It includes the average values for the ASEAN region. It is clear that there is great variation in levels of labour productivity across countries within the ASEAN region, with output per worker in Singapore at more than US\$46,000 while at approximately \$3,800 in Cambodia. Although the differences between Singapore and the other ASEAN Member Countries are considerable, the gap between Singapore and every other ASEAN Member Country has narrowed somewhat over the past decade. Thus, at least with regard to labour productivity, there is moderate convergence taking place in the region. As noted in the ASEAN Economic Community Blueprint, further upgrading productivity in the less-developed countries will be important for their enhanced participation in regional and global initiatives.<sup>10</sup>

Every country in ASEAN has experienced significant acceleration in labour productivity growth in the most recent five-year period, compared with the previous five-year period, which reflects the region's recovery from the Asian financial crisis of 1997–1998. Productivity growth in the region as a whole accelerated from 0.2 per cent per year between 1997 and 2002 to 3.9 per cent per year between 2002 and 2007. The ASEAN region has registered faster productivity growth in recent years than the Republic of Korea but remains well below the growth rates in China and India.

Yet, the existence of rising inequalities in several countries in the region indicates that labour market institutions and systems of social dialogue require strengthening, to ensure that the benefits of increased productivity are shared equitably and in a socially sustainable manner.<sup>11</sup>

10 ASEAN Economic Community Blueprint, Paragraph 66.

11 ILO: "Visions for Asia's Decent Work Decade: Sustainable growth and jobs to 2015", Background paper for Asian Employment Forum: Growth, Employment and Decent Work; Beijing, 13-15 August, 2007. <http://www.ilo.org/public/english/region/asro/bangkok/asiaforum/download/visions.pdf>

Looking at the data for 2007, productivity growth fell below its five-year average for the ASEAN region, which coincided with a decline of 1.2 per cent in Singapore. There was also a substantial deceleration in Myanmar and Thailand, where political instability led to a slowdown in economic growth, and in Indonesia, which enjoyed a sizeable increase in year-over-year employment growth. Productivity growth decelerated moderately in Malaysia in 2007 and was above trend in Cambodia, the Philippines and Viet Nam.

**Table 3.2: Output per worker (1997, 2002, 2006–2007), and growth in output per worker and employment (1997–2002, 2002–2007), selected economies**

	Output per worker, constant 1990 US\$				Average annual growth in output per worker (%)			Average annual employment growth (%)	
	1997	2002	2006	2007p	1997– 2002	2002– 2007p	2007p	1997– 2002	2002– 2007p
Singapore	37 226	41 085	47 037	46 494	2.0	2.5	-1.2	1.4	4.2
Malaysia	19 457	20 703	24 154	25 045	1.2	3.9	3.7	2.2	2.0
Thailand	12 180	12 420	14 626	14 999	0.4	3.8	2.6	0.7	1.6
Indonesia	8 688	8 415	9 941	10 066	-0.6	3.6	1.3	1.4	1.7
Philippines	6 723	6 827	7 685	8 075	0.3	3.4	5.1	2.7	2.3
Viet Nam	3 503	4 144	5 131	5 453	3.4	5.6	6.3	2.7	2.3
Myanmar	2 509	3 478	4 944	5 082	6.7	7.9	2.8	3.7	3.6
Cambodia	2 845	2 873	3 530	3 772	0.2	5.6	6.9	7.6	4.7
ASEAN	8 206	8 272	9 738	10 020	0.2	3.9	3.0	2.1	2.2
China	5 342	7 323	10 939	12 101	6.5	10.6	10.6	1.1	0.9
India	4 441	5 201	6 614	7 003	3.2	6.1	5.9	2.0	2.5
Korea, Rep of.	28 688	33 735	38 158	39 512	3.3	3.2	3.6	0.9	1.1

*Note:* ASEAN productivity figures exclude Brunei Darussalam and Lao PDR. Productivity figures for 2007 calculated on the basis of official employment estimates produced by national statistical offices and ILO; calculated GDP figures based on 2006 observed values, together with 2007 GDP growth rates from the IMF, World Economic Outlook April 2008 Database. “p” denotes projection.

*Sources:* The Conference Board and the Groningen Growth and Development Centre, Total Economy Database, January 2008, <http://www.conference-board.org/economics>; National statistical offices.

Table 3.2 also points to the relationship between productivity and employment growth in ASEAN. Looking at the two five-year periods, the employment growth rate declined in all countries except Singapore and Thailand, with the largest declines in Cambodia, Viet Nam and the Philippines. This is due in part to demographic trends, together with rising school-participation rates. However, it also may reflect the ongoing shift in many countries from reliance on employment-intensive agricultural production to higher-value-added production, a topic that is taken up in Chapter 4.



### 3.4 Emerging challenges reflect the need to invest in productivity

Three major challenges facing the ASEAN region today – i) slowing global and regional economic growth, ii) surging inflation and iii) emerging environmental issues – underline the importance of promoting further gains in productivity.

#### *Faster productivity growth required*

First, the ongoing slowdown in economic growth, which has concentrated mainly in the world's industrialized economies, is likely to have a negative impact on growth in Asia. As indicated in Chapter 2, ASEAN economies are projected to experience a relatively minor slowdown in growth in 2008, with a possible drag on growth in the years beyond. Reliance on exports and foreign investment increases the vulnerability of ASEAN Member Countries to a prolonged global slowdown. Accelerating labour productivity growth will be essential to minimize the effects of the global economic slowdown and to promote continued development in the region. Given an expected deceleration in labour force and employment growth in the years ahead, most ASEAN economies will require even higher rates of labour productivity growth in order to sustain robust economic growth rates (see Chapter 7 for estimates of future productivity growth required to maintain historical economic growth rates).

Is this acceleration in labour productivity growth achievable? Absolutely. Is achieving this goal automatic? Absolutely not. Certainly, there are some universal good practices, such as ensuring that workers are healthy and working in a safe work environment, have basic education and are working in conditions of freedom and human dignity. But the crucial factors shaping national competitiveness differ for countries at different stages of development, and thus accelerating productivity growth requires a different policy focus for countries at different levels as well.

For policy-makers in ASEAN Member Countries at lower levels of per-capita GDP, focus should be on public investments that will yield long-term productive dividends, such as improvements in school quality and the share of children completing primary and secondary education (as opposed to being engaged in the labour market) as well as improved infrastructure, which will allow companies to get products to markets at a lower cost and with less wastage. The priorities also should foster macroeconomic stability, promote good governance and work to secure private property rights so that the domestic market is made more attractive to foreign investment and, through this investment, enterprises and workers have improved access to physical and financial capital needed to realize higher levels of output.<sup>12</sup>

For economies moving to middle stages of development, it is important to get the basics right; but enterprises must also increase their focus on improving their efficiency. Investments to develop targeted in-house training programmes and reduce labour turnover (for instance, by strengthening mechanisms for workers to provide feedback on workplace policies and to enhance labour–management

12 World Bank: *Unleashing prosperity: Productivity growth in Eastern Europe and the Former Soviet Union* (Washington, DC, 2008).



dialogue) will produce win-win results. These practices can boost employee morale while also improving productivity and profitability in the workplace.<sup>13</sup>

When these progressive workplace practices are introduced as a package, synergies between the different components could result in considerable improvement in productivity. Moreover, sharing experiences within an industry, in a country and across the ASEAN region could encourage replication and broader productivity gains. New Zealand's national workplace productivity programme provides a good example of how government and the other tripartite partners can successfully support such efforts (box 3.2).

Workplace training is also important in developed economies, in which innovation and sophisticated production processes are key differentiating factors. Improving productivity in these economies requires investment in higher education, so that the educational system provides a sufficient number of workers with appropriately specialized education and skills. It also requires immigration policies that ensure that a shortfall in the supply of certain types of workers can be filled by qualified workers from outside the domestic labour force. Enterprises in developed economies can realize higher levels of labour productivity through improvements in business networks, such as better connections with suppliers through business clusters. In addition, both the public and private sectors must foster innovation through investment in research and development and respect for intellectual property rights.<sup>14</sup>

### Box 3.2 New Zealand national workplace productivity programme

The Government of New Zealand follows the ILO tripartite approach in its efforts to increase workplace productivity. It has identified seven drivers of workplace productivity in the country: building better leadership and management; investing in skills and knowledge; using technology and encouraging innovation to get ahead; organizing work; creating a productive workplace culture; networking and collaborating; and measuring what matters.

The national workplace productivity has a dedicated web site that offers case studies about businesses that have improved their workplace productivity as well as various resources and services. The programme has reached a large number of enterprises and provides practical support for employers and workers to raise performance, the value of the work done and the rewards for both employers and workers.

Source: [www.dol.gov.nz/workplaceproductivity](http://www.dol.gov.nz/workplaceproductivity)

The second pressing challenge of sharply increasing inflation – driven by high food and energy prices – also highlights the importance of productivity growth, particularly in rural areas in the less-developed countries. Most directly, investments in improved fertilizer, irrigation and infrastructure linking rural and urban areas can boost agricultural productivity and increase agricultural output. This would then help to ease price pressures while allowing for non-inflationary increases in rural incomes.

*Agriculture still matters*

13 See ILO: *The promotion of sustainable enterprises*, Report VI, International Labour Conference, 96th Session, Geneva, 2007. <http://www.ilo.org/dyn/empent/docs/F1377429635/ILOsustainableEnterprises.pdf>

14 Sala-i-Martin et al. in World Economic Forum: *Global Competitiveness Report 2007-2008*.

*Investing in a green  
ASEAN*

Annual labour productivity growth in agriculture in the ASEAN region has averaged approximately 3.2 per cent since 2000. Productivity improvements in agriculture have been crucial to increasing agricultural output: More than 98 per cent of the growth in agricultural value added has been due to increased labour productivity, with less than 2 per cent due to increased employment in agriculture. This trend has occurred in the context of rapid urbanization in many ASEAN Member Countries (a scenario related to increasing agricultural productivity is presented in Chapter 7).

Finally, emerging environmental challenges, including environmental degradation and climate change, point to a need for productivity improvements based not only on the goal of increased output, but also more efficient and environmentally sustainable production. ASEAN Member Countries could benefit from strengthened cooperation to promote more sustainable natural resource use as well as more efficient energy use through technology and knowledge transfer. Collaboration could also be strengthened with other Asian countries. For instance, developing countries in the region (where GDP tends to be energy intensive), could learn much from Japan, which has developed energy-efficient capabilities.<sup>15</sup>

Investments in related research and development activities will require the participation of employers along with effective public–private partnerships. Businesses and multinational enterprises engaging in corporate social responsibility principles can promote “greener” production. When combined with strengthened occupational safety and health measures in the workplace, both can promote more sustainable production as well as increased operational efficiencies and higher productivity.

It is clear that a renewed focus on labour productivity growth will be needed in ASEAN Member Countries in the years ahead. Efforts must focus on fostering balanced growth – growth that is employment rich, supportive of increased productivity and improved living standards, and environmentally sustainable. Governments, employers and workers must all play a role, with effective tripartite dialogue and respect for fundamental rights helping to ensure that efforts to improve productivity are agreeable for all parties and that the benefits of increased productivity are distributed in an equitable manner, supportive of sustainable economic growth and development.

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15 ILO: “Visions for Asia’s Decent Work Decade: Sustainable growth and jobs to 2015”, Background paper for Asian Employment Forum: Growth, Employment and Decent Work; Beijing, 13-15 August, 2007. <http://www.ilo.org/public/english/region/asro/bangkok/asiaforum/download/visions.pdf>

# Drivers of productivity growth

Many developing economies in ASEAN are in the midst of a dramatic economic transformation – a structural shift – away from predominantly agrarian-based production to higher-value-added industrial activities and expanded employment in services, particularly in urban areas. This chapter investigates the positive economic effects of such structural shifts in terms of higher productivity growth in the region as well as prospects and prerequisites for continued structural employment shifts going forward.

At the same time, the more economically developed ASEAN Member Countries have largely moved beyond the period of structural employment shifts. Improving productivity at the industry and enterprise levels is vitally important for both developed and developing economies as they strive to move up the value chain and compete successfully in the global economy. In this context, this chapter also examines ways to promote productivity in small enterprises, which are a major source of employment in the region across all three economic sectors and in both less-developed and more-developed ASEAN Member Countries. Encouraging productivity growth in these enterprises can enhance the competitiveness of ASEAN economies in the years ahead and help reduce poverty and informal employment.

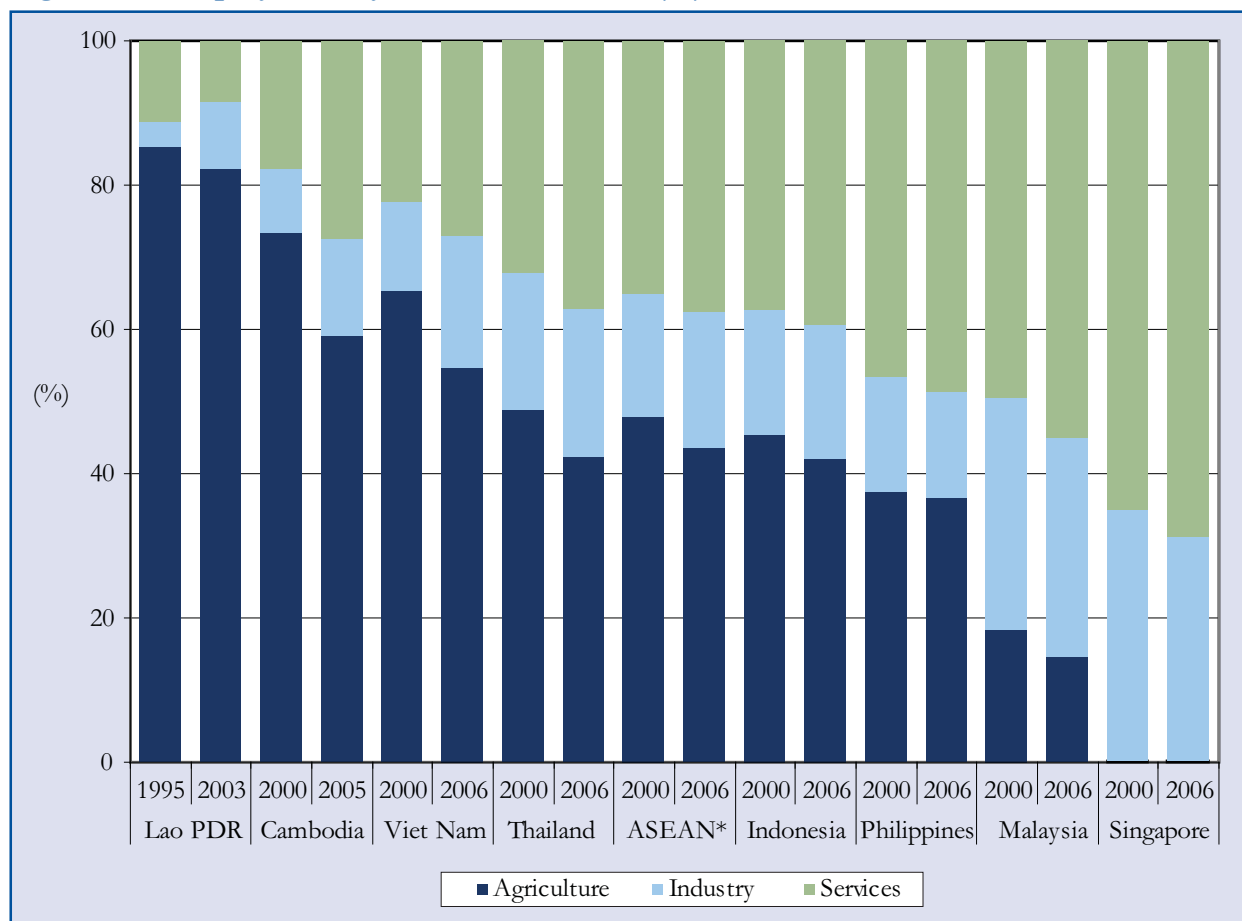
## 4.1 The changing structure of employment in ASEAN

Figure 4.1 shows the evolution of employment in ASEAN Member Countries and in the region. While the agricultural sector remains the largest in terms of employment for the ASEAN region, the share of employment in agriculture is on the decline in every ASEAN Member Country, led by sharp decreases in Cambodia, Thailand and Viet Nam. Even with these shifts, the agricultural sector is still home to more than 80 per cent of workers in the Lao People's Democratic Republic, more than half of workers in Cambodia and Viet Nam, and more than 40 per cent of workers in Indonesia and Thailand.

*Employment shifting out of agriculture*

The services sector typically accounts for the largest share of employment in more-developed economies, as in Singapore and Malaysia where it accounts for 69 per cent and 55 per cent of employment, respectively. It is also the dominant sector in the Philippines, with nearly half of all workers in the country in service-based employment.

**Figure 4.1: Employment by sector, 2000–2006 (%)**



Notes: \*ASEAN regional figures exclude Myanmar. The starting and ending years are 2000 and 2006, respectively, except for the following countries: Cambodia (2000, 2005); Lao PDR (1995, 2003).

Sources: National statistical office data; ILO, Key Indicators of the Labour Market Fifth Edition; ILO, Global Employment Trends Model 2008.

Table 4.1 shows actual employment growth by sector since 2000, along with the annual rates of growth in each sector. These two pieces of information provide a very good picture of the dynamics of employment shifts across sectors.

Overall, the agricultural sector in ASEAN (excluding Myanmar)<sup>1</sup> has grown by 324,000 workers, representing annual growth of approximately 0.1 per cent. The agricultural sector has contributed less than 2 per cent of all new employment growth in the region since 2000. More than 8.4 million new jobs have been created in the rapidly expanding industrial sector, representing annual growth of more than 3.6 per cent. The services sector grew by 13.3 million, or by 2.8 per cent annually. In aggregate, the services sector accounted for approximately 60 per

<sup>1</sup> ASEAN regional figures in this chapter exclude Myanmar because data on value added by sector are not available for the country and thus it is not possible to calculate labour productivity figures.

cent of all new employment while the industrial sector accounted for more than 38 per cent of new employment in the region.

While the share of employment in agriculture is declining in all ASEAN Member Countries, the sector(s) in which new employment is being generated differs across the region. In Cambodia, Thailand and Viet Nam, employment is growing rapidly in both industry and services. In Malaysia, Philippines and Singapore, employment is growing much faster in the services sector, even as Malaysia and Singapore experience low growth due to declining industrial employment. In Indonesia, the Lao People's Democratic Republic and Philippines, agriculture is still generating a large share of total employment, which likely reflects persistent surplus labour in rural areas in those countries where the sector plays the role of "employer of last resort" for many unskilled or low-skilled rural workers.

**Table 4.1: Growth in employment by sector, 2000–2006**

	Total change in employment ('000s)			Annual growth rate (%)		
	Agriculture	Industry	Services	Agriculture	Industry	Services
ASEAN*	324	8 445	13 314	0.1	3.6	2.8
Cambodia	310	540	1 110	1.4	15.3	15.5
Indonesia	-544	2 078	4 086	-0.2	2.1	1.9
Lao PDR	236	159	-22	1.5	15.1	-1.2
Malaysia	-208	109	1 051	-2.1	0.6	3.5
Philippines	1 765	454	3 198	2.6	1.6	3.8
Singapore	0	18	307	1.1	-1.5	2.9
Thailand	-780	1 223	2 847	-0.8	3.0	4.0
Viet Nam	-670	3 388	3 463	-0.5	9.4	5.8

*Note:* \*ASEAN regional figures exclude Myanmar. The starting and ending years for the calculations are 2000 and 2006, respectively, except for the following countries: Cambodia (2000, 2005); Lao PDR (1995, 2003); Singapore – agricultural sector only (1997, 2004).

*Source:* ILO, Global Employment Trends Model, 2008; official data from national statistical offices.

## 4.2 The relationship between employment shifts and labour productivity

Are the structural shifts affecting labour productivity trends and overall economic growth in the region? Table 4.2 encapsulates three factors to help answer that question: i) labour productivity by sector in the most recent year, ii) the average annual growth rates in labour productivity by sector and for the economy, and iii) the share of the total productivity growth over the period that is attributed to the shift in employment. The information indicates the extent to which structural employment shifts are benefiting ASEAN Member Countries.

### Large gaps between productivity levels across sectors

In every country, the agricultural sector has the lowest level of labour productivity while the industrial sector is the most productive (except in the Lao People's Democratic Republic where it is essentially at the same level as the services sector). The ratio of average productivity in industry to agriculture is greatest in Thailand – nearly 12 to 1, which means that it would take the average industrial worker only one month to produce the same value as the average agricultural worker would produce in one full year. In Indonesia, the ratio is 7.7 to 1. In Viet Nam, it is 6.4 to 1, in the Lao People's Democratic Republic, it is nearly 5 to 1, and in Cambodia it is 4 to 1. The ratio is lower (approximately 3 to 1) in Malaysia and Singapore. While high ratios indicate high probabilities of significant inequalities in earnings and quality of employment between workers in different sectors, they also indicate the high potential returns to employment shifts out of agriculture.<sup>2</sup>

**Table 4.2: Labour productivity by sector (constant 2000 US\$ and average annual growth) and contribution from sector employment shift, 2000–2006**

	Labour productivity, most recent year			Annual labour productivity growth				Contribution from employment shift	
	Ag.	Ind.	Serv.	Ag.	Ind.	Serv.	Total	Total	%
ASEAN*	806	7 429	4 209	3.2	1.3	2.1	3.1	0.6	18.3
Cambodia	361	1 445	1 149	3.6	-1.2	-4.7	3.2	1.5	46.9
Indonesia	773	5 408	2 456	3.4	1.9	4.4	3.8	0.3	7.6
Lao PDR	477	2 318	2 329	2.9	6.6	4.9	4.2	1.0	23.8
Malaysia	6 442	18 838	8 816	5.6	3.6	1.8	2.9	-0.2	-5.4
Philippines	1 226	6 015	3 493	1.1	1.5	2.3	1.8	0.1	3.7
Singapore	16 202	50 309	43 744	-2.2	3.6	1.7	2.3	-0.0	-2.0
Thailand	838	9 873	5 788	3.4	3.1	0.4	3.4	1.0	30.6
Viet Nam	392	2 523	1 523	4.2	0.8	1.3	5.0	1.8	36.7

Notes: \*ASEAN regional figures exclude Myanmar. The starting and ending years for the calculations are 2000 and 2006, respectively, except for the following countries: Cambodia (2000, 2005); Lao PDR (1995, 2003); Singapore – agricultural sector only (1997, 2004).

Source: ILO calculations based on official employment data from national statistical offices and value added data from World Bank, World Development Indicators online database.

### Employment shifts drive productivity gains

The sector-level labour productivity trends reveal that there is much variability underlying the positive productivity performances. In the ASEAN region, while total labour productivity increased at an annual rate of 3.1 per cent between 2000 and 2006, it grew at a rate of only 1.3 per cent in the industrial sector, compared with 2.1 per cent in services and 3.2 per cent in agriculture. The shift in employment that took place (in which a larger share of workers moved into industry and services) contributed 0.6 percentage points of annual productivity growth for the ASEAN

<sup>2</sup> The high ratio in Thailand reflects large differences in average incomes between rural and urban areas. Thailand has a relatively high land-labour ratio, with average agricultural yields below those in more densely populated countries. Large numbers of undocumented migrant workers in agriculture also may play a role in discouraging more capital-intensive agricultural production. At the same time, the country's industrial sector benefits from high-value-added production activities, such as automobile manufacturing and assembly.

See: <http://www.ilo.org/public/english/region/asro/bangkok/library/download/pub07-30.pdf>

region. Thus, around 18 per cent of the total productivity growth that has taken place since 2000 has been due to the employment shift, with the remainder due to productivity growth within sectors.<sup>3</sup>

At the country level, the effects of structural change range from contributing negative 5 per cent of total productivity growth (a sign of de-industrialization) to nearly 47 per cent, showing that it can be a very substantial driver of productivity growth. The following productivity trends are noteworthy:

- Nearly 47 per cent of Cambodia's healthy annual labour productivity growth rate of 3.2 per cent was due to the structural employment shift. This, combined with rapid employment growth, led to high overall economic growth rates. Labour productivity in Cambodia's industrial sector declined moderately between 2000 and 2005 as employment surged. Productivity in the country's services sector declined significantly. Declining sector-level productivity growth is not sustainable in the long term: If it persists, the competitiveness of enterprises in the country will erode, with profits and wages likely to stagnate.
- Nearly a quarter of the productivity growth in the Lao People's Democratic Republic was due to the country's structural employment shift. However, productivity growth was robust in each of the individual sectors.
- Thailand had rapid growth in agricultural and industrial productivity, with stagnation in productivity in the services sector. The structural employment shift accounted for more than 30 per cent of the total productivity growth.
- In Viet Nam, the shift in employment accounted for nearly 37 per cent of the country's rapid average productivity growth of 5 per cent. Productivity in the agricultural sector increased at a healthy pace of 4.2 per cent annually, with fairly low growth in the industrial and services sectors.
- Indonesia registered robust productivity growth in the services and agricultural sectors, while industrial productivity lagged. Structural employment shifts contributed only moderately (0.3 percentage points) to total economy productivity growth over the period of 2000–2006.
- Productivity growth was fairly weak in all three sectors in the Philippines. The benefit from structural employment shifts in the country was negligible. One relative bright spot is the country's services sector, which has experienced rapid growth in areas such as call centres and information technology, hotels and tourism, along with fairly rapid urbanization.
- Malaysia and Singapore did not benefit from a structural shift in employment, which is to be expected given their higher levels of development and smaller shares of agricultural employment.

In analysing the sector employment and sector productivity data together, it is possible to divide ASEAN Member Countries into two groups:

**Group 1: Countries with high potential to benefit from structural shifts in employment** – Within this group, Cambodia, the Lao People's Democratic Republic, Thailand and Viet Nam are already reaping significant benefits from structural change. Indonesia, Myanmar and the Philippines have considerable

<sup>3</sup> This is calculated as the difference between actual productivity growth and the weighted average productivity growth of the three economic sectors, for which weights are equal to sector employment shares in 2000.



potential, given their large shares of agricultural workers. But widespread benefits from structural change have not yet been realized. In this group and especially in the lower-income/agriculture-oriented countries, a primary focus should be on the continued facilitation of labour mobility across sectors. Promoting productivity growth within sectors is also an important objective for long-term sustainable growth.

**Group 2: Post-structural-change countries** – The primary focus in the higher-income economies of Brunei Darussalam, Malaysia and Singapore should be on boosting productivity growth within sectors rather than on encouraging a shift across them. This can be done, for instance, by providing industrial or service-sector workers with relevant training so that they can produce more within existing enterprises or transition to newly emerging enterprises that use latest technologies.

In both groups, high-quality labour market information is essential for facilitating employment shifts and promoting employment growth across and within sectors. For instance, in order for employment services to be effective in helping to reduce gaps between labour supply and demand, good-quality labour market information is needed to identify the emerging employment opportunities for workers and the skills that are in demand so that training programmes can be designed accordingly.

### 4.3 Two key drivers of future productivity growth in ASEAN

How can ASEAN Member Countries effectively drive higher national and regional productivity growth rates in the years ahead? As Chapter 2 indicated, there are many answers to this question, though they vary significantly across the region. The remainder of this chapter focuses on two potential drivers for increasing productivity in the years ahead. Following the previous analysis, the first potential driver is the facilitation of further structural change in the countries with large agricultural workforces. This is particularly relevant for countries in Group 1 above. The second potential driver is the promotion of productivity-enhancing improvements in small enterprises to help boost productivity within sectors, which is relevant for all countries.<sup>4</sup>

*Driver 1:  
Facilitating  
structural change  
through targeted  
investments*

What will drive successful structural change in ASEAN economies with large agricultural workforces in the years ahead? One thread linking each of the Group 1 economies that have been undergoing successful employment shifts away from agrarian-centred production to higher-value-added activities is healthy growth in agricultural productivity. Such growth can enable structural change by freeing up rural labourers so that they move to industrial centres and take up higher-productivity employment. This is essentially a “push” factor – fewer workers are needed in agriculture and this increases the potential supply of workers for other activities. If agricultural productivity does not grow, it is less likely that a structural employment shift will take place. In this light, it appears that the relatively low

<sup>4</sup> A third driver that is related to both of these – improving workforce quality and skills – is discussed in Chapter 5.

agricultural-productivity growth in countries such as Indonesia and the Philippines is likely to have contributed to the low degree of beneficial structural employment shifts.

Thus, in ASEAN Member Countries with a high share of workers still engaged in agriculture – Cambodia, Indonesia, the Lao People’s Democratic Republic, Myanmar, Philippines and Thailand – investments aimed at boosting agricultural productivity are likely to both improve the livelihoods of the poorest workers and help to address the problem of rising food prices (as discussed in Chapters 2 and 3). They also are likely to promote structural change, which would likely raise average productivity levels and increase overall economic growth and development prospects.

ASEAN’s Economic Ministers have recognized the importance of increasing productivity in agriculture through the transfer of technology, research and development, the increase of agricultural land and the substantial increase of public and private investment.<sup>5</sup> Such investments could include improved rural infrastructure and rural–urban linkages, irrigation systems, additional capital equipment provided to farmers on favourable terms and subsidized fertilizers. Importantly, these investments are likely to require a shift in investment priorities for some governments in the region. For instance, in Indonesia, government expenditures on energy subsidies are approximately six times as large as public agricultural investments, indicating scope for a reallocation of investment that could promote agricultural productivity and beneficial structural change.<sup>6</sup> Raising productivity in agriculture will also require an integrated approach, involving the promotion of productive employment, social protection, rights at work and strong labour market institutions and effective labour administration, including a robust labour inspection system.<sup>7</sup>

Even if productivity in agriculture increases, thereby freeing up additional surplus agricultural labour, if there are no new employment opportunities in higher productivity industries, structural change will not take place. Accordingly, a crucial “pull” factor that can facilitate structural economic transformations in Group 1 countries is physical capital formation – such as additional machinery, information and communications technology as well as improved infrastructure. To explore this issue in greater detail, table 4.3 shows the level and change in gross capital formation per worker in ASEAN Member Countries in 2000 and 2006.

In the more developed Group 2 economies of Brunei Darussalam, Malaysia and Singapore, capital formation per worker declined, which is consistent with services-sector-led growth, rather than growth driven by industrialization. Instead of gross capital formation, these developed economies rely more on enterprise-level innovation and improved production processes to drive productivity growth. Capital formation per worker also declined in the Philippines, which reflects the more services-sector-oriented growth that has taken place; but it also likely inhibited a more significant structural transformation.

5 “Joint ministerial statement on food security”, ASEAN Economic Ministers’ Retreat, May 3, 2008, available at: <http://www.aseansec.org/21498.htm>

6 “Fuel subsidies overseas take a toll on US”, in *The New York Times*, July 28, 2008.

7 For further information on the integrated approach to promoting rural employment, see ILO: *Promotion of rural employment*, Report IV, International Labour Conference, 97th Session (Geneva, 2008).

**Table 4.3: Gross capital formation per worker, 2000–2006**

	Gross capital formation per worker (constant 2000 US\$)		Change, 2000–2006	
	2000	2006	US\$	%
ASEAN*	717	793	76	10.6
ASEAN* excluding Singapore, Malaysia & Brunei Darussalam	463	609	146	31.5
Brunei Darussalam	5 304	4 177	-1 127	-21.2
Cambodia	108	145	37	34.2
Indonesia	409	564	156	38.1
Lao PDR	154	298	144	93.4
Malaysia	2 646	2 386	-260	-9.8
Philippines	579	430	-149	-25.7
Singapore	15 731	10 264	-5 466	-34.7
Thailand	849	1 268	418	49.2
Viet Nam	245	399	154	62.7

*Note:* \*ASEAN regional figures exclude Myanmar. The starting and ending years for the calculations are 2000 and 2006, respectively, except for Cambodia, which is 2000 and 2005. ILO estimates of employment based on NSO data are used for Lao PDR.

*Source:* ILO calculations based on World Bank, World Development Indicators, 2008.

Group 1 countries that benefited from structural change had the largest percentage increase in capital formation per worker from 2000 to 2006. This implies that the significant amounts of additional capital per worker in those countries translated into new employment opportunities in higher-value-added industries, pulling in agricultural workers along with new entrants to the labour market. The countries that did not benefit to the same extent from structural change showed a different trend with regard to capital formation. In Indonesia, capital formation per worker increased but not as substantially as in Thailand or Viet Nam.<sup>8</sup>

When analysed together, the evidence indicates that policies to channel domestic savings and attract investment into industries with high potential for economic growth and employment generation are the most likely to stimulate structural employment shifts and promote higher levels of productivity growth in ASEAN's developing countries.

*Driver 2: Focusing on small-scale activities to boost productivity within sectors*

In addition to the importance of increasing mobility across economic sectors to boost labour productivity, it is critical for ASEAN Member Countries to increase productivity within sectors. This is because the move to higher-value-added production takes place both through sector transformation and through the modernizing of existing sectors and enterprises. Small and medium-sized enterprises (SMEs) hugely outnumber large enterprises in ASEAN Member

<sup>8</sup> The increase in capital formation per worker in Cambodia is less substantial than in Indonesia, Thailand and Viet Nam. However, this is mainly due to the very rapid employment growth that took place in Cambodia. Total capital formation (not on a per-worker basis) increased by more than 111 per cent over the period in Cambodia, compared with 47 per cent in Indonesia, 64 per cent in Thailand and 87 per cent in Viet Nam.

Countries in both the quantity of establishments and the share of the labour force they employ. Thus, improving productivity in those enterprises will be an essential route to increasing productivity of the overall economy and strengthening the backbone of the ASEAN Community.

Further, given that the majority of SMEs operate in the informal economy (where incomes are typically insufficient to lift workers and their families out of poverty and working conditions are poor with little or no economic security), boosting productivity in small-scale activities and integrating them into the formal economy can bring the added dividend of decreasing vulnerable employment and the numbers of working poor.

In the ASEAN Member Countries for which data are available, SMEs account for between 26 per cent and 58 per cent of total value added and between 52 per cent and 99 per cent of employment (table 4.4). In the ASEAN+3 countries<sup>9</sup> and India, SMEs are the major sources of output, value added and employment (contributing relatively more to employment than to value added).

SMEs also make relatively smaller but still important contributions to export production. For example, in Malaysia, Singapore and Viet Nam, SMEs accounted for between 15 and 20 per cent of total exports. In Indonesia and Thailand, they accounted for 10–11 per cent of exports.

The differences in the contribution of SMEs to output and employment underscore the substantial productivity gaps between SMEs and large enterprises. That is, if SMEs were as productive as their larger counterparts, their contribution to total value added in a given country would approximate their shares in employment. Taking all else equal, the larger the gap is between output and employment, the larger the discrepancy in average productivity levels between SMEs and large-scale enterprises. For example, in Indonesia where there is a very large difference between the SME contribution to value added and to employment, labour productivity in micro and small enterprises was only 6.9 per cent of that in medium-sized and large enterprises in 2003.<sup>10</sup> In Malaysia, where the gap between value added and employment is considerably lower, average value added per worker in SMEs was around 30 per cent of that in large enterprises in 2005.<sup>11</sup>

9 +3 refers to China, Japan and the Republic of Korea.

10 T. Tambunan: "Entrepreneurship development: SMEs in Indonesia", in *Journal of Developmental Entrepreneurship*, Jakarta, 2007, Vol. 12, No. 1, pp. 95-118. Micro-enterprises refer to those with 1-4 workers, small enterprises those with 5-19 workers, medium enterprises those with 20-99 workers and large enterprises those with 100 or more workers.

11 Central Bank of Malaysia: *Small and medium enterprise (SME) annual report 2006* (Kuala Lumpur, 2006), available at: <http://www.bnm.gov.my/index.php?ch=116&pg=350&ac=101>

**Table 4.4: Contribution of SMEs to value added, employment and export production, most recent years (%)**

	Year	Value added	Employment	Exports
Indonesia	2003	57.6	99.4	10.6
Malaysia	2005	47.3	65.1	15
Philippines	2001	32.0	70.0	-
Singapore	2005	34.7	51.8	16
Thailand	2006	-	68.1	10
Viet Nam	2004	26.0	77.5	20
China	2004	68.7	85.2	40-60
India	2003	40.0	85.8	-
Japan	2004	53.8	71.0	13.5
Korea, Rep. of	2004	59.4	86.5	40

*Note:* Data for exports refer to the most recent year available.

*Sources:* For value added and employment data, UNCTAD in M. Fujita: “FDI by MNEs in global context: Implications for ASEAN”, Paper prepared for ASEAN-Japan Seminar on FDI: Sharing Japanese SMEs’ dynamism in ASEAN Integration, 28-29 May 2007. For data on exports, UNCTAD: “Improving the competitiveness of SMEs through enhancing productive capacity”, Doc. No. TD/B/COM.3/51/Add.1, Geneva, 2003.

In terms of trends in the productivity gap, evidence from Indonesia suggests that the gap has not narrowed significantly over time with the level of development.<sup>12</sup> Between 1986 and 1996, value added per worker grew at an annual average rate of 2.3 per cent in manufacturing SMEs employing between 20 and 299 workers, compared with 2.2 per cent for large enterprises employing 300 or more workers.<sup>13</sup>

The large, persistent productivity gaps, together with the large share of workers in SMEs, suggest that more policy attention needs to be given to raising SME productivity. Specifically, policy formulation and implementation, which have often reflected the interests of larger enterprises, should better reflect the needs of small enterprises. Success in this area would go a long way to boost productivity growth within sectors in the years ahead. The ASEAN Policy Blueprint for SME Development 2004–2014 is an important initiative in this regard (box 4.1).

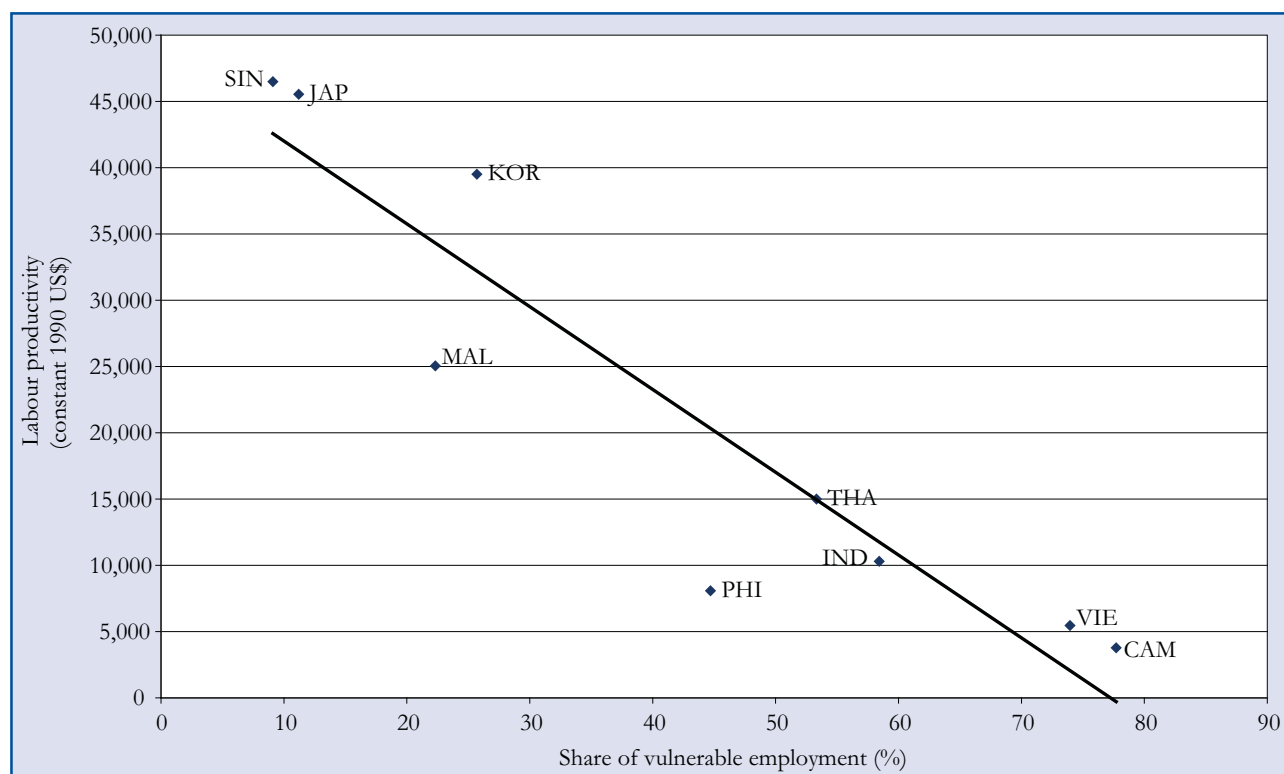
SMEs are a heterogeneous group comprising activities that range from “survival” (such as street vendors) to “sophisticated” (formal enterprises exporting and investing abroad). However, in many developing countries, including those in the ASEAN region, a significant proportion of SMEs are engaged in low-productivity activities in the informal economy, unprotected and unregulated by

12 Although the data for other ASEAN countries is limited, a study of 10 Latin American economies suggests that the productivity gap between SMEs and large enterprises decreased over time in half of the countries surveyed while increasing in the other half. See W. Peres and G. Stumpo: “Small and medium- sized manufacturing industries in Latin America and the Caribbean under the new economic model”, in *World Development*, Vol. 28. No. 9, pp. 1643-1655.

13 M. Hiyashi: “Development of SMEs in the Indonesian economy” Australian National University Department of Economics Working Paper No. 2003/1, 2006.

law. While informality may bring some short-term advantages, it often prevents such enterprises from accessing resources, information and markets and undermines incentives for them to invest in capital and labour.<sup>14</sup>

**Figure 4.2: Labour productivity (2007) and vulnerable employment (most recent year)**



Notes: Labour productivity data are for 2007. Data for share of vulnerable employment are for the most recent year available. Sources: Labour productivity data are from the Conference Board and Groningen Growth and Development Centre, Total Economy Database, January 2008, <http://www.conference-board.org/economics>. Vulnerable employment shares are ILO estimates, based on data from national statistical offices.

As illustrated in figure 4.2, higher shares of vulnerable/informal employment (in terms of the share of own-account and contributing family workers in total employment) are negatively associated with the level of productivity across the ASEAN+3 countries.<sup>15</sup> Effective measures to roll back informality in the region could boost productivity in SMEs, which, in turn, could directly reduce the number of working poor who often just barely eke out a living in the informal economy.

Measures for integrating SMEs into the mainstream economy and reducing informality include: reducing the time and cost of registering businesses, ensuring secure property rights, improving access to credit, expanding training opportunities for workers in the enterprises and lowering the cost of workers' health insurance.

The promotion of SME clusters, or the agglomeration of enterprises engaged in similar business activities in a geographically concentrated area, is another recommended approach. In addition to providing SMEs with opportunities for

14 ILO: *The promotion of sustainable enterprises*, Report VI, International Labour Conference, 96th Session (Geneva, 2007).

15 See footnote 3 in Chapter 2 for a discussion of definitions and limitations of the vulnerable employment indicator.



### Box 4.1 The ASEAN Policy Blueprint for SME Development 2004–2014

In recognition that a strong, dynamic and efficient SME sector is essential to ensuring sustainable economic development of the region, the ASEAN Economic Ministers adopted the ASEAN Policy Blueprint for SME Development 2004–2014. This blueprint provides a framework for SME development and includes the following programmes:

- I. *Human resource development and competency-building*
  1. Entrepreneurship development programme;
  2. Enhancing SME-sector skills in management and organization on a self-reliant basis;
  3. Fostering SME capabilities for inter-enterprise networking and linkages;
  4. tracking and benchmarking SME capabilities, dynamism and competitiveness;
- II. *Enhancing SME marketing abilities*
  5. Setting up regional and subregional networks of interlinked, on line clearing points or trading houses for SME businesses;
  6. Enhancing SME capabilities in and reliance on ICTs and e-commerce;
  7. Tracking and benchmarking SME readiness as subcontractors and compliance to non-negotiable subcontracting preconditions or compliance requirements on the demand-side;
- III. *Access to financing*
  8. Capacity building for improved SME access to financing;
  9. Financial institutional capacity building for improved SME financing;
  10. Widening and deepening SME access to credit;
- IV. *Access to technology*
  11. SME technology upgrading and transfers of innovative technologies;
- V. *Creating a conducive policy environment*
  12. Simplification, streamlining and rationalization of the procedures for SME registration and the process for SME support services;
  13. Fine-tuning policy and regulatory framework for SME development;
  14. Promotion of public-private synergies and partnership for SME development and integration.

economies of scale and scope, clustering offers possibilities to share the cost of training and to share knowledge, know-how and skills, thereby enabling small enterprises to increase their productivity. Many ASEAN Member Countries have turned to the clustering approach, including an automobile cluster outside Bangkok, Thailand, the palm oil cluster in Sabah, Malaysia, and the furniture cluster in Jepara, Indonesia.

A critical challenge for the ASEAN Member Countries is to design and implement a cluster policy in a way that maximizes the potential of human resources development. Employer organizations can play a leading role in improving the regional knowledge base, and in facilitating the formalization of small firms.

Another promising approach is to promote relationships (and thus information transfer) between small and large enterprises (including multinational enterprises), thereby enabling the smaller businesses to gain insight on improved production methods, access to and uptake of new technology and expanded access



to markets. The resulting productivity increases can allow for increased specialization and thus for small enterprises to move up the value chain.

The ASEAN region has engaged in some effective practices in this regard. Singapore's hard disk industry is a successful outcome of enterprise linking, with the Government facilitating partnerships between small domestic enterprises engaged in supporting activities (such as plastic injection, electroplating, tool and dye) and leading multinational hard disk manufacturers.<sup>16</sup> Over time, the multinational enterprises and their smaller suppliers have moved up the value chain in the areas of research and development, distribution and service. However, the benefits of these partnerships are by no means automatic. This depends critically on the capability of small enterprises to effectively build and sustain relationships with larger enterprises, which, in turn, depends upon the workforce quality and adaptability of the enterprises.

#### 4.4 Policies for economically and socially sustainable productivity growth

There are clear paths for ASEAN Member Countries at all levels of development to increase labour productivity and raise economic growth rates in the years ahead. Targeted investments and carefully designed policies can help to achieve a positive and economically sustainable outcome. Following the previous discussion, initiatives will be needed to assist national economies move from agrarian to higher-value-added industrial and services-based activities, as well as to promote enterprise and industry-level productivity improvements among the masses of ASEAN's small and medium-sized enterprises.

The structural shift in employment, away from agriculture to higher value-added industry and services, has been a key driver in increasing labour productivity, rising living standards and lifting millions of poor from poverty. Many ASEAN Member Countries still stand to benefit from further structural shifts and as such facilitating labour mobility across sectors should be a key policy concern. In particular, governments should promote private investment in agriculture and substantially increase their own investment in the sector through rural infrastructure modernization, additional capital equipment provided to farmers on favourable terms, and subsidized fertilizers with a view to promoting productivity growth. Success from increased policy attention in agriculture will depend critically on providing avenues for agricultural workers to reflect their needs and participate in decision-making, which can be accomplished by strengthening agricultural workers' organizations and cooperatives.

With SMEs forming the bulk of enterprises in ASEAN, it will be imperative that governments facilitate productivity growth in these types of enterprises. Governments can play a key role through the provision of appropriate incentives in the development of clusters and linkages between large and small firms. Supporting occupational safety and health in SMEs as well as for agricultural

16 S. Lall: *Promoting industrial competitiveness in developing countries: Lessons from Asia*, Economic Paper No. 39 (London, Commonwealth Secretariat, 1999).

workers, through for example diffusion of appropriate technologies and good practices and strengthening labour inspection systems can also reap significant productivity gains. The ASEAN Policy Blueprint for SME Development 2004-2014 provides a solid framework to support the development of SMEs, and governments should seek to translate it the into concrete national policy measures.

In addition to ensuring that productivity growth is economically sustainable, effective dialogue between the tripartite partners can help to ensure that these investments and new policies maximize benefits for employers, workers and society as a whole. This is particularly important because as employment shifts, structural change is likely to be characterized by both job creation and job destruction and movement up the value chain will inevitably expose enterprises and workers to evolving forms of global competition.

# Workforce quality, skills shortages and enterprise competitiveness

Education and skills are critical for enhanced productivity, employment growth and social development.<sup>1</sup> A good-quality workforce equipped with the knowledge, skills and attitudes required by the economy can drive national competitiveness and spur economic development.<sup>2</sup> And a well-trained workforce is better equipped to effectively and quickly adjust to shifting labour markets, changing technologies and new business practices. In the context of the current volatility in global markets and inflationary pressure in most of the ASEAN Member Countries, it is even more imperative now that education and training policies support workforce development and enrich productivity growth.

This chapter examines the link between education and training and enterprise competitiveness in ASEAN from two complementary perspectives. The first section of the chapter discusses the relationship between workforce quality and national competitiveness from the angle of labour supply. It focuses on education and training outcomes at the national level and key policy issues for human capital development in different ASEAN Member Countries. The second section looks at the link between workforce quality and enterprise competitiveness from the perspective of labour demand based on the experience of businesses. It concentrates on the growing problem of skills shortages, their impact on productivity at the workplace and the ways companies are responding to these problems. The chapter concludes with a review of various policy measures and practical actions that could improve workforce quality, reduce skills shortages, and boost productivity and competitiveness.

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1 While education and skills development are closely related to the broader issues of individual, social and economic development, the focus of this chapter is on education and skills development for productivity, competitiveness and growth.

2 ASEAN Economic Ministers, for example, recently “stressed the need to integrate education priorities into ASEAN’s development agenda, and hone the skills and talents of our peoples to boost the region’s overall competitiveness, in order to reap the fruits of globalisation.” Joint Communiqué of the 41st ASEAN Ministerial Meeting, “One ASEAN at the Heart of Dynamic Asia”, Singapore, 21 July 2008, available at <http://www.aseansec.org/21771.htm>.

## 5.1 Workforce quality and competitiveness

First, a caveat – statistics that measure learning achievement and education quality are rather limited.<sup>3</sup> This lack of a comprehensive and cross-national monitoring and an evaluation system of the outcomes of the education and training system thus restricts the assessment of workforce quality in the ASEAN region to the use of primarily input indicators, such as years of schooling and enrolment rates. But these input measures do not reveal the outcome of education: the knowledge, cognitive abilities and even social and other non-cognitive skills acquired through formal education and in daily life outside the school system.<sup>4</sup> While educational attainment is certainly important for human capital development and sustained economic growth, the centrality of education quality and learning achievement cannot be neglected.

Bearing in mind these constraints, table 5.1 presents the most recent national data on school-life expectancy, which indicates the overall level of development of a country's educational system in terms of the number of years of formal education that a child can expect to complete. The table also provides adult literacy rates, which is a standard outcome indicator that reflects the accumulated achievement of primary education and literacy programmes in imparting basic skills that enable the adult population to communicate using the written word in daily life, whether in higher education or in the workplace. These education indicators are shown together with country rankings from the World Economic Forum's Global Competitiveness Index and labour productivity as measured by output per worker.

There is a positive relationship between an economy's competitiveness and productivity levels (two important outcome indicators) and its school-life expectancy and adult literacy rates (two proxy indicators for workforce quality). As expected, competitive economies with higher productivity tend to have education systems that provide more average years of schooling and develop more literate adults. The evidence also reveals the disparities between the education systems in ASEAN. On one end, the more competitive economies, including Malaysia and Thailand, have average school-life expectancies of more than 12 years. Indonesia, the Philippines and Viet Nam have rates that average between 10 and 12 years of schooling. And at the other end, the number of years of education that a child can expect to achieve in Cambodia, the Lao People's Democratic Republic and Myanmar is less than 10 years.

3 UNESCO: *Education for All global monitoring report 2008: Education for all by 2015: Will we make it?* (Paris, 2006), pp. 66-79.

4 For further discussion, see Commission on Growth and Development: *The growth report: Strategies for sustained growth and inclusive development* (Washington, DC, World Bank, 2008), pp. 37-40 and E.A. Hanushek and L. Wößmann: *The role of education quality in economic growth*, Policy Research Working Paper 4122 (Washington, DC, World Bank, 2007).

**Table 5.1: Competitiveness rankings, output per worker, school life expectancy and adult literacy rates in ASEAN, most recent year**

	Global competitiveness ranking	Output per worker, constant 1990 US\$	School life expectancy, primary to tertiary education (years)	National literacy rate for adults, ages 15+ (%)
	2007–2008	2007p	2006*	2007**
Singapore	7	46 494	-	94.4
Brunei Darussalam	-	-	14.0	94.9
Malaysia	21	25 045	12.7	91.9
Thailand	28	14 999	13.5	94.1
Indonesia	54	10 309	11.5	91.4
Philippines	71	8 075	11.7	93.4
Viet Nam	68	5 453	10.3	-
Myanmar	-	5 082	8.3	89.9
Cambodia	110	3 772	9.8	76.3
Lao PDR	-	-	9.2	73.2

Notes: “p” denotes projections; “-” denotes data not available or ranking not given; “\*” data for school life expectancy are from 2006, except Malaysia (2005), Myanmar (2002) and Viet Nam (2000); “\*\*” data for adult literacy rates are from 2007, except Myanmar (2000).

Sources: School-life expectancy and adult literacy rates: UNESCO Institute for Statistics, accessed July 2008; Global competitiveness ranking: World Economic Forum, Global Competitiveness Report 2007-2008; Output per worker: The Conference Board and Groningen Growth and Development Centre, Total Economy Database, January 2008.

The correlation between adult literacy and productivity and competitiveness is not as defined as the relationship between school-life expectancy and those same two outcome indicators. But certain trends in literacy do appear, particularly among the lower-income ASEAN Member Countries characterized by weaker productivity and competitiveness. In Cambodia and the Lao People’s Democratic Republic, for instance, adults have a literacy rate of 76.3 per cent and 73.2 per cent, respectively. In three of the four leading economies in the region, namely Brunei Darussalam, Singapore and Thailand, more than 94 per cent of adults are literate. Hence, the evidence makes clear that improvements in education, including increased school-life expectancy and more literate populations, are fundamental to the development of a productive and competitive workforce and national economy.

Quality basic education is the stage in which essential skills of literacy and numeracy are first acquired. These vital work skills provide a foundation of human capital needed for higher productivity employment and competitiveness in global markets, particularly for countries in which the economy is still predominantly reliant on agriculture and low-skilled manufacturing. Although examining input indicators such as attainment of basic education does not provide an accurate gauge of the quality of basic education, it can offer insights into the extent to which children participate in education as preparation for the labour force and a decent work life.

*Basic education establishes a foundation for decent work and competitiveness*

**Table 5.2: Key education indicators, selected ASEAN Member Countries, most recent year (%)**

	Net enrolment rate, Primary	Survival rate to grade 5	Transition from primary to lower secondary	Net enrolment rate, Secondary	Tech. & vocational enrolment as share of secondary enrolment
	2006	2005	2005	2006	2006
Lao PDR	83.7	62.0	77.0	34.9	1.2
Cambodia	89.9	62.2	81.2	30.8	3.2
Myanmar	99.6	71.5	73.8	45.7	-
Viet Nam	94.5	92.1	92.7	61.0	5.0
Indonesia	95.5	84.4	88.5	59.0	13.6
Philippines	91.4	74.0	99.1	60.4	-
Thailand	94.2	-	-	71.0	15.5
Malaysia	99.9	99.3	99.6	68.7	5.9

Notes: '-' denotes data not available; enrolment data are from 2006 except Malaysia (2005); survival and transition rates are from 2005 except Malaysia (2004).

Source: UNESCO Institute for Statistics, accessed July 2008.

Throughout ASEAN, tremendous efforts have been made to enhance access to primary education (table 5.2). Primary net enrolment rates have exceeded 90 per cent for all countries, with the exception of Cambodia (89.9 per cent) and the Lao People's Democratic Republic (83.7 per cent). However and unfortunately, many children in the ASEAN region do not remain long enough in the school system to acquire even basic literacy and numeracy skills. The survival rates to grade 5 in 2005 were only 62.2 per cent in Cambodia, 62 per cent in the Lao People's Democratic Republic and 71.5 per cent in Myanmar. In addition, of the children who do complete primary education in those three countries, only 81.2 per cent in Cambodia, 77 per cent in the Lao People's Democratic Republic and 73.8 per cent in Myanmar make the transition to lower secondary school. In contrast, transition rates in Malaysia and the Philippines exceed 99 per cent and are nearly 93 per cent in Viet Nam.

Millions of children in ASEAN cannot access or complete basic education because of the costs of schooling and the need to support family income or care for siblings. Unfriendly school environments and poorly equipped schools with inadequately trained teachers are additional factors that often deter parents from enrolling or keeping their children in education. Early school drop-out often results in child labour as well as unemployed or underemployed youth who lack the skills to form a high-quality workforce.<sup>5</sup>

<sup>5</sup> Please see Federico Blanco Allais and Frank Hagemann: *Child labour and education: Evidence from SIMPOC Surveys* (Geneva, ILO, 2008) and UNESCO: *Education for All Global monitoring report 2008: Education for all by 2015: Will we make it?* (Paris, 2007), p. 55.

By neglecting universal basic education for all children now, countries are risking a future labour force that could lack the essential skills needed for increasing national competitiveness in rapidly changing regional and global markets. Thus, for ASEAN Member Countries at lower levels of per-capita income, strengthening the quality of basic education and improving access to and completion of primary and lower secondary education should be the priority focus in their education and training policies, while targeting vulnerable children and youth who have been left out of the school system.

Those countries with strong achievement in basic education and that are approaching or are in the middle stages of economic development should aim to improve the quality of and participation in secondary education as well as technical and vocational education and training (TVET). At this point in the education system, young people can acquire the higher levels of skills, training and knowledge required to meet the increasing demands of labour markets that are shifting towards skilled manufacturing- and services-based employment. However, secondary net enrolment rates in Indonesia, the Philippines and Viet Nam are only around 60 per cent; in Malaysia and Thailand, access to secondary education is slightly better with net enrolment around 70 per cent.

Moreover, among the students who do enrol in secondary education in these countries, few are pursuing pathways into technical and vocational training (table 5.2). TVET systems in some countries struggle with the problem of ineffective curriculum, weak capacity and shortage of qualified training instructors, outdated training equipment and inadequate links between training providers and private-sector demand for skilled labour.<sup>6</sup> Competency standards and national qualifications frameworks have yet to be established in some developing ASEAN Member Countries (see Chapter 6, box 6.2) or may not be tailored to the requirements of the local labour market.

In many cases, upper-secondary education and TVET programmes have not adequately prepared both young women and men for a smooth school-to-work transition. Typically, females do not have avenues in secondary education and technical training that are free of sex-based discrimination and stereotyping.<sup>7</sup> This, in turn, hinders their decent work prospects and, at a national level, the development of a future workforce capable of maximizing its full productive potential.

Furthermore, as ASEAN Member Countries at middle- and high-levels of per-capita income strive to move up the value chain in global production systems, the demand for advanced and specialized skills to fill highly productive, technical and professional occupations will only sharpen, underscoring the importance of investment in tertiary education. Yet, in 2007, only 20.1 per cent of those employed

*Workforce  
development through  
secondary education  
and beyond*

6 ILO SKILLS-AP: *Major skills challenges facing SKILLS-AP countries* (Bangkok, ILO, forthcoming).

7 Direct and indirect discrimination against girls in the school environment may result in stereotyping them as less interested or less capable in certain subjects, such as mathematics and science. In most ASEAN Member Countries for which data are available, female participation in TVET programmes lags behind the participation of males. For example, in Malaysia, the share of female enrolment as a share of total enrolment in TVET programmes at the secondary level was 43.3 per cent in 2004. In Indonesia and Thailand, the equivalent shares in 2006 were 41.9 per cent and 45 per cent, respectively. As a result, this may prevent future employment prospects in highly productive and remunerated technical and professional fields. See United Nation's Girls' Education Initiative (UNGEI): *The transition from school-to-work from a gender perspective: East Asia and the Pacific* (Bangkok, forthcoming).



*The role of business  
is critical in  
education and  
training*

in Malaysia had attained some level of tertiary education. In Thailand and Indonesia, the shares were only 14.2 per cent and 6.5 per cent, respectively. In comparison, 33.6 per cent of those employed in the Republic of Korea had attained tertiary education.<sup>8</sup>

Increasing the number of quality university graduates in science and engineering fields in particular will be instrumental in meeting skills shortages that can deter growth and competitiveness (see box 5.1). Equally important, the curriculum of higher education and training must be aligned with labour market demands and must provide an enabling environment to nurture and encourage innovation and creativity. To this end, enterprises and employers' organizations can play a critical role in developing curricula that better reflect the needs of the economy and providing apprenticeship programmes that complement classroom learning with practical workplace training.

**Box 5.1**  
**Meeting demand for engineers in Thailand**

A severe shortage of skilled labour has undermined Thailand's ability to attract new foreign direct investment. Since the 1997 financial crisis, Thailand's success at attracting high value-added investment is largely to blame for the current skills shortage. Its difficulty to produce enough qualified engineers from top universities compounds the situation.

The Ministry of Education predicts that if the shortage continues, the current shortfall of 50,000 engineers will become 100,000 by 2010. The shortage has been further exacerbated by an economic recovery plan to rebuild the automobile industry (after a production decline in 1996–1997) by producing 1.8 million vehicles by 2010. To meet this hefty demand alone, Thailand needs an additional 18,850 skilled engineers – an increase of 10,300 from 2005.

The Government and private sector are making attempts to address this shortage of qualified engineers. The Board of Investment has introduced skill, technology and innovation incentives, asking for investments in advanced technology training or even an educational institution. Despite such efforts, Thailand still has a way to go before high-quality tertiary education and technical education programmes are widely available and produce enough skilled workers to fill the gap. The troubling reality is that this labour shortage will endure for an uncertain number of years.

*Source:* Edward Russell: "Thailand's skilled labor shortfall – When will it end?", *Thai-American Business*, Volume 2/2007, pp. 12-14, available at [http://www.amchamthailand.com/asp/view\\_doc.asp?DocCID=1458](http://www.amchamthailand.com/asp/view_doc.asp?DocCID=1458).

## 5.2 Education quality raises concerns about labour market outcomes

It is important to emphasize again that while increasing educational attainment at all levels is certainly essential, there is also a simultaneous and urgent need to improve the quality of education and training to ensure that ASEAN's future workforce is equipped with the cognitive and professional skills necessary to raise

<sup>8</sup> Employment statistics by educational attainment data are from the national statistical offices of Indonesia, Malaysia, Republic of Korea and Thailand, and from ILO, LABORSTA.

both productivity and competitiveness. Evidence is growing to indicate that the quality of education, as assessed by tests of cognitive skills, is significantly more important for economic growth than the quantity of education, as measured by years of formal schooling and mere education enrolment.<sup>9</sup>

Although statistical measures of education outcomes and learning achievement are limited, certain surveys reveal a vital need to improve the quality of education systems in the region. For instance, the Programme for International Student Assessment (PISA) surveys<sup>10</sup> assess the extent to which 15-year-old students have acquired key competencies and cognitive skills needed for work and daily life as an adult. Table 5.3 depicts a comparison of 2006 PISA mean scores in math, science and reading for Indonesia and Thailand and the average scores for 28 mostly middle-income economies and the Organisation for Economic Co-operation and Development (OECD) countries. As the results indicate, students from both Indonesia and Thailand performed below the average score for the 28 middle-income economies and significantly below the OECD average in all three subject areas.

**Table 5.3: Mean PISA scores, 2006**

	Math	Science	Reading
Indonesia	391	393	393
Thailand	417	421	417
28 middle-income economies average	437	443	425
OECD average	498	500	492

*Note:* The 28 middle-income economies are: Argentina, Azerbaijan, Brazil, Bulgaria, Chile, Colombia, Croatia, Estonia, Hong Kong (China), Indonesia, Israel, Jordan, Kyrgyzstan, Latvia, Liechtenstein, Lithuania, Macao (China), Montenegro, Qatar, Romania, Russian Federation, Serbia, Slovenia, Taiwan (China), Thailand, Tunisia and Uruguay.

The 30 OECD countries are: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Republic of Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, Turkey, United Kingdom and United States.

*Source:* OECD: *PISA 2006: Volume 2: Data* (Paris, 2007).

Moreover, the PISA findings indicate that a large proportion of Indonesian students did not, in 2006, possess proficiency levels in math (65.7 per cent), science (61.6 per cent) and reading (58.3 per cent), which are deemed critical for effective and productive participation in life situations. The equivalent share of Thai students not reaching proficiency was only slightly better: 53 per cent in math, 46.1 per cent in science, and 44.6 per cent in reading. These figures compare poorly with the 21.3 per cent, 19.3 per cent and 20.1 per cent, respectively, for the OECD average scores. In sum, the data indicate that substantial numbers of Indonesian and Thai students are not acquiring the essential skills needed for a productive and decent work life as adults.

9 E. A. Hanushek and L. Wößmann: *The role of education quality in economic growth*, Policy Research Working Paper 4122 (Washington, DC, World Bank, 2007).

10 The OECD launched PISA in 1997, using an internationally agreed common framework to monitor the outcomes of education systems in terms of cross-cutting skills and competencies among 15-year-olds. The PISA 2006 survey covered only Indonesia and Thailand. See OECD: *PISA 2006: Science competencies for tomorrow's world: Volume 1: Analysis* (Paris, 2007).

### *Enhancing workforce quality*

Certainly, expanding the coverage of education-quality monitoring systems to include other ASEAN Member Countries needs to be a leading priority. But these surveys raise alarming concerns about human resource development and the capacity of the education and training systems to address skills shortages in the region.

Efforts to strengthen workforce quality and to better align education and training systems to meet labour market demand should be based on a country's economic development objectives, shifting demographics and the existing capacity of education and training institutions. In some ASEAN Member Countries, a shift in public expenditure priorities may be needed.

In terms of public expenditure in education, developing economies in ASEAN allocate a much lower percentage of GDP on education than the more-developed economies. For instance, Myanmar and Cambodia spend less than 2 per cent of their GDP on education, compared with 4.2 per cent in Thailand and 6.2 per cent in Malaysia.<sup>11</sup> Although these data do not reflect private financing in education or the issues related to the data collection and processing of official education spending, the data do indicate that increasing investment in education for some countries should be a critical part of their human resources development (HRD) policy. This should go hand-in-hand with upgrading the efficiency, responsiveness and transparency of the education and training system. Otherwise, more investment will yield little result.

With an ambitious goal for a common market by 2015, ASEAN Member Countries should cooperate in the development of education and training resources. Collaborating with each other on developing curricula, competency standards and assessment materials would avoid duplication and nurture greater harmony among them. For example, education and labour ministries throughout the region might consider pooling and then targeting their resources at priority areas, such as teacher training and development.

Also essential are the continued expansion of the TVET system in the least-developed ASEAN Member Countries and in some middle-income economies and its upgrading of quality and relevance to the labour market. Encouraging cooperation between the business community and education and training providers is an effective and feasible way to reduce the mismatch between TVET outcomes and employment opportunities. Employers' involvement in the management of training institutions helps to keep institutions abreast of changing technologies and practices in the workplace, shifting demand for specific skills and new competency standards. And they become part of the feedback system to training providers on whether or not the quality of training matches workplace expectations.<sup>12</sup> Moreover, employers can provide trainees with practical learning through apprenticeship programmes that enhance the knowledge acquired in the classroom.

11 Data are from the most recent year available: Cambodia (2004), Malaysia, (2004), Myanmar (2001) and Thailand (2005). *Source*: UNESCO Institute for Statistics, accessed July 2008.

12 ILO: *Skills for improved productivity, employment growth and development*, Report V, International Labour Conference, 97th Session (Geneva, 2008), p. 38.

It is critical that countries adopt education and training policy measures that are appropriate to their specific national context. Low-income ASEAN Member Countries should focus first on early childhood and basic education and literacy improvements before increasing access to secondary education and vocational training. At later stages of development, policy-makers should keep in mind the importance of tertiary education in developing innovative and visionary leaders needed to fill the more senior and managerial positions in government and business. Finally, for the ASEAN Member Countries wrestling with slow labour force growth and ageing populations, more incentives to provide lifelong learning should be an increasingly important component of a joint public–private commitment to continued workforce development and enterprise competitiveness.<sup>13</sup>

### 5.3 The challenge of skills shortages

Reflecting the trends in education and training within the ASEAN region previously noted, many countries have been suffering from a shortage of qualified workers. This denotes a mismatch between the supply of workers with appropriate education and skills and the demand for those types of workers. Although skills mismatch and skills shortages are not a new phenomenon, their intensity has increased along with the region's robust economic growth in recent years.

Skills shortages are no longer limited to some multinational enterprises – they also affect the growing number of domestic companies that are trying to move up the value chain and expand into international markets. It appears that skills shortages have become so widespread that they may constrain enterprise competitiveness and pose a serious risk to the region's future development if not successfully addressed.

The discussion on skills shortages is based on two recent enterprise surveys that shed light on the nature and consequences of those deficiencies. The Economist Intelligence Unit's (EIU) Asia Business Outlook Surveys reflect the views of Western multinational enterprises operating in Asia, while the ILO's Workplace Practices Survey picks up the experiences of leading Asian companies (see Annex I). Neither survey is nationally representative. But both provide significant insight into the critical trends and challenges pertinent to all companies striving to enhance their competitive position in domestic and international markets.

The EIU carried out its first Asia Business Outlook Survey between December 2006 and January 2007 and the second survey in December 2007. The two surveys aimed to identify companies' performance, business prospects and key challenges. The respondents were member companies of the EIU's Corporate Network in Asia (241 companies in the first survey and about 600 in the second one), in different industries in China, India and South-East Asia (Indonesia, Malaysia, Singapore and Viet Nam). The majority of the respondents worked in

13 Government policies and incentive schemes to encourage higher investment in lifelong learning can include deduction of training expenditures from corporate tax, compulsory tax exemption schemes that ensure a minimum level of expenditure on training, voluntary industry training levies to finance skills training and apprenticeships, and paid education and training leave. For further discussion, see ILO: *Skills for improved productivity, employment growth and development*, Report V, International Labour Conference, 97th Session (Geneva, 2008), p. 25.

Western multinational enterprises (83 per cent of the total in December 2007; the remaining 17 per cent were Asian companies).<sup>14</sup>

The ILO conducted its Workplace Practices Surveys in China, India and Malaysia in 2007 and in the Republic of Korea in late 2007 and early 2008. These surveys focused on the fastest-growing industries in each country and, within these, the leading domestic companies. The companies were selected because they are at the forefront of product and process innovations, technological development, cutting-edge business practices and human resource management. The ILO surveys sought to identify important human resource management concerns and the role of progressive workplace practices and labour–management cooperation in supporting economic upgrading and enhanced competitiveness. In total, the surveys covered 440 companies in the four countries.

*Shortage of qualified staff is a top business concern*

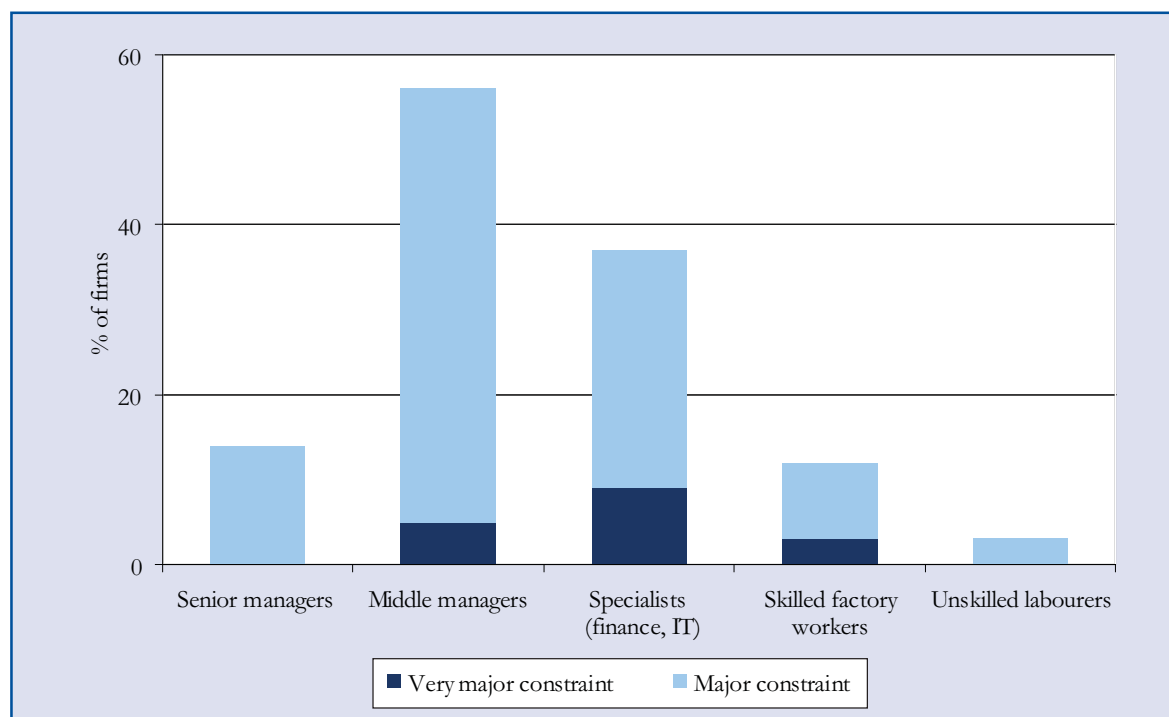
According to the EIU's first Asia Business Outlook Survey, the top business concern in surveyed companies at that time in South-East Asia was a shortage of qualified staff, while other issues related to labour shortages also ranked high (such as wage increases and labour turnover). The survey findings highlighted skills shortages as the main business concern in China and the fourth most important one in India.

Among multinational enterprises in ASEAN Member Countries that are growing rapidly and expanding their workforce, many reported in the second Asia Business Outlook Survey (December 2007) that shortages of middle managers and professionals (such as IT and financial staff) were presenting serious constraints to growth (figure 5.1). The respondents indicated that while the shortages of qualified workers impacted all industries, the most serious effects were in financial, ICT and professional services and the electronics/engineering sector. The survey findings also showed serious skills shortages in managerial, technical and professional occupations in China and India.

The ILO's Workplace Practices Surveys revealed that difficulty in hiring staff is also a challenge to the leading domestic enterprises that are growing fast, upgrading production and harbouring ambitions to become world-class companies. More than 70 per cent of the surveyed employers in Malaysia and China and about 50 per cent in India reported difficulties in recruiting suitable employees.

The survey findings also uncovered some significant variations by type of ownership, industry and region. In Malaysia, for example, public companies experienced greater difficulties in recruiting suitable candidates than multinational enterprises or private domestic enterprises. In India, the ICT industry and the pharmaceutical sector had the greatest difficulties in filling vacancies, while in China it was the greatest issue for electronics companies and the electrical engineering industry. Also in China, the regional dimension of labour shortages was striking: twice as many employers in the eastern region reported having recruitment difficulties compared with those whose businesses were located in the central or western parts of the country.

14 EIU, Asia Business Outlook Survey, 2007 and EIU, Asia Business Outlook Survey, 2008.

**Figure 5.1: Staff shortages as a constraint, South-East Asia (%)**

Source: EIU: Asia Business Outlook Survey, 2008.

When employers were asked in which occupation they have experienced the greatest difficulty in recruiting suitable candidates, the majority in all four countries identified technical and professional occupations. The second greatest difficulty in hiring was for managerial workers in India and Malaysia and for skilled production workers in China (table 5.4). Only a small minority of respondents reported recruitment problems for semi-skilled and unskilled workers. These findings correspond to similar experiences of multinational enterprises operating in the Asian region.

**Table 5.4: Occupations with greatest difficulties in hiring suitable candidates, 2007 (%)**

	Management	Administration	Technical/ Professional	Skilled production	Semi- and unskilled production
China	15.4	1.1	59.3	23.1	1.1
India	35.2	1.9	53.7	5.6	3.7
Malaysia	23.0	5.0	56.0	5.0	11.0

Source: ILO Workplace Practices Surveys, 2008.

The ILO surveys found that the primary reason for the difficulties in recruiting suitable workers was not the lack of applicants but rather their poor quality. Around two-thirds of the employers in China, India and Malaysia highlighted the lack of relevant experience of the applicants and the lack of suitable qualifications (table 5.5). Interestingly, some employers emphasized the importance of communication and soft skills for technical and professional staff, which are increasingly regarded as critical for companies to move up to higher value-added production and to enter global markets.

*Plenty of job-seekers  
but many lack  
relevant education  
and experience*



The findings from these surveys lend support to a recent ADB report that argues that developing Asia is “suffering from a shortage of skills, not a shortage of workers”.<sup>15</sup> The findings of the ILO surveys also corroborate the need for upgrading the educational systems and to build relevant work experience programmes into the curricula of universities and TVET institutions. This could improve the employability of graduates while also meeting the needs of growth industries for workers with the right skills, knowledge and attitudes.

**Table 5.5: Main reason for difficulties in hiring suitable candidates, 2007 (%)**

	Lack of suitable qualifications	Lack of relevant experience	Not enough candidates	Other
China	44.1	47.3	7.5	1.1
India	22.9	43.8	20.8	12.5
Korea, Rep. of	75.4	0.0	18.5	6.2
Malaysia	11.8	45.1	23.5	19.6

Note: Data for the Republic of Korea were collected in late 2007 and early 2008.

Source: ILO Workplace Practices Surveys, 2008.

*Skills shortages undermine enterprise competitiveness*

Skills shortages could undermine enterprise competitiveness in a variety of ways. They can lead to capacity underutilization and productivity losses, increased labour turnover, higher wage increases and higher recruitment and training costs, to mention just a few. As a result, business efficiency suffers. If the problems are widespread, whole industries and entire economies may suffer. Compared with multinational enterprises, domestic enterprises – even the leading ones aspiring for global expansion – are in a disadvantaged position. They often have difficulties in attracting and retaining local talent and are unable to resort to international staff relocation to fill critical skills shortages, a strategy available in global companies.

According to the ILO surveys, labour turnover is particularly high in China – an astonishing 24 per cent annual turnover rate among the surveyed enterprises. The correlation between hiring difficulties and unfilled vacancies is evident in table 5.6: the higher the share of companies with recruitment difficulties, the higher the percentage of unfilled vacancies.

**Table 5.6: Hiring difficulties and unfilled vacancies (%)**

	Share of companies with hiring difficulties	Share of unfilled positions
China	70.1	<10
Malaysia	70.3	9.2
India	50.6	4.3
Korea, Rep. of	34.7	2.9

Note: Data for the Republic of Korea were collected in late 2007 and early 2008.

Source: ILO Workplace Practices Surveys, 2008.

15 ADB: *Asian development outlook 2008: Workers in Asia* (Manila, 2008), p. 65.



When companies have high vacancy rates and compete strongly to attract and retain talent, this tends to generate upward wage pressure because much-needed workers can increasingly move between competing enterprises for a higher salary. Not surprisingly, the ILO Workplace Practices Survey showed that in China, India and Malaysia, wages of technical and production workers were growing at the fastest pace, followed by skilled production workers. Wages among semi-skilled and unskilled workers also were growing, but at lower rates (table 5.7). These trends reflect both skills shortages and the increasingly critical role that technical and professional workers play in product and process innovations and the movement up the value chain.

**Table 5.7: Average monthly earnings and growth rates, selected groups of workers, 2007**

	Average monthly earnings (US\$)			1-year earnings growth rate (%)		
	China	India	Malaysia	China	India	Malaysia
Technical & professional	420	586	1 183	9.4	14.1	6.4
Skilled production	270	278	590	8.1	12.1	5.1
Unskilled & semi-skilled	174	160	336	5.7	10.6	4.4

*Source:* ILO Workplace Practices Surveys, 2008.

The reasons for skills shortages in ASEAN Member Countries, and more generally in developing Asia, are manifold. Some are common challenges, while others are country specific. Common drivers include globalization and technological progress and the need to move up the value chain in the face of growing competition from the two giants, China and India. It is also true that the shortfall in skills stems from the Asian region's economic success: "an explosive economic growth in recent years, accompanied by rapid structural transformation and industrial technological upgrading that fuelled an unrelenting demand for skills". In other words, "the emerging skills gap is largely a symptom of Asia's economic success".<sup>16</sup>

Country-specific factors include demographic trends and national education and training policies. Within the ASEAN region, the workforces in Singapore and Thailand are ageing rapidly, which is reflected by their slow population growth rates and shrinking youth labour force. Other countries still have abundant labour supply. China is also experiencing labour supply constraints; its labour force is expected to stop growing after 2015. As discussed earlier, the quality of basic and secondary education and training in some low-income ASEAN Member Countries is relatively low. In some middle-income countries, such as Malaysia, the enrolment and completion rates for higher education are lower than in other countries at a similar income level. Others, such as Thailand, suffer from both quality problems in tertiary education and a shortfall of graduates in specific technical fields, such as engineering.

16 ADB: *Asian development outlook 2008: Workers in Asia* (Manila, 2008), p. 63.

### *Better management of talent is critical*

Enterprises sometimes can manage some deficits in skills by investing more in workplace training and education of their workers. However, many technical and professional skills require long periods of more formal education. Also, enterprises may not have strong incentives to invest in sought-after skilled workers who could easily hop between jobs in a tight labour market where demand for such skills is high. Nonetheless, the employer respondents in the ILO surveys identified staff training, particularly for managers and professionals, as the most critical area of their HRD strategy.

In addition, enterprises also need to consider the attitudes of well-educated job seekers in their HRD strategy. When asked about the most critical factor in finding and retaining top talent, employers in Malaysia and India in the ILO surveys most frequently referred to competitive salaries (table 5.8).

However, merely raising wages is not a solution in itself. With an increasingly educated and qualified workforce come new staff preferences: company reputation, career opportunities, employment benefits, working conditions and family-friendly policies. In China, for example, more than 50 per cent of the respondents in the ILO survey mentioned the reputation of the business as the most important factor in recruiting top talent. And in the Republic of Korea, where university graduates have the highest share (46 per cent) of jobs in the surveyed companies, more than 40 per cent of the respondents referred to career opportunities, good working conditions and family-friendly policies as recruitment requisites. Another 37 per cent said the good reputation of the business was the most critical factor in recruiting top talent. Only 14 per cent of the respondents mentioned competitive salaries.

**Table 5.8: Most critical factors for recruiting top talent, 2007 (%)**

	Strong reputation	Competitive salaries	Employment-related benefits	Family-friendly policies	Career opportunities	Good working conditions	Others
China	53.1	28.6	8.2	0.0	9.2	1.0	0.0
India	31.8	41.2	1.2	8.2	11.8	5.9	0.0
Korea, Rep. of	36.7	14.4	5.8	6.5	18.7	15.1	2.9
Malaysia	20.4	43.9	19.4	0.0	12.2	4.1	0.0

*Note:* Data for the Republic of Korea were collected in late 2007 and early 2008.

*Source:* ILO Workplace Practices Surveys, 2008.

## **5.4 Policy options to enhance workforce quality and address skills shortages**

Meeting the increasing demand for competitive skills and developing human capital in the ASEAN region requires close collaboration between governments, workers' organizations and the business sector. Governments have a critical role to play in easing skills bottlenecks; improving the relevance of education and skills training are vital components in any national strategy to promote productivity, competitiveness and growth. Short-term policy options include increasing

participation in and the quality of compulsory and secondary education. To this end, policy-makers might consider measures to make schools more accessible, especially for the children of poor families. This can include reducing the direct costs of schooling as well as targeting education-related financial assistance and other services such as transport, school meals and income-generating activities for families to overcome the need for child labour.<sup>17</sup> To improve education quality, greater investment is needed to ensure adequate classroom materials, provide safe and well-maintained school environments and strengthen the quality of teachers through training, support and better salaries.<sup>18</sup>

As well, governments should expand the number and the quality of university and technical and vocational graduates in the fields where skills shortages are the greatest, based on sound labour market information. Attracting leading foreign universities and encouraging cooperation among universities and student exchange programmes could broaden the pool of skilled workers. Countries where the labour force participation rate of women is low, such as Malaysia and Indonesia, should consider measures to encourage the re-entry of educated women into the labour market.

In the long term, building a strong and responsive higher-education and TVET system capable of providing graduates with the skills, knowledge and attitudes required by a competitive economy will be essential. The needed investment will be large, and it will take some time for the benefits to be fully realized. But an immediate and beneficial step in this direction is to build bridges between TVET programmes and universities and the business community. This will rely on the involvement of leading enterprises in the development of relevant curricula and the provision of practical workplace training that can complement classroom education.

Beyond the education system, governments must support workforce development through lifelong learning and skills training programmes. Importantly, government policies should provide fiscal incentives for enterprises to offer training to their workers to improve their skills. Such subsidies are economically justified because enterprises, especially in tight labour markets where labour turnover is high, cannot fully capture the benefits of such training. In addition, tripartite mechanisms can be an effective channel to improve the education and TVET systems in ASEAN as well as lifelong learning and skills development. In Singapore, for example, innovative tripartite approaches have enhanced workforce quality, enterprise competitiveness, and economic growth (see box 5.2). To this end, workers' organizations can contribute substantially to skills development and training based on first-hand understanding of critical workplace needs.

Finally, at the regional level, continued cooperation between ASEAN Member Countries is critical in tackling workforce quality concerns and skills shortages. First, enhancing the existing coverage of monitoring and assessment systems to better measure the impact and outcome of education and training policies and investments for all countries is an imperative. Second, to achieve the vision of an

17 International Programme on the Elimination of Child Labour (IPEC): *Combating Child Labour through Education* (Geneva, ILO, 2008).

18 UNESCO: *Education for All global monitoring report 2008: Education for All by 2015: Will we make it?* (Paris, 2006), pp. 72-79.

ASEAN common market by 2015, regional collaboration could be strengthened to support improvements to the TVET systems and provision in the least-developed countries. Collective effort in this area can help to address the unmet demand for skilled workers in the region and enhance regional labour migration for increased competitiveness, as discussed in Chapter 6.

Even if economic growth in ASEAN, and in the Asian region as a whole, decelerates in the wake of a slowing global economy, the problems of skills shortages at the high end are likely to remain. When employers in the ILO Workplace Practices Surveys were asked about their top concerns related to their workforce in the coming three years, the majority of the Chinese respondents said rising costs while respondents in India and Malaysia mentioned skills shortages. How the challenge of human resource development and skills shortages is managed in ASEAN Member Countries and developing Asia will have a crucial impact on the competitiveness of enterprises, industries and national economies.

### Box 5.2 Tripartite approaches to skills development and training in Singapore

Numerous factors are responsible for Singapore's rapid economic development and global competitiveness. Among them, various tripartite initiatives in the development of skills and the workforce have played a critical part. In 2003, the Government set up the Singapore Workforce Development Agency to improve the employability of the labour force and help workers adjust to an economy shifting from traditional manufacturing to knowledge-based services. The Skills Development Fund, which is supported by collections from a skills-development levy on employers, has provided financial incentives for training on a cost-sharing principle.

Both sides benefit: Workers acquire new skills and, according to impact surveys, a majority of employers have seen improvements in employee retention and productivity, customer satisfaction, quality of product and services, and sales and profitability from their investment in workforce training.

However, research also indicates that the benefits of the training programmes have not been equally distributed among the workforce. Well-educated workers with higher earnings are more likely to participate in training than lower-paid and less-educated workers. Further, age has a negative impact on participation, suggesting that older workers are less likely to take advantage of training opportunities than younger workers. Therefore, there is still a need to involve the more vulnerable members of the workforce in the training opportunities.

*Source: R.D. Lansbury: Creating a knowledge society: Tripartite approaches to skills development and training in Singapore (ILO, forthcoming).*

# Managing the region's human resources for mutual benefit<sup>1</sup>

Labour migration is an increasingly important feature of the ASEAN labour market. An estimated 1.5 million ASEAN workers leave their home countries each year to work abroad, including in other ASEAN Member Countries. The massive and growing movement of workers across borders is a clear sign of closer labour market integration in the region. And it is a principal aspect of all three pillars of the ASEAN Community: the ASEAN Economic Community, Security Community and Socio-Cultural Community.

This chapter examines the contribution of labour migration to productivity and economic growth, focusing mainly on Malaysia, Singapore and Thailand – the three major labour receiving countries in the ASEAN region. The impact of migration on sending countries is briefly highlighted, as is the critical challenge of managing intra-regional labour migration more effectively and fairly.

## 6.1 Labour migration trends

The ten countries of ASEAN can be divided into two broad groups in terms of labour migration: Those that are mainly sending countries (Cambodia, Indonesia, the Lao People's Democratic Republic, Myanmar, Philippines and Viet Nam) and those that are mainly receiving countries (Brunei Darussalam, Malaysia, Singapore and Thailand). Malaysia and Thailand were formerly labour-sending countries but rapid economic development in the 1980s and the early 1990s transformed them into the major labour-destination countries in the region.

Intra-ASEAN migration has helped fill much of the labour shortage in the region's receiving countries. Of Thailand's estimated 1.8 million migrant workers, an estimated 75 per cent are from Myanmar; most of the others are from Cambodia and the Lao People's Democratic Republic.<sup>2</sup> Indonesians represent an estimated 60 per cent of the some 2.1 million migrant workers in Malaysia, which also has a

*Widespread intra-ASEAN migration*

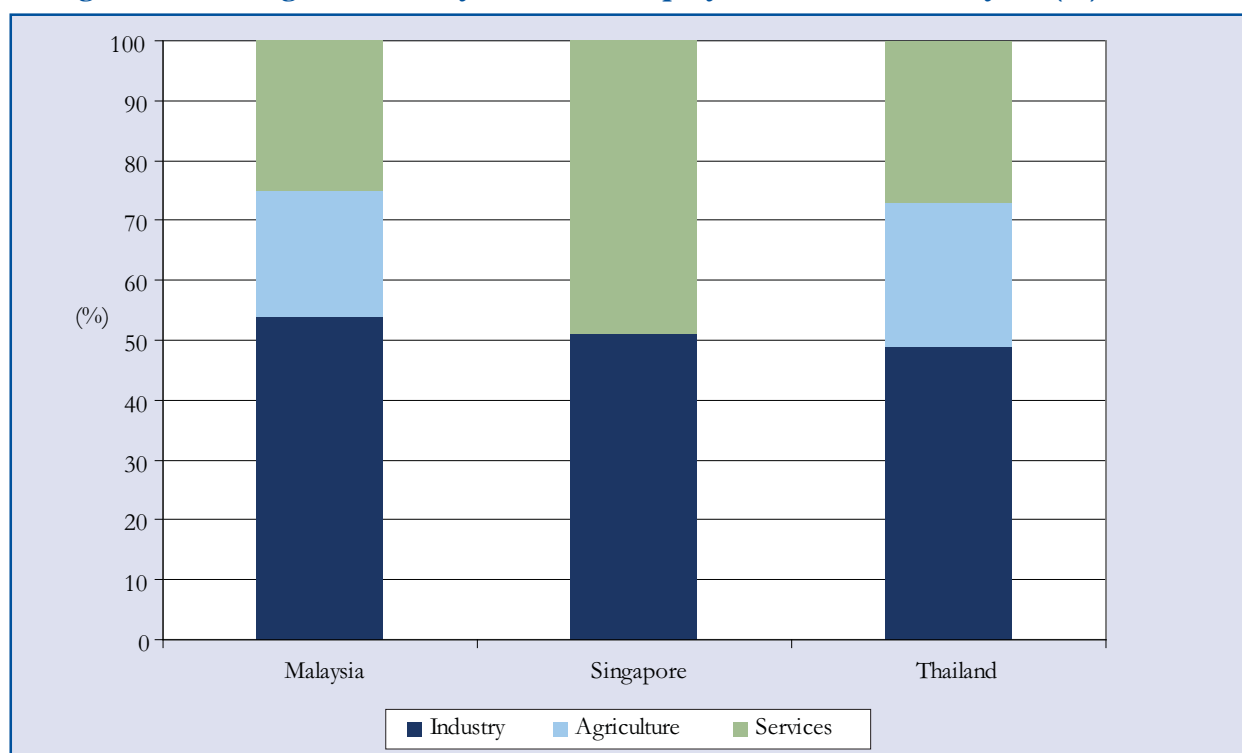
1 This chapter was prepared by the ILO/EU Asian Programme on the Governance of Labour Migration.

2 P. Martin: *The economic contribution of migrant workers to Thailand* (Bangkok, ILO, 2007).

significant number of workers from the Philippines.<sup>3</sup> More than 30 per cent of the labour force in both Brunei Darussalam and Singapore are foreign workers, many from Malaysia, Thailand, Philippines and Indonesia.<sup>4</sup>

In Thailand, agriculture employs an estimated 24 per cent of migrant workers while manufacturing and construction absorb 49 per cent of them, and the services sector takes in the remaining 27 per cent (figure 6.1).<sup>5</sup> In Malaysia, manufacturing employs about a third of migrant workers, household domestic service takes an estimated 25 per cent and construction and agriculture account for another 21 per cent.<sup>6</sup> In Singapore, the services sector employs 53 per cent of migrant workers, while manufacturing takes in 29 per cent and construction another 18 per cent.<sup>7</sup>

**Figure 6.1: Foreign workers by sector of employment, most recent year (%)**



Sources: Kanapathy (2004); Singapore Department of Statistics (2008); Thailand Ministry of Labour (2008)

*Migration policies often differ for workers with different skill levels*

Both highly skilled and low-skilled workers are involved in intra-ASEAN migration. In Singapore, 13 per cent of the 671,100 foreign workers in the country in 2005 were skilled workers.<sup>8</sup> In addition to foreign workers, Singapore also has more than 200,000 permanent residents (non-Singapore citizens) working in the country, most of whom are foreign skilled workers who have chosen to remain in the city-state.

As is the typical case in most labour-receiving countries around the world, Singapore welcomes skilled workers, even offering incentives to become permanent residents. But the Government is strict in admitting lower-skilled migrants,

3 V. Kanapathy: "Migrant workers in Malaysia: An overview". Paper prepared for the Workshop on an East Asian Cooperation Framework for Migrant Labour in Kuala Lumpur, 6-7 December 2006.

4 Singapore Department of Statistics: *Yearbook of statistics* (Singapore, 2008).

5 P. Martin: op. cit.

6 V. Kanapathy: op. cit.

7 Singapore Department of Statistics: op. cit.

8 B. Yeoh: *Singapore: Hungry for foreign workers at all skill levels* (Washington, DC, Migration Information Source, 2007).

controlling the numbers through the work permit system, foreign-worker levy and a limit on how many lower-skilled workers an enterprise can hire.<sup>9</sup> Malaysia also uses a work permit system similar to Singapore's but levies higher-skilled foreign workers a larger amount than lower-skilled workers.

In both Thailand and Malaysia, the existing economic structures are still heavily dependent on labour-intensive industries. Given the porous borders with poorer neighboring countries and the policy of restricting the admission of lower-skilled foreign workers, it is not surprising that both countries have experienced high levels of irregular migration. It is estimated that 70 per cent of Thailand's migrant workers are irregular, as are about half of those in Malaysia. Irregular migrants are a serious concern due to their greater vulnerability to exploitation, abuse of rights, and limited access to channels for redress, and furthermore, for their potential to be a source of political tension between sending and receiving countries. Finding effective mechanisms to regularize irregular migrants in ASEAN, in a way that balances the interests of the migrants, the sending countries, and the receiving countries, is thus of paramount importance for maximizing the economic gains from labour migration.

## 6.2 The contribution of migrant workers to competitiveness, growth and development

Within a competitive market environment, the free movement of labour and capital across countries should lead to a more efficient matching of these resources, resulting in greater overall output and improved productivity and competitiveness. In the case of labour, this typically means the movement of workers from a low-productivity, low-wage country with few decent employment opportunities to a higher-productivity, higher-wage country experiencing a shortage of labour.

*Higher productivity through migration*

For any two such countries, greater combined output is guaranteed – but that does not necessarily mean both countries will be better off. In theory, some form of redistribution should be possible that benefits both sending and receiving countries. In the ASEAN region, the large and growing volume of remittances moving from destination to origin countries has served as the main redistribution mechanism.

Migrant workers can help boost productivity and output in receiving countries in several ways:

- by feeding excess labour demand in rapidly growing sectors and thus controlling labour costs and maintaining profitability in industries that otherwise would lose comparative advantage;<sup>10</sup>
- by filling lower-productivity but necessary jobs, thus allowing (possibly) higher-skilled native workers to find employment in higher-productivity jobs; for example, household domestic workers make this important contribution;

9 *ibid.*

10 V. Kanapathy: "International migration and labour market development in Asia: Economic recovery, the labour market and migrant workers in Malaysia", Paper prepared for the 2004 Workshop on International Migration and Labour Markets in Asia, organized by JILPT, the Government of Japan, OECD and the ILO, Tokyo, 5-6 February 2004.



- by increasing the current profitability of enterprises, thus allowing savings to be generated that can later be invested in improved capital;
- by augmenting domestic consumption and the multiplier effect of consumption on output.

Malaysia admitted nearly 35,000 highly skilled foreign workers in 2007, which played a role in mitigating the country's skills shortages (mainly in the services and manufacturing sectors).<sup>11</sup> The highly skilled foreign workers represented only about 2 per cent of Malaysia's total foreign workers, most of whom are low-skilled. But the skilled workers were strategically located, according to findings from the Workplace Practices Survey the ILO conducted with the Malaysian Employers Federation (MEF) in 2007. Of the 103 leading enterprises surveyed in the country's fastest-growing industries, 52 per cent employed at least one highly skilled foreign worker and 17 per cent employed at least 20 of them (box 6.1 presents some of the findings related to the employment of foreign workers; for more information from the survey, see Annex I).<sup>12</sup>

Recent studies generally find a positive impact of migrant workers on the economies of receiving countries. Researchers at the Thailand Development Research Institute concluded from a study based on the Institute's CGE model in 1996 that the estimated 1.8 million migrant workers in the country contributed about 1.25 per cent of GDP.<sup>13</sup> Estimating the contribution of migrant workers on the basis of their labour productivity, researchers found that their contribution could be as high as 6.2 per cent of GDP, depending on the average productivity of migrant workers relative to native workers.

A study conducted in Malaysia, also using a CGE model, found that migrant workers "contribute importantly to GDP and export revenue and help moderate wage increases". The researchers estimated that a 20 per cent reduction in the number of migrant workers would result in a 1.1 per cent decline in Malaysia's GDP, a fall in exports by 0.9 per cent, a decline in total investment of 1.4 per cent and a reduction in household consumption by 0.8 per cent. This would be accompanied by a rise in the average real wage by half a per cent and in the rental price of capital by 1.1 per cent.<sup>14</sup>

The Workplace Practices Survey in Malaysia found a clear, positive relationship between the employment of foreign workers and the revenue growth of the surveyed enterprises. This was based on the finding that enterprises with foreign workers were more likely to report revenue growth (table 6.3 in box 6.1). For example, 51 per cent of enterprises with foreign workers (either highly skilled or low-skilled) reported revenue growth, as opposed to only 26 per cent of those without any foreign workers.

11 Malaysia Employers Federation: *Country study on competitiveness and workplace practices in Malaysia*, 2008. In Malaysia, highly skilled foreign workers are termed "expatriates" while lower-skilled foreign workers are called "foreign workers".

12 *ibid.*

13 P. Martin: *The economic contribution of migrant workers to Thailand* (Bangkok, ILO, 2007). Martin was careful to note, however, that because of the structural changes in Thailand after the Asian financial crisis, the parameters of this CGE model may not be as fitting.

14 V. Kanapathy: "International migration and labour market development in Asia: Economic recovery, the Labour market and migrant workers in Malaysia", Paper prepared for the 2004 Workshop on International Migration and Labour Markets in Asia, organized by JILPT, the Government of Japan, OECD, and the ILO, Tokyo, 5-6 February 2004.

Of the enterprises with highly skilled foreign workers, 56 per cent reported revenue growth as opposed to only 35 per cent of those without any highly skilled foreign workers. Of enterprises with low-skilled foreign workers, 53 per cent reported revenue growth, compared with only 38 per cent of those without any low-skilled foreign workers. This relationship reflects both the response of fast-growing enterprises to their labour and skills shortages in some occupations (recruiting foreign workers in hard-to-fill vacancies) and the positive contribution of the foreign workers to the financial performance of those companies.

### Box 6.1

#### The ILO/MEF Workplace Practices Survey: Data on foreign workers in Malaysia

In partnership with the Malaysian Employers Federation (MEF), the ILO conducted a Workplace Practices Survey in Malaysia in October 2007. Designed to examine the link between workplace practices and enterprise competitiveness, the survey covered 103 leading companies from six industries: electrical, electronic, metallic, food and beverage, petroleum/chemical, pharmaceutical, and information and communications technology. Selected results pertaining to foreign workers are summarized below:

**Table 6.1: Share of enterprises employing foreign workers**

No. of foreign workers employed	% of enterprises
1 or more	77
20 or more	52
50 or more	50
100 or more	24

**Table 6.2: Share of enterprises employing foreign workers, by ownership**

Type of enterprise	% of enterprises employing foreign workers
Domestic-owned private	65
Domestic-owned public	94
Joint venture private	63
Joint venture public	90
Foreign-owned	88

**Table 6.3: Share of enterprises with revenue growth and those with increased investment in automation, by employment of foreign workers**

Type of enterprise	% of enterprises with revenue growth	% of enterprises with increased investment in automation
Employing at least 1 foreign worker	51	50
Employing at least 20 foreign workers	59	56
Employing at least 50 foreign workers	59	53
Employing at least 100 foreign workers	56	56
Not employing any foreign workers	26	13

Sources: MEF: *Country study on competitiveness and workplace practices in Malaysia, 2008*; Authors' analysis of ILO/MEF survey data.

The survey findings also noted that the employer respondents found that foreign workers are more willing to work overtime than native workers and are more likely to remain in the enterprise, thus reducing both operational and labour turnover costs (figure 6.2). This is not a surprising finding since the terms of their admission visas and work permits effectively “tethers” foreign workers to their employers, and many have to work long hours to re-coup the cost of recruitment and travel. Allowing for greater job mobility would have greater positive productivity effects for the economy as a whole since more efficient producers should be able to offer more attractive wages.

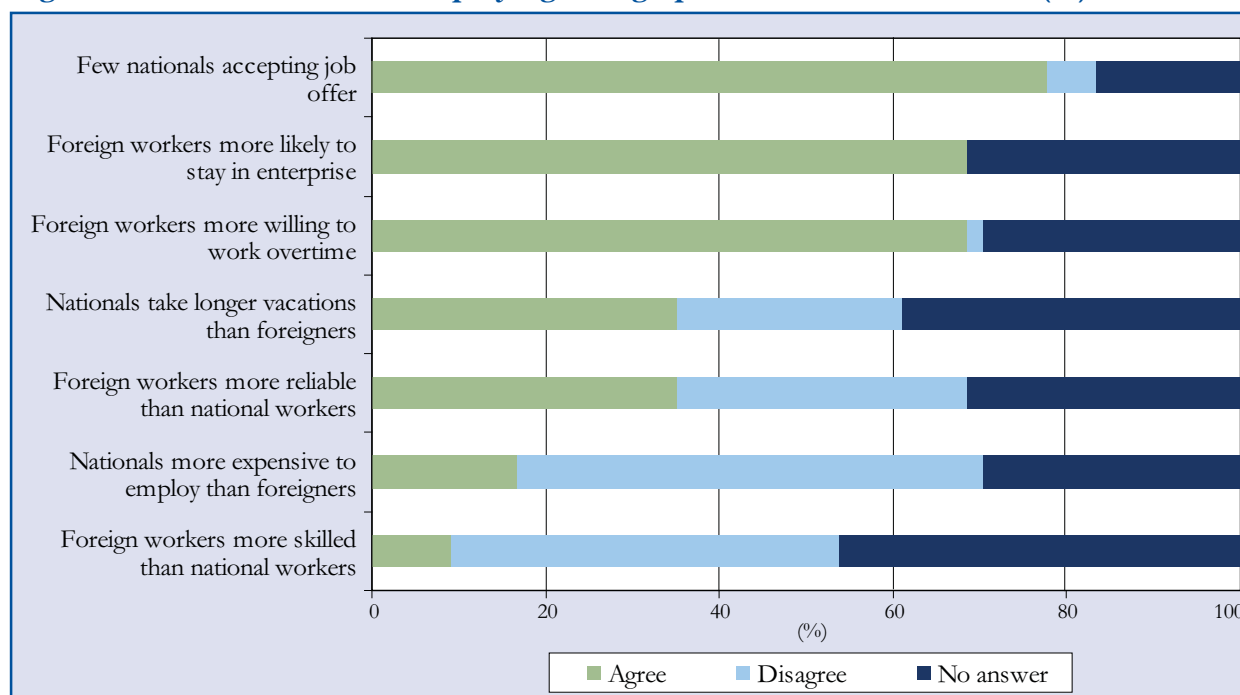
*Recognition of the benefits of migration at the highest level*

The Singapore Government openly recognizes and appreciates the economic contribution of foreign workers to its economy. In a 2008 speech, Gan Kim Yong, Minister of State for Education and Manpower, said that “without foreign workers, Singapore would not be able to fully meet the manpower needs of the businesses” and that the “contributions of these foreign workers have helped to keep [Singapore’s] economy globally competitive and create jobs for Singaporeans.”

Echoing him, Singapore Prime Minister Lee Hsien Loong emphasized that “foreign workers help enlarge the economic pie for the country”,<sup>15</sup> noting that:

- Foreign workers allow the airport, the sea ports, factories, offices, hotels, restaurants and retail outlets to offer better service and business hours 24 hours a day, 365 days a year. They can run the operation, service their customers and thus strengthen Singapore’s overall competitiveness.
- Foreign workers can supplement local workers and allow many small and medium-sized enterprises that do not make large profits, especially the neighbourhood shops, to continue to operate.

**Figure 6.2: Main reasons for employing foreign production workers, 2007 (%)**



Sources: Authors’ calculation from the ILO/MEF Workplace Practices Survey data.

<sup>15</sup> “Foreigners do not take jobs away from locals: PM” in *The Straits Times* (Singapore), 1 May 2008.

In Singapore and Malaysia, which have admitted a significant number of foreign workers for domestic service, there is evidence that allowing generally better-educated resident women to enter the labour force and find productive employment improved productivity. From 1991 to 2007, the labour force participation rate of resident women in Singapore climbed 6.3 percentage points, as opposed to a decline in the labour force participation rate of men by 2.9 percentage points. The increase is particularly high for women older than 30, many of whom would otherwise be occupied with household chores and raising children.<sup>16</sup> In Malaysia, labour force participation of women is also climbing faster than men's participation, although less dramatically than in Singapore.

A major concern on the admission of foreign workers is that it will drive down wages and thus discourage investment in automation and technology upgrading; in the long run, it will have a negative impact on productivity. Studies on the subject are scarce, but the recent ILO Workplace Practices Survey findings suggest that this is not necessarily true (table 6.3 in box 6.1).

In the survey, 50 per cent of the employers with at least one foreign worker (highly or low skilled) reported increased investment in automation in 2007, compared with only 13 per cent of those without any foreign workers. Among enterprises with highly skilled foreign workers, 57 per cent reported increased investment in automation, compared with only 24 per cent of those without any highly skilled foreign workers. And 49 per cent of enterprises with low-skilled foreign workers reported increased investment in automation, compared with only 34 per cent of those without any low-skilled foreign workers.

For sending countries, the emigration of their workforce raises two important concerns. The migration of low-skilled workers such as domestic helpers has been fraught by many reports of maltreatment, including physical violence and harassment. The other concern is over the emigration of highly skilled workers which can lead to "brain drain", the deterioration of their own productivity and a reduction in domestic growth, both in the short and the long term. These are valid concerns that require greater cooperation between sending and receiving countries as well as further analysis of the labour market for highly skilled workers. Loss of the most experienced workers, for instance, has been known to disrupt the usual processes of skill formation in related occupations. Similarly, local industries may lose the capacity to innovate or build on certain in-house technological advantages to produce new product lines when they constantly lose their most talented technicians through emigration.

There are, however, some significant mitigating factors. Most prominently, sending countries benefit from the remittances of their migrant workers. The World Bank estimated remittances into ASEAN countries at US\$29 billion in 2006, about 16 times the 1986 level of \$1.8 billion.<sup>17</sup> As a proportion of GDP in 2006, remittances accounted for 13 per cent in the Philippines, 7.9 per cent in

*Migrant workers  
boost female labour  
force  
participation in  
receiving countries*

*Employment of  
migrants and  
technological  
progress go hand-in-  
hand*

*Remittances could  
spur development  
in sending countries*

16 Singapore Department of Statistics: *Yearbook of statistics* (Singapore, 2008). This cannot be entirely attributed, of course, to the arrival of foreign domestic workers. A portion of the increase would just be due to the improving economic opportunities for women as a result of the expanding economy and their increasing level of education.

17 World Bank: Remittances Data, 2008. Available at: [http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1110315015165/RemittancesData\\_Jul08\(Release\).xls](http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1110315015165/RemittancesData_Jul08(Release).xls)

Indonesia, 4.1 per cent in Cambodia and 1 per cent in Malaysia. There is evidence that many households use these remittances to invest in the education of their children.<sup>18</sup>

More broadly, large inflows of remittances also provide funds that the government or the private sector can more easily access to invest in much-needed physical and human capital in their own countries, possibly helping to boost productivity in the long run. For instance, the Philippine Government is considering plans to issue bonds targeted specifically to overseas Filipino workers.<sup>19</sup>

### 6.3 Managing migration for economic growth and equitable development: Key challenges

Two of the major labour-receiving countries in ASEAN – Singapore and Thailand – have below-replacement fertility rates. In the absence of labour migration, as discussed in Chapter 2, productivity growth in these countries (and in other ASEAN Member Countries for that matter) needs to increase in order to maintain current levels of GDP growth. Meanwhile, fertility rates in Cambodia, Indonesia, the Lao People's Democratic Republic, Myanmar and the Philippines remain above replacement, implying that population growth will continue to be significant in the foreseeable future.<sup>20</sup>

Given that the wide per capita income and wage gaps across countries are likely to persist into the future, the pressure to migrate and to accept labour migrants will continue to be considerable in the near and medium term. This underscores the importance of developing regional and national mechanisms to ensure fair working conditions for migrant workers and the protection of their rights. This makes it more likely that mobile workers from ASEAN will choose to work within the region instead of elsewhere in the developed world that may offer some combination of better pay and/or better working conditions.

There is no inherent conflict between labour migration and labour productivity growth. Rather, labour migration should be seen as a possible instrument to improve productivity and competitiveness in both receiving and sending countries. To manage this opportunity prudently and fairly, the following recommendations are offered:

- The effective management of labour migration should be regarded as part of the larger issue of managing both economic and social change, especially over the long term.
- The quality of data on labour migration in ASEAN countries is widely uneven. Countries should work on their own labour market information systems as

18 G. Ducanes and M. Abella: *Overseas Filipino workers and their impact on household employment decisions*, ILO Asian Programme on the Governance of Labour Migration Working Paper No. 8 (Bangkok, ILO, 2008).

19 "BSP, gov't OK bond offering to OFWs" in *the Philippine Daily Inquirer* (Manila), 4 November 2007.

20 Total fertility rate in Viet Nam is below replacement level. Those in Myanmar and Indonesia are only slightly above replacement.

well as collectively to develop better-quality data on labour migration. In destination countries, this is necessary to better gauge labour market needs and to manage the demand for labour. In sending countries, this is required to raise awareness of the occupations in which migrant workers are likely to be needed in the future and to help them design relevant training programmes for their outgoing workers.

- A more efficient matching of labour and capital across borders is facilitated when a system is in place for recognizing skills qualifications earned abroad. ASEAN countries should move faster towards developing such a system, partly through supporting less-developed countries to design their own national qualifications framework and through Mutual Recognition Agreements, focusing on specific professional occupations (see box 6.2).
- The main benefit to sending countries of labour migration comes in the form of remittances. Sending countries – and within these, governments and the private sector alike – should promote the development of financial market instruments suited to the capacity and levels of income and savings of migrants.
- To settle issues that may be impeding a more efficient and mutually beneficial movement of workers across countries in the region, there should be a platform for regular dialogue to settle contentious issues related to labour migration.
- The ASEAN Declaration on the Promotion of the Rights of Migrant Workers (2007) is a major step by ASEAN Member Countries in recognizing the increasingly important role of the region's mobile workers, both highly and low-skilled, in the regional economy, and their responsibility in ensuring the protection of migrant workers' rights. Countries should ensure that the Declaration is executed soon in an effective and fair manner to maximize the benefits of labour migration for both economic growth and social development.

### Box 6.2 Development and harmonization of national qualifications frameworks in ASEAN

To improve regional governance of labour migration, the management of how skilled workers are assessed and accredited is emerging as an important issue throughout ASEAN Member Countries. A major barrier to achieving an ASEAN-wide skills recognition system has been the uneven development of national skills qualifications frameworks across the countries more recently admitted into ASEAN. In response, a subregional skills recognition arrangement initiative was proposed specifically for Cambodia, the Lao People's Democratic Republic, Myanmar, Viet Nam and also for Thailand. The regional qualifications framework was meant to complement the national qualifications frameworks. Competency standards in certain occupations would also be established. However, in 2008, the ASEAN Economic Ministers deferred the development of a regional qualifications framework until all countries had developed their own national qualifications system.

A related initiative, the ASEAN Framework Agreement on Services, aims to eliminate restrictions to trade in services of ASEAN Member Countries and deals with skills and competency recognition. Recent developments include the Mutual Recognition Arrangements (MRAs), a framework designed to facilitate the freer movement and employment of qualified and certified personnel within the region. MRA's have been established for engineering and architecture, among others. These various intra-regional initiatives to accredit occupational qualifications can support different economies in ASEAN to address changing labour market demands and meet rising skills shortages.

The ILO is assisting ASEAN Member Countries in establishing a skills recognition system by updating its Regional Model Competency Standards. The ILO is also: helping to generate more accurate information on labour markets; assisting sending countries in training and preparing their workers for employment abroad; conducting research on remittances and returning migrants; and developing a platform for regular dialogue on labour migration issues in the region.

*Source:* ASEAN Secretariat, <http://www.aseansec.org/19087.htm>; ASEAN Australian Development Cooperation Programme (AADCP), Enhancing Skills Recognition in ASEAN, Project Extension Proposal. For more information on the ILO's work on labour migration in the ASEAN region, see: <http://www.ilobkk-migration.org/>



# Looking ahead to 2015

As ASEAN Member Countries continue their effort to accelerate the establishment of the ASEAN Community by 2015, they are also pushing forward their commitment to promote decent and productive work.<sup>1</sup> Informed projections and likely scenarios can assist policy-makers to identify appropriate policy responses at both the national and regional levels. The prospects for successful economic integration, improved competitiveness and more productive employment in the coming years are significantly influenced by demographic factors, labour force trends, economic integration, rapid technological change and global competition. But national and regional policy responses are also important.

Projections regarding population growth, labour force participation and labour supply are relatively straightforward, although margins of error increase the further these projections extend into the future. But given an increasingly interdependent global economic environment, assessing economic growth and productivity improvements and their impact on labour markets is much more difficult. With these limitations in mind, this chapter begins by highlighting projected changes in the demographic structure and labour force, followed by projections of economic growth and productivity, based largely on the projected demographic trends.

The discussion of productivity focuses on two emerging challenges: i) the need to accelerate labour productivity growth to maintain recent rates of economic growth in the context of slowing labour force growth and ii) the need to increase productivity in agriculture to ease food price pressures and their negative impact on the population, especially on the poor. The last section of the chapter presents some projections on the combined impact of demographic trends and economic developments on the structure of employment in terms of the sector, geography and status of employment.

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1 At the 14th ILO Asian Regional Meeting, in September 2006, representatives of governments and workers' and employers' organizations committed themselves to an Asian Decent Work Decade – for the period up to 2015 – during which they will make concerted and sustained efforts to realize decent work in all countries of Asia and the Pacific. More information on decent work can be found at [www.ilo.org/public/decent.htm](http://www.ilo.org/public/decent.htm).

## 7.1 Demographic structure and labour force growth

### *Rapid population growth*

In looking at prospects for productive employment, the supply side offers a starting point. What will happen to the growth of the working-age population, the primary source of labour force growth? Between 2007 and 2015, ASEAN's total population is expected to grow by 55.2 million (or 9.7 per cent) to around 626 million. Most of this growth, 33.2 million, will occur in the prime-age population (25–54 years). Projections indicate the population aged 55 years and older will grow by 24.2 million (36.1 per cent), while the child and youth population younger than 25 years is expected to shrink by about 2.2 million (0.8 per cent).<sup>2</sup>

### *Demographic trends in some countries are favourable to economic growth*

The projected increase in the relative share of ASEAN's prime-age population from 40.9 per cent in 2007 to 42.6 per cent in 2015, together with the expected decline in the proportion of economic dependants in the region, can result in a "demographic dividend". A larger potential labour force presents a window of opportunity, and the demographic dividend could be translated into higher rates of savings and greater investment. Rising investment, in return, can lead to capital deepening, an increase in economic growth potential and productivity growth in terms of output per worker.<sup>3</sup> Compared with China, where the share of the prime-age population is expected to increase by only 0.5 per cent between 2007 and 2015, demographic trends in ASEAN will be more favourable to economic growth – a potentially important advantage over ASEAN's giant northern neighbour.

Countries such as the Republic of Korea, Singapore and Thailand already have benefited in terms of rapid growth in investment, productivity, employment, and improvements in health and education. Available research indicates that favourable demographic trends in previous decades in those countries accounted for between one-quarter and one-third of the total growth in per capita income.<sup>4</sup> Such a demographic dividend is not guaranteed, however. It depends critically, among other things, on whether or not countries can mobilize sufficient capital to productively employ the new potential workers.

Within ASEAN, demographic projections vary significantly by country. Between 2007 and 2015, Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, Myanmar, the Philippines and Viet Nam will all see an increase in their share of population aged 25–54 years. This is considered an opportunity to reap the benefits of their demographic dividends (table 7.1). Where labour force participation among women is relatively low, for example in the Philippines, Malaysia and Indonesia (see table I.2.1 in the Statistical Annex), the benefits are likely to be smaller.

Some countries have limited time remaining; in Indonesia, for instance, the window of opportunity is closing rapidly because the prime-age share of its total populations will stop growing soon after 2015.

2 UN, World Population Prospects 2006 Revision Database.

3 ILO: *Realizing decent work in Asia*, Report of the Director-General, Fourteenth Asian Regional Meeting (Busan, Republic of Korea, August-September 2006), p. 19.

4 D. E. Bloom and J. G. Williamson: "Democratic transitions and economic growth in emerging Asia", in *World Bank Economic Review*, Vol. 12, No. 3, September 1998, pp. 419-456.

**Table 7.1: Population aged 25–54, total and % of total population, 2007 and 2015**

	Total population (000s)		Population aged 25–54 (000s)		Share of population aged 25–54 in total (%)	
	2007	2015	2007	2015	2007	2015
ASEAN	571 345	626 534	233 785	266 992	40.9	42.6
Brunei Darussalam	390	453	177	206	45.3	45.3
Cambodia	14 444	16 641	4 658	6 239	32.3	37.5
Indonesia	231 627	251 567	97 085	110 300	41.9	43.8
Lao PDR	5 859	6 699	1 896	2 429	32.4	36.3
Malaysia	26 572	30 047	10 575	12 320	39.8	41.0
Myanmar	48 798	51 998	20 907	23 496	42.8	45.2
Philippines	87 960	101 090	31 326	37 871	35.6	37.5
Singapore	4 436	4 809	2 144	2 081	48.3	43.3
Thailand	63 884	66 763	29 477	29 581	46.1	44.3
Viet Nam	87 375	96 467	35 539	42 470	40.7	44.0
China	1 328 630	1 388 600	612 025	647 245	46.1	46.6
India	1 169 016	1 302 535	439 741	515 261	37.6	39.6

Source: UN, World Population Prospects 2006 Revision Database.

In Brunei Darussalam, the share of the prime-age population will remain relatively stable between 2007 and 2015, while in Singapore and Thailand it will decline. These latter countries are ageing relatively rapidly – a trend that will probably accelerate in the decades to come. Both countries are expected to experience a rapid increase in the number of people aged 55 and older. In these countries, demographic trends will constrain the supply of labour, which, in turn, could lead to widespread labour shortages in labour-intensive export-oriented manufacturing and other industries. In addition, the increasing demand for services and products for their ageing populations may create additional labour shortages in institutional, social and health care services catering for the elderly. As a result, demand for migrant workers is expected to increase in these countries in the near future.

Most of ASEAN's population increase will occur in urban areas. Aside from natural increases, analysts expect rural-to-urban migration to continue or even escalate. Between 2007 and 2015, the region's urban population is expected to grow by 64.1 million, or nearly 25 per cent, while the rural population will shrink by 9 million, or 2.9 per cent. By 2015, an estimated 52 per cent of ASEAN's population will live in urban areas, compared with about 46 per cent in 2007. Around 80 per cent of the increase in the urban population will occur in Indonesia (30.4 million additional urban dwellers), the Philippines (13.8 million) and Viet Nam (6.6 million).

In terms of urban population growth, the most dramatic shifts will take place in those countries where rapid population growth is combined with massive migration from rural to urban areas. Cambodia and the Lao People's Democratic Republic will see explosive urban population growth (43.7 per cent and 33.3 per cent, respectively) between 2007 and 2015. Countries experiencing such rapid urban

*Other ASEAN countries ageing rapidly*

*Majority of ASEAN's population will live in urban areas by 2015*

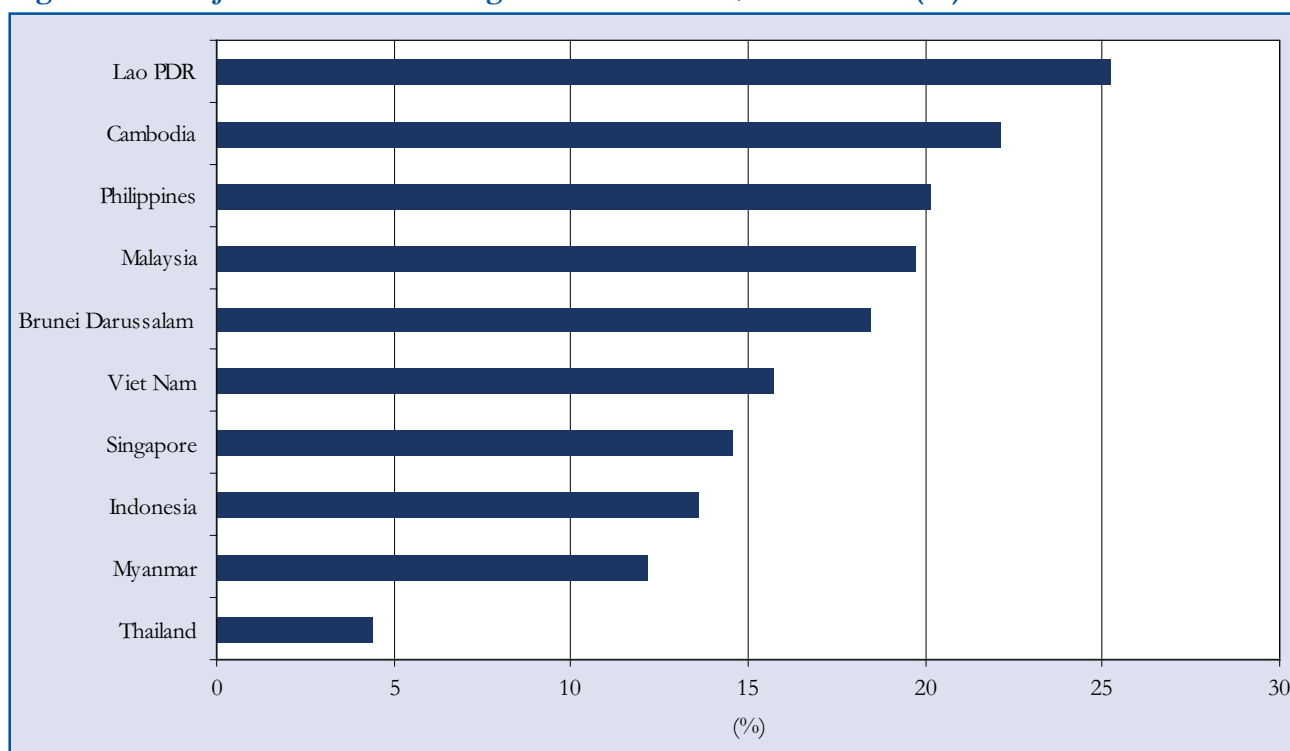
population growth will face the challenge of job creation in their bulging cities. Yet, Cambodia and the Lao People's Democratic Republic as well as Myanmar, Thailand and Viet Nam are projected to remain predominantly rural even beyond 2025.

*ASEAN's labour  
force expanding by  
40 million*

ASEAN's labour force is large and growing. In 2007, it stood at about 285 million and is expected to increase by around 40 million, or 14.1 per cent, between 2007 and 2015. This represents annual labour force growth of slightly below 1.7 per cent – lower than the average annual labour force growth rate of 2 per cent registered between 2000 and 2007.

Figure 7.1 shows that the fastest labour force growth is projected to occur in countries with the greatest numbers of people who are poor and the largest informal economies, among them Cambodia (22.1 per cent), the Lao People's Democratic Republic (25.2 per cent) and the Philippines (20.2 per cent). Malaysia and Viet Nam will also experience significant labour force growth (19.7 per cent and 15.8 per cent, respectively). In Thailand, on the other hand, the rate of labour force growth is slowing, primarily due to the demographic trends previously discussed. In the years ahead, the country is likely to encounter an emerging labour shortage, with economic and social consequences, including the growing importance of skills development and adequate social security coverage.

**Figure 7.1: Projected labour force growth in ASEAN, 2007–2015 (%)**



Sources: ILO, LABORSTA, Economically Active Population Estimates and Projections (Version 6).

Population ageing does not automatically result in a growth deceleration or a contraction in the labour force. Government policies do matter. In Singapore, for example, where the working-age population is projected to remain stagnant between 2007 and 2015, a combination of recently introduced incentives to raise labour force participation and a well-managed labour migration policy is expected to increase the country's labour force by 14.6 per cent between 2007 and 2015 – more than three times the projected labour force growth in Thailand.

## 7.2 Productivity and economic growth

Changing demographics and slowing labour force growth have significant implications for future economic growth and development prospects. Most importantly, in countries that are expected to see a significant slowdown in labour force growth in the years ahead, accelerating labour productivity growth will be essential to sustaining healthy economic growth rates and promoting future economic development and increased living standards.

Table 7.2 provides historical GDP and labour productivity growth rates for the period 2000–2007 in the ASEAN region and individual countries. Also included is the projected economic growth that would result over the 2007–2015 period, taking the expected labour force growth with historical productivity growth rates. The table also shows the increase in annual labour productivity growth needed if historical economic growth rates are to be maintained.

*Demographic challenges highlight the need for increased productivity*

**Table 7.2: Historical and projected growth in GDP and labour productivity, 2000–2007 and 2007–2015**

	Real GDP growth (%)		Labour productivity growth (%)	
	2000-2007 (Actual)	2007-2015 (With no increase in productivity growth)	2000-2007 (Actual)	2007-2015 (Needed)
ASEAN	5.6	5.2	3.3	4.1
Cambodia	9.5	5.8	3.1	6.8
Indonesia	5.1	5.1	3.5	3.4
Malaysia	5.1	5.5	3.2	2.8
Myanmar	11.7	9.3	7.7	10.1
Philippines	5.0	4.4	2.0	2.6
Singapore	5.1	2.9	1.2	3.3
Thailand	5.0	3.8	3.3	4.4
Viet Nam	7.7	7.2	5.3	5.8

*Notes:* ASEAN productivity figures exclude Brunei Darussalam and Lao PDR. Productivity figures for 2007 calculated on the basis of official employment estimates produced by national statistical offices and ILO calculated GDP figures based on 2006 observed values together with 2007 GDP growth rates from the IMF, World Economic Outlook April 2008 Database. Future employment growth calculated on the basis of projected labour force growth, together with 2007 unemployment rate estimates.

*Sources:* The Conference Board and the Groningen Growth and Development Centre, Total Economy Database, January 2008, <http://www.conference-board.org/economics>; National statistical offices; ILO, Economically Active Population Estimates and Projections (EAPEP) Database, Version 6.

If labour productivity growth does not accelerate, the ASEAN region's economic growth rate is projected to slow by 0.4 percentage points, down to 5.2 per cent. Countries that would be most adversely affected under this scenario include Cambodia, where growth would decline sharply from 9.5 per cent to 5.8 per cent; Myanmar, where growth would decline from 11.7 per cent to 9.3 per cent; Singapore, where growth would fall sharply to 2.9 per cent, from 5.1 per

cent; Thailand, where growth would decline from 5 per cent to 3.8 per cent; and the Philippines, where annual growth would slide to 4.4 per cent, from 5 per cent.

How could countries maintain robust economic growth rates in light of the expected slowdown driven by demographic changes? Increased labour productivity growth will be essential. ILO estimates of how much growth would be needed over the 2007–2015 period to maintain the GDP growth rates registered since 2000 indicate that annual labour productivity growth must accelerate from 3.3 per cent to 4.1 per cent in the ASEAN region.

In Cambodia and Singapore, productivity growth would need to more than double. In Thailand, productivity growth would need to accelerate from 3.3 per cent to 4.4 per cent, while Myanmar and the Philippines would also require a significant acceleration. In Indonesia, Malaysia and Viet Nam, the productivity growth rates registered over the 2000–2007 period appear roughly sufficient, given expected employment growth. Yet, achieving historical productivity growth rates is not a given.<sup>5</sup>

*Improvements in  
basic education still  
needed*

Policies to support increased labour productivity in ASEAN Member Countries at different stages of development were discussed in Chapter 3. But looking at available data, it is clear that one basic requirement for supporting robust productivity growth in the years ahead will be improved educational outcomes in the region. Looking ahead to 2015, projections in primary and lower-secondary school enrolments raise concerns about the future workforce of ASEAN as a whole. Based on current trends in educational enrolment and future estimates of economic and demographic growth, as many as 14.1 million children in the region may still not be enrolled in school by 2015, representing 14.6 per cent of the total primary and lower-secondary school-age population.<sup>6</sup> Without concerted efforts to achieve basic education for all children now, countries are risking a future labour force that could lack the essential skills that serve as a basis for increasing national competitiveness in rapidly changing regional and global markets.

*Agricultural  
productivity growth  
as a catalyst for  
poverty reduction*

While productivity needs to increase across all three economic sectors (agriculture, industry and services), nowhere is the call for increased productivity more acute than in the region's agricultural sector. Annual labour productivity growth in agriculture in the ASEAN region has averaged approximately 3.1 per cent since 2000. Productivity improvements in agriculture have been crucial to increasing agricultural output: More than 98 per cent of the growth in agricultural value added has been due to increased labour productivity, with less than 2 per cent due to increased employment in agriculture. This trend has occurred in the context of rapid urbanization in many ASEAN countries. If this trend persists, the region will be on track to producing US\$27 billion (33 per cent) in additional agricultural output in 2015.

5 Achieving higher than expected employment growth rates can reduce the productivity growth rates needed to achieve economic growth rates. For instance, Indonesia's economy expanded at the rapid pace of 6.3 per cent in 2007 with only 1.3 per cent labour productivity growth. This was possible due to very rapid employment growth of 4.7 per cent.

6 These figures represent upper-bound estimates of school non-net enrolment. Using lower-bound projections, approximately 11 million children may not be enrolled by 2015, representing 11.4 per cent of the primary and lower-secondary school-age population. Authors' calculations based on IMF, World Economic Outlook Database, April 2008; UN Population Prospects 2006 Revision Database; UNESCO Institute for Statistics; World Bank, World Development Indicators, 2008.



If, on the other hand, average annual growth in agricultural labour productivity could be accelerated by 1 per cent over the 2007–2015 period, this would result in \$10 billion per year in extra value added in the sector by 2015. Is this goal achievable? Based on current trends, agricultural labour productivity in the ASEAN region is projected to grow from US\$795 per worker in 2006 to \$1,130 in 2015. Accelerating annual growth by 1 per cent would require output per worker to rise to \$1,230, or an additional \$100 per worker by 2015. Assuming 250 days of work for the average agricultural worker, this implies that 40 cents per day in additional output per worker by 2015 would result in \$10 billion in additional agricultural output in the region.

Because Indonesia, Malaysia, the Philippines, Thailand and Viet Nam together account for more than 96 per cent of the agricultural value added produced in the ASEAN region, improvements in productivity in these countries are likely to have the most beneficial impact regionally in terms of food prices.

However, as discussed in Chapter 4, improving productivity in agriculture is also crucial in countries such as Cambodia and the Lao People's Democratic Republic in which a majority of workers are engaged in the agricultural sector. With targeted investments focused on boosting agricultural productivity, the goal of increasing agricultural productivity growth by 1 per cent is achievable – and it would help to put downward pressure on food prices while at the same time improving rural incomes, thereby raising living standards and helping to reduce poverty in the region.

### 7.3 Structure of employment, vulnerability and the working poor

Accelerated ASEAN integration and globalization, among other factors, will continue to spur further structural transformation. By 2015, the services sector is expected to become the largest sector in terms of employment in ASEAN, accounting for 41.1 per cent of total employment in 2015, up from 36.5 per cent in 2007. The share of agricultural employment is expected to drop from 44.5 per cent in 2007 to 36.5 per cent in 2015, while the share of industrial employment is expected to grow from 19 per cent in 2007 to 22.4 per cent during the same period. Underlying these trends, according to projections, employment in ASEAN's services sector will increase by 28 million between 2007 and 2015, with employment in industry growing by 17.6 million and employment in agriculture declining by 7.1 million.<sup>7</sup>

The movement of employment into services indicates that total economy productivity growth will increasingly depend on productivity growth in services. Hence, this sector will play a critical part in determining living standards in ASEAN. The services sector is vastly heterogeneous, encompassing jobs that range from wealth management to petty trade at street stalls. Nonetheless, the sector is typically characterized by more direct interactions between the employee and the customer, indicating a need for ASEAN Member Countries to strengthen skills and training in areas such as “soft” skills, communications, marketing, and innovation.

*Most of the jobs will be created in the services sector*

7 ILO: Global Employment Trends Model, 2008.



*Vulnerable  
employment remains  
massive*

Furthermore, with employees coming into more frequent contact with the customer, harmonious labour–management relations built on social dialogue can play a critical role in ensuring that employees are more dedicated and motivated, thereby better servicing their customers while also increasing enterprise productivity.

The share of those vulnerable in total employment will remain enormous. In 2015, more than 55 per cent of ASEAN’s workers are likely to remain vulnerable – defined as the share of own-account workers and contributing family members in total employment – although this represents a decrease from 60.1 per cent in 2007. Importantly, vulnerability is not only restricted to own-account workers and contributing family members but also includes those wage workers who are in casual, part-time or temporary employment and other forms of atypical employment. This aspect of vulnerability is expected to continue to increase in ASEAN, given competitive pressures and the continued search for labour market flexibility.

Working poverty is expected to continue to decline. But even by 2015, hundreds of millions will not earn enough to lift themselves and their families above the US\$2 per day poverty line. The current economic volatility and rising food and energy prices suggest that many of these working poor face an even direr situation and that millions more households in ASEAN are vulnerable to the growing threat of falling into poverty. In particular, poverty is increasingly becoming an urban problem on the heels of rural-to-urban migration. In Indonesia for example, while the number of poor is expected to decline by 2015, the number of urban poor is expected to rise.<sup>8</sup> This rapid urbanization, which will be especially pronounced in Cambodia, Indonesia, the Lao People’s Democratic Republic and Viet Nam, will also call for a greener economy as urbanization poses the danger of serious environmental degradation in the form of pollution, waste accumulation and exploitation of natural resources.

The projections presented here are in no way intended to be presented as foregone conclusions. Rather, they are given to highlight some key issues and challenges within the ASEAN region as Member Countries strive to move towards a more integrated and harmonious ASEAN Community in the years ahead. And while all potential scenarios for demographic change, labour force growth and the structure and quality of employment in the region have not been exhausted in this discussion, it is clear from the data available today that the ASEAN region has great potential for growth and continued development.

Whether or not this potential will be realized will depend in large part on the extent to which favourable demographic trends and rapid urbanization can be leveraged into an expansion in decent and productive employment opportunities for the region’s workers. It also depends on whether challenges such as persistent vulnerability, large segments of workers trapped in low-productivity employment, and increasing numbers of dependants in need of strong social protection mechanisms can be successfully addressed.

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8 ILO: *Labour and social trends in Indonesia 2008: Progress and pathways to job-rich development* (Jakarta, 2008).

# Recommendations

This report has highlighted some major labour and social trends and some key policy challenges related to those developments. Many of the trends are closely linked to the process of economic integration and the vision for building a “people-orientated ASEAN Community”. This chapter offers some recommendations on the way forward to promoting productivity, competitiveness and social progress. In each of these areas, respect for principles and rights at work, strong labour institutions and mechanisms for dialogue and consultations provide the bedrock for sustainability.

## Support productivity growth in all sectors

Labour productivity is a principal determinant of competitiveness, employment and poverty reduction. However, if productivity growth is not broad based, it can undermine sustained economic growth, shared prosperity and thus, social progress. In this respect, promoting growth in small and medium-sized enterprises (SMEs) and the agricultural sector will be critical to the healthy growth of many national economies within the ASEAN region. The agricultural sector and SMEs continue to experience particularly low levels of productivity, which is hindering national competitiveness, employment quality and advances in poverty reduction.

Governments should make concerted efforts to help SMEs move from “survival” to “sustainability”, which will be crucial for expanding domestic markets and improving the competitiveness and productivity of the overall economy. It is also a path to moving from the informal to the formal economy. Skills are the necessary tools for empowerment of both workers and enterprises. Management, accounting and marketing support, access to finance and technology, safety and health systems are also critical. Progress has been achieved through the ASEAN Policy Blueprint for SME Development 2004-2014 initiative and other programmes, but even more needs to be done.

### *Suggested actions:*

- Given the sheer size of the SME sector, focusing limited resources on ‘priority integration sectors’ could produce even more tangible results while promoting regional integration. There are a large number of SMEs in priority sectors such as wood-, rubber- and agro-based products, fisheries and tourism. Fostering the capabilities for inter-firm linkages and encouraging relationships – through local economic development, clustering approaches and value-

chain-based initiatives – would help small and medium-sized firms to integrate into local, domestic, regional and ultimately global production networks and move to a more sustainable development path.

More needs to be done to improve the productivity of employment in agriculture, where the majority of ASEAN's poor works. With soaring food prices, it is clear that agricultural production and productivity have not received sufficient attention in recent years. It is essential to find ways of increasing production and help small farmers and the most vulnerable households living in rural areas.

#### *Suggested actions:*

- Governments should consider increasing employment-intensive investments in areas that could boost agricultural productivity, such as rural infrastructure – irrigation, electrification and transport. Equally important is to give a voice to the silent rural majority by strengthening their organizations and involvement in decisions that concern their livelihoods.

With the majority of workers in SMEs and agriculture, boosting productivity growth in these two sectors could bring the double dividend of increasing productivity in the overall economy and in decreasing vulnerable employment and the numbers of working poor.

## **Promote progressive workplace practices**

As enterprises in ASEAN Member Countries focus on developing more efficient production processes, increasing product quality and harnessing innovation, competitiveness becomes increasingly driven by the way human resources are managed at the workplace. Progressive workplace practices – based on cutting-edge HRD and organizational techniques required by modern production systems, the recognition of the principles and rights at work and constructive labour-management relations – could stimulate improved productivity on the one hand and better working conditions, higher wages and increased investment in the workforce on the other. When different practices are organized holistically, synergies between various components enhance their overall impact and benefits.

#### *Suggested actions:*

- Governments, employers' and workers' organizations can jointly promote progressive workplace practices by identifying, documenting and disseminating good examples. Sharing experience within an industry, in a country or across ASEAN could encourage learning and further improvements in productivity and progress towards decent work. This could be via publications, media, tripartite meetings and perhaps through an ASEAN award recognizing innovative workplace practices that promote both productivity and good labour relations.
- In collaboration with employers' and workers' organizations, ASEAN Member Countries and the ASEAN Secretariat could consider setting up a dedicated web site that collects case studies about businesses that have improved their workplace productivity and labour relations. This mechanism could reach a large number of workplaces and provide practical support for employers and workers to raise performance and support innovations.

## Improve the relevance and quality of education and training

Strengthening national education and training systems to better prepare ASEAN's workforce with the skills and competencies that can respond to the needs of the labour market will help to tackle the problem of rising skills shortages and boost enterprise and national competitiveness. Meeting this challenge will require a sharpened policy focus among national policy-makers in addition to broad collaboration and support from the business community. But any improvements will be limited if they fail to promote equal opportunities for women.

### *Suggested actions:*

- Partnerships between the business community and the education and training sector should be nurtured. Curricula must be aligned with the needs of industry and include more useful apprenticeship systems to provide trainees with practical workplace skills. Leading enterprises can help ensure that education and training institutions keep abreast of changing technologies and practices in the workplace, shifting demands for specific skills and changing competency standards.
- To sustain a dynamic development process and successfully manage regional integration, policy-makers should consider providing financial incentives to expand private-sector investment in enterprise- and industry-based skills training and lifelong learning. Such shared commitment to continuously upgrade workforce quality can help mitigate the adjustment costs for ASEAN workers and enterprises adversely affected by rapid technological and market changes.
- The low participation of women in the workforce in some ASEAN Member Countries partially reflects unequal opportunities and treatment of women in education and training. Governments, workers and employers should explore measures that would ensure equal opportunities for all women in education and training to actively engage in the world of work. Governments should encourage the re-entry of educated women into the labour market.

## Develop an ASEAN framework for managing labour migration

Labour mobility across borders contributes to the region's competitiveness and growth. But this potential can only be harnessed if the cross-border movements of workers, especially of those with scarce skills, are better managed and the protection of their rights is guaranteed. These twin and inseparable objectives can be advanced through the development of an ASEAN Framework on Migration that is based on both the ASEAN Declaration on the Promotion and Protection of the Rights of Migrant Workers and on promoting continued dialogue among countries regarding their short- and long-term human resource requirements.

### *Suggested actions:*

- The ASEAN Forum on Labour Migration can be used as a platform for regular consultations at technical levels on shared interests and concerns, including the long-term implications for migration of evolving industrial

and trade structures, good practices in recruitment and national policy on foreign workers, conditions of their employment and social protection, transfers of remittances, social integration, and the return of migrant workers from other ASEAN Member Countries.

- The ASEAN Declaration on the Promotion and Protection of the Rights of Migrant Workers should be translated into a comprehensive ASEAN Framework on Migration. This would require a review of how existing national policies and legislation conform to the principles of the Declaration and adopting targets for reducing gaps and harmonizing standards, agreeing on common principles and guidelines for policy, and promoting good practices.
- Developing practical systems and instruments for comparing skills qualifications acquired in other ASEAN Member Countries and facilitating job matching and admission of needed workers through a common system for identifying those who are qualified (similar to what is used in the maritime industry) would help to address regional skills shortages and drive competitiveness.

## Produce quality labour market information for informed decision-making

Relevant gender- and age-specific labour market information is critical for informed decision-making by policy-makers, employers, workers, job-seekers, school leavers and education and training providers. High quality labour market information helps policy-makers and educational institutions gauge labour market needs, better manage the demand for labour and design appropriate employment and education programmes. It can also assist employers in their location, production and recruitment decisions as well as job-seekers and workers in their labour market choices. Equally important is that comparable information is collected and pooled at the regional level to facilitate a better understanding of both national and ASEAN-wide trends, to identify key policy issues and to improve knowledge sharing and transparency as the ASEAN Community moves towards a common marketplace.

### *Suggested actions:*

- ASEAN Member Countries should promote regional cooperation on harmonizing and strengthening national labour market information systems. This effort can focus on improved harmonization, collection and dissemination of national labour statistics. Specific activities could include taking stock of existing national practices in the area of collection; analysis and dissemination of common labour market indicators; improving standards for harmonization of data collection and tabulation; and training users in analysis and use of labour market information.
- Member Countries could also consider developing a regional labour market information system. Such a system, based on a harmonized set of indicators, would help to monitor regional labour market trends as ASEAN moves towards greater regional integration. Within this system, data on labour migration would serve to better gauge labour market needs and better manage the demand for labour in destination countries. For sending countries, such

information would serve to raise awareness of the occupations in which migrant workers are likely to be needed in the future, thus helping in the design of relevant training programmes for outgoing workers.

- These efforts should be supported by the ASEAN Secretariat, together with international organizations and civil society. In this regard, strengthening the statistical capacity of the ASEAN Secretariat is particularly essential.

## Strengthen the social dimension of economic integration

Rising inequalities, the impact of soaring food prices on living standards and the sheer numbers of those still living in poverty and working in vulnerable situations, as well as the related economic and labour market changes that are bound to occur with closer ASEAN integration, all call for the need to build an effective social floor in the region. Such a floor is vital to ensuring security and guaranteeing equal opportunities for everyone to participate and benefit from the process of integration. Success in this regard is critical to the longer-term viability of economic integration and the underlying social fabric.

### *Suggested actions:*

- In close cooperation with employers' and workers' organizations, governments can review how the basic components of their social security system – access to health care; protection for children, the old and the disabled; social assistance for the poor and unemployed and other elements that vary from country to country – meet the needs of their economic and social development objectives in the context of rapidly changing economic, demographic and social circumstances.
- There is a window of opportunity offered by years of economic growth and resulting fiscal space to further strengthen social security systems incrementally, according to each country's realities and priorities. This could empower millions to move out of poverty and further ahead in life. Such a social floor could also provide the reassurance for innovation and the foundation for productivity growth. ASEAN Member Countries should collectively seek to establish mechanisms for learning and sharing of information on strengthening social protection and, in particular, extending it to the informal economy.

## Invest in labour institutions to foster growth with equity

Effective mechanisms for dialogue, organization and voice, based on the fundamental principles and rights at work, empower societies and allow them to find negotiated solutions to the challenges and issues highlighted in this report. Some of these challenges and issues need to be handled at the enterprise level, others at the industry level and some at the national level. With progress in integration among ASEAN Member Countries, there are more and more issues that can best be solved at the regional level. Such mechanisms at different levels help ensure a fair distribution of gains arising from improved productivity and deeper integration. But they can also foster cooperation and innovations in dynamic labour markets



and contribute to an enabling environment to attract domestic and foreign investment.

There is no single design for tripartism and industrial relations systems; they depend on the history, culture and traditions of each country. But there are some common areas where investing in labour institutions can pay off.

#### *Suggested actions:*

- First, meaningful social dialogue and tripartism require strong labour ministries and workers' and employers' organizations. Thus, national and collective efforts to strengthen their capacity are of critical importance. Building knowledge across the three parties would enable them to better understand each other's perspective, think more strategically and find mutually beneficial solutions. Second, strengthening collective bargaining and other forums for communication, consultation and negotiation at different levels would provide a network of channels for addressing different issues.
- Equally important is to ensure that both workers and employers in the region have a voice within the ASEAN Community through the Confederation of Employers and the ASEAN Trade Union Council, which could significantly contribute to building "a people-oriented ASEAN where all are encouraged to participate".<sup>9</sup>

## **Promote growth that is sustainable**

In the long term, the sustainability of economic growth and the prospects for achieving social progress in ASEAN will depend on the region's ability to protect the environment and cope with the consequences of climate change. Environmental degradation, ranging from climate change to the growing pollution of water, air and land to an increasing scarcity of natural resources and raw materials, is negating a rising share of the gains from economic growth. As a result, there is growing acknowledgement in the ASEAN Community of the importance of a "clean and green ASEAN", as reflected in the ASEAN Vision 2020.

With soaring and high commodity prices, the cost of rapid industrialization based on high energy intensity is growing and may accelerate the transformation to cleaner and more energy-efficient production. Environmental performance standards and eco-efficiency targets in the workplace will require upgrading skills and adopting new technologies. The collective commitment and initiative of workers and employers will be critical in developing "green jobs" and facilitating the transition to "green growth". In these areas, there is a need for more research to fill knowledge gaps as well as information, including documentation and dissemination of good practices, for assisting employers and workers in effective dialogue and action.

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9 ASEAN Charter, Article 1, Paragraph 13.



# Annex I:

## ILO Workplace Practices Surveys

As part of the ILO-Korea Partnership Programme and in close collaboration with national employers' organizations, the ILO has conducted enterprise-level Workplace Practices Surveys designed to examine human resource (HR) managers' views on the linkages between HR/workplace practices and enterprise competitiveness. Surveys were conducted in China, India, the Republic of Korea and Malaysia. In order to draw concrete lessons and policy implications, a sectoral approach was taken, with a focus on the leading enterprises operating in the most dynamic growth sectors. The reason for focusing on these companies is that they are likely to be at the forefront of product and process innovation, technological development, cutting-edge business strategies and new employment practices and human resources management. While they may not represent the entire business community, they are the most likely to exhibit new trends and practices, which has important implications for the broader business community and for policy makers.

Table A.I.1 provides a list of countries in which Workplace Practices Surveys were carried out, together with the number of enterprises surveyed in each country, the industries included in each country survey and the time period over which the surveys were conducted.

**Table A.I.1: ILO Workplace Practices Surveys, background information**

Country	No. of enterprises surveyed	Industries surveyed	Period of survey
China	100	Chemical, electrical, electronic, steel, transportation	May–June 2007
India	87	Chemical, pharmaceutical, information and communication technology, metals, transportation	July–August 2007
Malaysia	103	Electrical & electronic, information and communication technology, metals, petroleum/chemical, food/beverage, pharmaceutical	October 2007
Republic of Korea	150	Coal/petroleum/chemical, Electrical & electronic, metals, real estate & social service, transport equipment	November 2007–January 2008

Within each country and dependent upon data availability, industries were selected based on growth rates in variables including value added, employment, productivity and exports. Within each industry, enterprises were selected for the survey based on indicators including sales & profit growth, employment growth, and industry lists of top enterprises.

The Workplace Practices Surveys collected both quantitative and qualitative information, and included firm-specific questions on workplace practices such as hiring and firing, skills upgrading, working conditions, and workplace relations. They also asked HR managers' perceptions on relevant policies and institutions, such as the education and training system, labour regulations and labour market policies, as well as how they perceive the importance of those employment issues relative to other non-employment competitiveness factors.

# Annex II:

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## I.1.1.1. Labour force - Total 1995, 2000, 2005-2008, 2015 &amp; 2020

(thousand)

	1995	2000	2005	2006	2007	2008	2015	2020
<b>ASEAN</b>	<b>221 459</b>	<b>248 415</b>	<b>274 587</b>	<b>277 670</b>	<b>285 001</b>	<b>290 317</b>	<b>325 085</b>	<b>346 572</b>
Brunei Darussalam	131	155	176	181	186	191	221	240
Cambodia	4 936	5 916	7 006	7 183	7 454	7 680	9 104	10 014
Indonesia	86 879	99 577	109 435	109 900	113 399	115 443	128 805	137 382
Lao PDR	2 119	2 391	2 711	2 786	2 875	2 964	3 601	4 009
Malaysia	8 167	9 737	11 026	11 276	11 576	11 867	13 856	15 170
Myanmar	22 412	24 858	27 050	27 397	27 918	28 361	31 307	33 038
Philippines	27 460	30 830	34 931	35 527	36 954	37 862	44 407	49 266
Singapore	1 739	2 059	2 277	2 323	2 364	2 411	2 709	2 805
Thailand	32 030	34 176	36 296	36 412	36 663	36 937	38 279	38 669
Viet Nam	35 585	38 716	43 679	44 686	45 612	46 602	52 797	55 979
<b>"Plus 3" Countries and India</b>								
China	703 066	741 534	778 171	784 523	792 324	799 004	831 451	834 300
Japan	66 902	67 722	66 755	66 790	65 871	65 434	61 889	60 091
Korea, Rep. of	21 299	22 575	23 925	24 124	24 213	24 381	25 304	25 498
India	365 308	403 407	447 058	457 011	464 053	473 358	540 278	586 396

Source: ILO, LABORSTA, Economically Active Population Estimates and Projections (Version 6).

## I.1.2. Labour force – Male 1995, 2000, 2005–2008, 2015 &amp; 2020

(thousand)

	1995	2000	2005	2006	2007	2008	2015	2020
<b>ASEAN</b>	<b>129 363</b>	<b>145 354</b>	<b>160 393</b>	<b>162 608</b>	<b>166 896</b>	<b>169 965</b>	<b>189 740</b>	<b>201 830</b>
Brunei Darussalam	84	94	104	106	108	110	122	130
Cambodia	2 387	2 936	3 552	3 645	3 812	3 940	4 751	5 276
Indonesia	54 018	62 273	68 751	69 390	71 532	72 839	81 189	86 430
Lao PDR	1 061	1 192	1 335	1 371	1 418	1 465	1 810	2 033
Malaysia	5 400	6 352	7 180	7 335	7 494	7 660	8 755	9 463
Myanmar	12 380	13 683	14 791	14 943	15 225	15 446	16 884	17 688
Philippines	17 247	19 297	21 502	21 963	22 799	23 299	26 836	29 427
Singapore	1 066	1 236	1 346	1 367	1 388	1 409	1 532	1 556
Thailand	17 433	18 249	19 187	19 327	19 441	19 577	20 232	20 401
Viet Nam	18 286	20 041	22 645	23 163	23 680	24 221	27 629	29 425
<b>"Plus 3" Countries and India</b>								
China	384 537	403 696	421 781	424 639	429 130	432 642	450 916	453 658
Japan	39 836	40 242	39 251	39 203	38 541	38 172	35 255	33 746
Korea, Rep. of	12 896	13 473	14 127	14 192	14 321	14 420	14 946	15 046
India	262 448	290 733	320 970	326 666	333 715	340 196	385 990	416 655

Source: ILO, LABORSTA, Economically Active Population Estimates and Projections (Version 6).

## I.1.3. Labour force - Female 1995, 2000, 2005-2008, 2015 &amp; 2020

(thousand)

	1995	2000	2005	2006	2007	2008	2015	2020
<b>ASEAN</b>	<b>92 096</b>	<b>103 062</b>	<b>114 194</b>	<b>115.062</b>	<b>118 105</b>	<b>120 352</b>	<b>135 344</b>	<b>144 742</b>
Brunei Darussalam	47	61	73	75	78	81	98	110
Cambodia	2 549	2 980	3 454	3 539	3 642	3 740	4 353	4 738
Indonesia	32 860	37 304	40 683	40 510	41 867	42 604	47 616	50 951
Lao PDR	1 059	1 199	1 376	1 415	1 457	1 499	1 791	1 976
Malaysia	2 767	3 386	3 846	3 941	4 082	4 207	5 101	5 706
Myanmar	10 032	11 175	12 259	12 454	12 693	12 915	14 423	15 351
Philippines	10 213	11 534	13 429	13 564	14 155	14 564	17 571	19 839
Singapore	673	823	931	956	976	1 002	1 177	1 249
Thailand	14 597	15 927	17 109	17 086	17 223	17 360	18 048	18 268
Viet Nam	17 299	18 675	21 034	21 523	21 932	22 381	25 167	26 554
<b>"Plus 3" Countries and India</b>								
China	318 529	337 839	356 390	359 884	363 193	366 362	380 535	380 642
Japan	27 066	27 480	27 504	27 587	27 330	27 261	26 634	26 345
Korea, Rep. of	8 404	9 103	9 798	9 932	9 892	9 961	10 359	10 451
India	102 860	112 674	126 087	130 345	130 338	133 161	154 288	169 741

Source: ILO, LABORSTA, Economically Active Population Estimates and Projections (Version 6).

### I.2.1. Labour force participation rate (ages 15-64) – Total 1995, 2000, 2005-2008, 2015 & 2020

(per cent)

	1995	2000	2005	2006	2007	2008	2015	2020
<b>ASEAN</b>	72.5	72.6	72.6	72.1	72.7	72.7	73.2	73.3
Brunei Darussalam	68.6	70.2	69.9	69.8	70.2	70.1	69.6	69.6
Cambodia	83.4	82.2	82.5	81.9	82.4	82.4	82.7	82.9
Indonesia	67.6	69.6	69.9	69.0	70.1	70.3	70.9	71.0
Lao PDR	84.7	83.9	82.4	82.0	82.0	81.9	82.5	83.6
Malaysia	64.4	65.2	65.2	65.1	65.3	65.5	66.8	67.6
Myanmar	79.5	79.5	79.2	78.9	79.3	79.3	80.1	80.8
Philippines	67.5	66.4	66.3	65.8	66.8	66.8	67.2	67.4
Singapore	69.0	71.1	71.5	71.4	71.3	71.2	73.2	75.5
Thailand	78.5	77.5	77.9	77.5	77.3	77.3	76.9	76.7
Viet Nam	81.9	78.8	78.1	77.9	77.7	77.6	78.1	78.0
<b>"Plus 3" Countries and India</b>								
China	84.3	83.6	81.6	81.3	81.2	81.1	80.6	80.6
Japan	71.6	72.5	72.8	73.0	72.6	72.6	73.2	74.0
Korea, Rep. of	64.5	64.1	65.5	65.5	65.2	65.1	64.9	65.6
India	62.7	61.6	61.2	61.3	60.8	60.7	60.6	60.8

Source: ILO, LABORSTA, Economically Active Population Estimates and Projections (Version 6).



## I.2.2. Labour force participation rate (ages 15-64) - Male 1995, 2000, 2005-2008, 2015 &amp; 2020

(per cent)

	1995	2000	2005	2006	2007	2008	2015	2020
<b>ASEAN</b>	<b>84.9</b>	<b>85.3</b>	<b>85.3</b>	<b>84.9</b>	<b>85.6</b>	<b>85.6</b>	<b>86.0</b>	<b>85.9</b>
Brunei Darussalam	83.1	81.6	79.2	78.7	78.9	78.4	75.8	74.7
Cambodia	86.6	86.0	87.5	86.8	87.8	87.9	88.5	88.8
Indonesia	83.8	87.0	87.9	87.2	88.5	88.7	89.6	89.6
Lao PDR	84.7	83.7	81.8	81.4	81.5	81.5	83.1	84.9
Malaysia	83.4	83.2	83.0	82.9	82.7	82.7	82.7	82.5
Myanmar	88.7	88.5	88.1	87.7	88.1	88.1	88.4	88.7
Philippines	84.4	82.8	81.4	81.1	82.2	82.0	81.1	80.4
Singapore	83.6	84.2	83.3	82.9	82.5	82.0	81.7	82.9
Thailand	86.8	85.0	85.2	85.1	85.0	85.0	84.7	84.4
Viet Nam	84.5	81.7	81.1	80.9	80.8	80.8	81.9	82.1
<b>"Plus 3" Countries and India</b>								
China	88.5	87.6	85.4	85.1	85.1	85.0	84.8	85.0
Japan	84.6	85.3	84.5	84.7	84.2	84.0	83.2	83.2
Korea, Rep. of	77.3	75.9	76.5	76.2	76.3	76.2	75.9	76.5
India	86.1	85.2	84.8	84.5	84.6	84.5	84.4	84.7

Source: ILO, LABORSTA, Economically Active Population Estimates and Projections (Version 6).

### I.2.3. Labour force participation rate (ages 15-64) - Female 1995, 2000, 2005-2008, 2015 & 2020

(per cent)

	1995	2000	2005	2006	2007	2008	2015	2020
<b>ASEAN</b>	<b>60.2</b>	<b>60.1</b>	<b>60.1</b>	<b>59.4</b>	<b>59.9</b>	<b>59.9</b>	<b>60.5</b>	<b>60.7</b>
Brunei Darussalam	52.4	57.8	60.0	60.4	61.0	61.2	63.2	64.3
Cambodia	80.6	78.9	77.8	77.4	77.4	77.2	77.1	77.2
Indonesia	51.3	52.3	52.0	50.8	51.7	51.8	52.3	52.5
Lao PDR	84.7	84.1	83.0	82.7	82.6	82.4	81.9	82.4
Malaysia	44.8	46.6	46.8	46.8	47.3	47.7	50.5	52.3
Myanmar	70.5	70.6	70.5	70.4	70.7	70.8	72.1	73.1
Philippines	50.4	49.9	51.1	50.4	51.2	51.5	53.2	54.2
Singapore	54.1	57.7	59.4	59.8	59.9	60.2	64.5	67.8
Thailand	70.4	70.5	71.1	70.2	70.1	70.0	69.6	69.3
Viet Nam	79.4	75.9	75.0	74.9	74.5	74.3	74.3	73.9
<b>"Plus 3" Countries and India</b>								
China	79.7	79.3	77.6	77.3	77.1	77.0	76.1	75.9
Japan	58.5	59.6	60.8	61.2	61.0	61.1	63.1	64.5
Korea, Rep. of	51.4	52.1	54.2	54.5	53.8	53.7	53.7	54.3
India	37.2	36.0	35.8	36.2	35.3	35.2	35.2	35.4

Source: ILO, LABORSTA, Economically Active Population Estimates and Projections (Version 6).

## II.1.1. Employment - Total 1995, 2000-2007

(thousand)

	1995	2000	2001	2002	2003	2004	2005	2006	2007
<b>ASEAN</b>	211 287	236 034	240 029	243 673	248 199	252 258	257 736	260 614	268 495
Brunei Darussalam	...	...	146	...	...	...	...	...	...
Cambodia	...	5 146	5 903	...	...	6 561	7 878	...	...
Indonesia	78 318	89 838	90 807	91 647	92 811	93 722	93 958	95 457	99 930
Lao PDR	2 167	...	2 445	2 490	2 537	...	2 740	...	...
Malaysia	7 645	9 322	9 357	9 543	9 870	9 980	10 045	10 275	10 538
Myanmar	...	...	...	...	...	...	...	...	...
Philippines	25 698	27 775	30 085	30 251	31 553	31 377	32 528	32 886	33 672
Singapore	1 702	1 483	1 583	1 574	1 605	1 632	1 647	1 797	1 842
Thailand	32 573	33 001	33 484	34 263	34 677	35 712	36 302	36 345	37 122
Viet Nam	...	38 368	39 000	40 162	41 176	42 316	43 452	44 549	...
<b>"Plus 3" Countries and India</b>									
China	680 650	720 850	730 250	737 400	744 320	752 000	758 250	764 000	...
Japan	64 560	64 430	64 130	63 310	63 130	63 300	63 560	63 840	64 120
Korea, Rep. of	20 416	21 156	21 572	22 169	22 139	22 557	22 856	23 150	23 433
India	290 048	331 383	...	...	...	347 764	...	...	...

Note: India: 1995 column shows data for 1994. Data for Cambodia (2005) and Philippines (2004) represent a break in series or revised estimation methodology.

Source: ILO, Key Indicators of the Labour Market (KILM) 5th Edition, Table 2b; ILO, LABORSTA; National statistical office data; ILO Global Employment Trends Model, 2008.

## II.1.2. Employment - Male 1995, 2000-2007

(thousand)

	1995	2000	2001	2002	2003	2004	2005	2006	2007
<b>ASEAN</b>	123 879	138 005	140 475	142 990	146 081	148 536	151 476	153 394	158 087
Brunei Darussalam	...	...	86	...	...	...	...	...	...
Cambodia	...	2 475	2 838	...	...	3 153	...	...	...
Indonesia	50 602	55 439	57 131	58 583	59 500	60 582	61 439	61 977	63 148
Lao PDR	1 044	...	1 173	1 194	1 217	...	1 364	...	...
Malaysia	5 057	6 086	6 056	6 142	6 324	6 390	6 471	6 619	6 747
Myanmar	...	...	...	...	...	...	...	...	...
Philippines	16 193	17 258	18 334	18 440	19 498	19 670	20 050	20 289	20 754
Singapore	1 044	889	938	938	949	961	960	1 037	1 060
Thailand	17 778	18 165	18 471	18 872	19 082	19 699	19 470	19 638	19 977
Viet Nam	...	19 292	19 744	20 356	20 959	21 649	22 313	22 894	...
<b>"Plus 3" Countries and India</b>									
China	...	...	...	...	...	...	...	...	...
Japan	38 440	38 150	37 840	37 370	37 170	37 130	37 220	37 310	37 530
Korea, Rep. of	12 149	12 387	12 581	12 944	13 031	13 193	13 330	13 443	13 607
India	205 834	236 189	...	...	...	249 172	...	...	...

Note: India: 1995 column shows data for 1994. Data for Philippines (2004) represents a break in series or revised estimation methodology.

Source: ILO, Key Indicators of the Labour Market (KILM) 5th Edition, Table 2b; ILO, LABORSTA; National statistical office data; ILO Global Employment Trends Model, 2008.

## II.1.3. Employment – Female 1995, 2000–2007

(thousand)

	1995	2000	2001	2002	2003	2004	2005	2006	2007
<b>ASEAN</b>	87 408	98 030	99 554	100 684	102 118	103 722	106 260	107 220	110 408
Brunei Darussalam	...	...	60	...	...	...	...	...	...
Cambodia	...	2 671	3 065	...	...	3 407	...	...	...
Indonesia	27 716	34 399	33 676	33 064	33 311	33 141	32 519	33 480	36 782
Lao PDR	1 122	...	1 272	1 296	1 320	...	1 374	...	...
Malaysia	2 588	3 236	3 301	3 401	3 546	3 589	3 575	3 657	3 791
Myanmar	...	...	...	...	...	...	...	...	...
Philippines	9 505	10 516	11 751	11 811	12 055	11 707	12 478	12 596	12 918
Singapore	658	593	644	636	657	671	688	760	783
Thailand	14 795	14 836	15 013	15 391	15 596	16 013	16 832	16 706	17 145
Viet Nam	...	19 076	19 257	19 807	20 217	20 666	21 140	21 655	...
<b>"Plus 3" Countries and India</b>									
China	...	...	...	...	...	...	...	...	...
Japan	26 120	26 280	26 290	25 940	25 960	26 170	26 340	26 530	26 590
Korea, Rep. of	8 267	8 769	8 991	9 225	9 108	9 364	9 526	9 707	9 826
India	84 214	95 193	...	...	...	98 593	...	...	...

Note: India: 1995 column shows data for 1994. Data for Philippines (2004) represents a break in series or revised estimation methodology.

Source: ILO, Key Indicators of the Labour Market (KILM) 5th Edition, Table 2b; ILO, LABORSTA; National statistical office data; ILO Global Employment Trends Model, 2008.

### II.2.1. Employment-to-population ratio – Total 1995, 2000–2007

(per cent)

	1995	2000	2001	2002	2003	2004	2005	2006	2007
<b>ASEAN</b>	66.8	66.5	66.1	65.8	65.6	65.4	65.5	65.0	65.7
Brunei Darussalam	...	...	63.0	...	...	...	...	...	...
Cambodia	...	76.4	81.8	...	...	64.8	57.0	...	...
Indonesia	60.8	63.6	63.1	61.6	61.3	60.9	59.3	59.4	60.9
Lao PDR	68.6	...	80.6	80.8	80.1	...	65.7	...	...
Malaysia	...	63.5	62.6	62.1	62.9	62.1	61.0	61.0	61.2
Myanmar	...	...	...	...	...	...	...	...	...
Philippines	60.1	57.8	60.9	59.5	60.3	59.1	59.8	59.1	59.2
Singapore	62.6	59.4	...	...	...	...	59.5	62.1	62.5
Thailand	75.2	70.6	71.0	71.7	71.7	72.2	72.6	71.9	72.6
Viet Nam	...	70.7	71.0	70.9	70.4	69.9	69.6	68.7	...
<b>"Plus 3" Countries and India</b>									
China	77.8	75.3	75.6	74.9	74.5	74.1	74.0	...	...
Japan	61.4	59.5	58.9	57.9	57.6	57.6	57.7	57.9	58.1
Korea, Rep. of	60.7	58.5	59.0	60.0	59.3	59.8	59.7	59.7	59.8
India	58.3	56.2	...	...	...	55.4	...	...	...

Note: China: 1995 column shows data for 1996. India: 1995 column shows data for 1994. Data for Cambodia (2005) and Philippines (2004) represent a break in series or revised estimation methodology. Source: ILO, Key Indicators of the Labour Market (KILM) 5th Edition, Table 2b; ILO, LABORSTA; National statistical office data; ILO Global Employment Trends Model, 2008.

## II.2.2. Employment-to-population ratio - Male 1995, 2000-2007

(per cent)

	1995	2000	2001	2002	2003	2004	2005	2006	2007
<b>ASEAN</b>	79.1	78.6	78.3	78.1	78.2	77.9	78.0	77.4	78.3
Brunei Darussalam	...	...	73.5	...	...	...	...	...	...
Cambodia	...	79.1	83.9	...	...	65.1	...	...	...
Indonesia	80.0	79.4	...	79.2	78.9	79.0	77.1	77.0	76.9
Lao PDR	67.7	...	79.3	80.3	79.6	...	65.9	...	...
Malaysia	...	80.8	79.6	78.8	79.2	78.1	77.2	77.3	77.0
Myanmar	...	...	...	...	...	...	...	...	...
Philippines	75.8	72.1	74.5	72.6	75.0	74.3	73.9	73.1	73.3
Singapore	76.3	72.3	...	...	...	...	70.7	73.0	73.7
Thailand	82.7	78.4	79.1	78.4	79.6	80.4	80.2	80.1	80.6
Viet Nam	...	74.3	75.1	74.8	74.4	74.1	74.0	73.0	...
<b>"Plus 3" Countries and India</b>									
China	...	...	...	...	...	...	...	...	...
Japan	75.2	72.6	71.7	70.6	70.1	69.8	69.9	70.0	70.3
Korea, Rep. of	74.6	70.7	71.0	72.2	71.9	72.0	71.6	71.3	71.3
India	81.0	78.8	...	...	...	78.0	...	...	...

Note: India: 1995 column shows data for 1994. Data for Philippines (2004) represents a break in series or revised estimation methodology.

Source: ILO, Key Indicators of the Labour Market (KILM) 5th Edition, Table 2b; ILO, LABORSTA; National statistical office data; ILO Global Employment Trends Model, 2008.



### II.2.3. Employment-to-population ratio – Female 1995, 2000–2007

(per cent)

	1995	2000	2001	2002	2003	2004	2005	2006	2007
<b>ASEAN</b>	54.8	54.6	54.3	53.7	53.4	53.1	53.4	52.8	53.4
Brunei Darussalam	...	...	52.5	...	...	...	...	...	...
Cambodia	...	74.1	80.0	...	...	64.5	...	...	...
Indonesia	42.3	48.2	...	44.2	43.8	42.9	41.3	41.7	44.8
Lao PDR	69.5	...	81.9	81.3	80.5	...	65.4	...	...
Malaysia	...	45.3	45.1	44.9	46.0	45.4	44.2	44.2	44.8
Myanmar	...	...	...	...	...	...	...	...	...
Philippines	44.4	43.6	47.3	46.4	45.8	44.0	45.8	45.2	45.3
Singapore	48.7	46.9	...	...	...	...	48.7	51.6	51.9
Thailand	67.8	62.9	63.1	63.9	63.9	64.2	65.4	64.2	65.1
Viet Nam	...	67.4	67.3	67.4	66.7	66.0	65.5	64.6	...
<b>"Plus 3" Countries and India</b>									
China	...	...	...	...	...	...	...	...	...
Japan	48.4	47.1	46.8	46.1	45.9	46.1	46.3	46.6	46.6
Korea, Rep. of	47.6	47.0	47.7	48.4	47.4	48.3	48.4	48.8	48.9
India	34.6	32.9	...	...	...	31.9	...	...	...

Note: India: 1995 column shows data for 1994. Data for Philippines (2004) represents a break in series or revised estimation methodology.

Source: ILO, Key Indicators of the Labour Market (KILM) 5th Edition, Table 2b; ILO, LABORSTA; National statistical office data; ILO Global Employment Trends Model, 2008.

### II.3.1. Unemployment – Total 1995, 2000–2007

*(per cent of labour force)*

	1995	2000	2001	2002	2003	2004	2005	2006	2007
<b>ASEAN</b>	4.6	5.0	5.8	6.1	6.2	6.5	6.1	6.1	5.8
Brunei Darussalam	...	...	...	...	...	...	...	...	...
Cambodia	...	2.5	1.7	...	...	0.9	...	...	...
Indonesia	7.0	8.1	8.1	9.1	9.7	9.9	11.2	10.3	9.1
Lao PDR	2.6	...	5.0	5.0	5.1	...	1.4	...	...
Malaysia	3.1	3.0	3.5	3.5	3.6	3.5	3.5	3.3	3.2
Myanmar	...	...	...	...	...	...	...	...	...
Philippines	8.4	10.1	9.8	10.2	10.1	11.0	7.5	7.3	6.3
Singapore	2.7	6.0	3.8	5.6	5.9	5.8	5.6	4.5	4.0
Thailand	1.1	2.4	2.6	1.8	1.5	1.5	1.4	1.2	1.2
Viet Nam	...	2.3	2.8	2.1	2.3	2.1	2.1	2.3	...
<b>"Plus 3" Countries and India</b>									
China	2.9	3.1	3.6	4.0	4.3	4.2	4.2	4.1	...
Japan	3.2	4.8	5.0	5.4	5.3	4.7	4.4	4.1	3.9
Korea, Rep. of	2.1	4.4	4.0	3.3	3.6	3.7	3.7	3.5	3.2
India	3.7	4.3	...	...	...	5.0	...	...	...

*Note:* India: 1995 column shows data for 1994; Data for Philippines (2004) represents a break in series or revised estimation methodology.

*Source:* ILO, Key Indicators of the Labour Market (KILM) 5th Edition, Table 8a; ILO, LABORSTA; National statistical office data; ILO Global Employment Trends Model, 2008.

### II.3.2. Unemployment – Male 1995, 2000–2007

*(per cent of labour force)*

	1995	2000	2001	2002	2003	2004	2005	2006	2007
<b>ASEAN</b>	4.2	5.1	5.7	5.8	5.7	6.0	5.6	5.7	5.3
Brunei Darussalam	...	...	...	...	...	...	...	...	...
Cambodia	...	2.2	1.4	...	...	0.9	...	...	...
Indonesia	5.4	7.2	6.6	7.5	7.9	8.1	9.3	8.5	8.1
Lao PDR	2.6	...	4.5	4.5	4.6	...	1.3	...	...
Malaysia	2.8	3.0	3.4	3.3	3.6	3.4	3.4	3.3	3.1
Myanmar	...	...	...	...	...	...	...	...	...
Philippines	7.7	10.3	9.4	10.1	10.0	10.5	7.5	7.7	6.4
Singapore	2.7	5.6	3.7	5.6	5.7	5.6	5.0	4.1	3.7
Thailand	0.9	2.4	2.7	1.9	1.6	1.6	1.5	1.3	1.3
Viet Nam	...	2.4	2.3	1.9	1.9	1.9	2.0	2.3	...
<b>"Plus 3" Countries and India</b>									
China	...	...	...	...	...	...	...	...	...
Japan	3.1	5.0	5.2	5.6	5.5	4.9	4.6	4.3	3.9
Korea, Rep. of	2.3	5.0	4.5	3.7	3.8	3.9	4.0	3.8	3.7
India	3.6	4.4	...	...	...	4.9	...	...	...

Note: India: 1995 column shows data for 1994; Data for Philippines (2004) represents a break in series or revised estimation methodology.

Source: ILO, Key Indicators of the Labour Market (KILM) 5th Edition, Table 8a; ILO, LABORSTA; National statistical office data; ILO Global Employment Trends Model, 2008.

### II.3.3. Unemployment – Female 1995, 2000–2007

*(per cent of labour force)*

	1995	2000	2001	2002	2003	2004	2005	2006	2007
<b>ASEAN</b>	5.1	4.9	6.1	6.5	7.0	7.2	6.9	6.8	6.5
Brunei Darussalam	...	...	...	...	...	...	...	...	...
Cambodia	...	2.8	2.0	...	...	0.9	...	...	...
Indonesia	9.8	9.6	10.6	11.8	12.7	12.9	14.7	13.4	10.8
Lao PDR	2.6	...	5.4	5.5	5.6	...	1.4	...	...
Malaysia	3.8	3.1	3.8	3.8	3.6	3.8	3.7	3.4	3.4
Myanmar	...	...	...	...	...	...	...	...	...
Philippines	9.4	9.9	10.3	10.2	10.3	11.8	7.5	6.9	6.0
Singapore	2.8	6.6	3.9	5.8	6.2	6.2	6.4	4.9	4.3
Thailand	1.4	2.3	2.5	1.6	1.4	1.4	1.2	1.1	1.1
Viet Nam	...	2.1	3.3	2.3	2.6	2.4	2.2	2.2	...
<b>"Plus 3" Countries and India</b>									
China	...	...	...	...	...	...	...	...	...
Japan	3.3	4.5	4.8	5.1	4.9	4.4	4.2	3.9	3.7
Korea, Rep. of	1.7	3.6	3.3	2.8	3.3	3.4	3.4	2.9	2.6
India	3.9	4.1	...	...	...	5.3	...	...	...

*Note:* India: 1995 column shows data for 1994; Data for Philippines (2004) represents a break in series or revised estimation methodology.

*Source:* ILO, Key Indicators of the Labour Market (KILM) 5th Edition, Table 8a; ILO, LABORSTA; National statistical office data; ILO Global Employment Trends Model, 2008.

## II.4.1. Youth unemployment – 1995, 2000, 2004–2007

	1995		2000		2004		2005		2006		2007	
	Youth unemployed (000s)	Youth unemployment rate (%)	Youth unemployed (000s)	Youth unemployment rate (%)	Youth unemployed (000s)	Youth unemployment rate (%)	Youth unemployed (000s)	Youth unemployment rate (%)	Youth unemployed (000s)	Youth unemployment rate (%)	Youth unemployed (000s)	Youth unemployment rate (%)
ASEAN	6 147	11.0	7 511	13.2	9 935	17.1	9 604	16.5	9 870	17.2	9 336	16.0
Brunei Darussalam	...	...	...	...	...	...	...	...	...	...	...	...
Cambodia	...	...	81	4.9	37	1.5	...	...	...	...	...	...
Indonesia	4 030	20.0	5 084	24.2	6 277	29.6	7 460	33.4	6 816	30.6	5 660	25.1
Lao PDR Republic	30	5.0	...	...	...	...	...	...	...	...	...	...
Malaysia	180	...	186	8.3	251	11.7	246	11.7	...	10.9	...	10.9
Myanmar	...	...	...	...	...	...	...	...	...	...	...	...
Philippines	1 086	16.1	1 480	21.2	1 773	21.7	1 307	16.5	1 325	16.9	1 145	14.9
Singapore	14	5.0	15	4.8	22	8.3	16	5.2	16	8.9	16	8.9
Thailand	169	...	401	6.6	265	4.5	260	4.8	246	4.8	233	4.5
Viet Nam	...	...	409	4.8	428	4.6	456	4.9	...	...	...	...
"Plus 3" Countries and India												
China	3 010	1.0	...	...	...	...	...	...	...	...	...	...
Japan	540	6.1	700	9.2	610	9.5	550	8.7	500	8.0	470	7.7
Korea, Rep. of	173	6.3	249	10.8	231	10.5	208	10.2	180	10.0	147	8.8
India	5 921	8.3	7 793	10.1	8 435	10.5	...	...	...	...	...	...

Note: China and India: 1995 column shows data for 1994; Data for Philippines (2004) and Singapore (1995, 2000, 2005) represent a break in series or revised estimation methodology.

Source: ILO, Key Indicators of the Labour Market (KILM) 5th Edition, Table 9; National statistical office data; ILO Global Employment Trends Model, 2008.

## II.4.2. Ratio of youth to adult unemployment rates, most recent year

	Year	Total	Male	Female
<b>ASEAN</b>	<b>2007</b>	<b>5.0</b>	<b>5.5</b>	<b>4.6</b>
Brunei Darussalam	...	...	...	...
Cambodia	2004	2.5	3.2	1.9
Indonesia	2007	5.1	5.7	4.3
Lao PDR	1995	5.6	6.4	4.9
Malaysia	2007	7.8	7.0	9.6
Myanmar	...	...	...	...
Philippines	2007	3.8	3.2	5.3
Singapore	2007	2.6	2.0	3.1
Thailand	2006	7.4	6.0	9.8
Viet Nam	2005	3.6	4.0	3.2
<b>"Plus 3" Countries and India</b>				
China	...	...	...	...
Japan	2007	2.2	2.3	2.1
Korea, Rep. of	2007	3.1	3.5	3.4
India	2004	3.0	3.2	2.8

Source: ILO, Key Indicators of the Labour Market (KILM) 5th Edition, Table 9; National statistical office data; ILO Global Employment Trends Model, 2008.

### II.5.1. Employment by major economic sector, most recent year

(per cent)

	Year	Agriculture	Industry	Services	Other
<b>ASEAN</b>	<b>2007</b>	<b>44.5</b>	<b>19.0</b>	<b>36.5</b>	<b>0.0</b>
Brunei Darussalam	2001	1.4	21.4	77.2	0.0
Cambodia	2005	59.1	13.4	27.5	0.0
Indonesia	2007	41.2	18.8	40.0	0.0
Lao PDR	2003	82.2	9.3	8.6	0.0
Malaysia	2007	14.8	28.5	54.1	2.6
Myanmar	1998	62.7	12.2	25.1	0.0
Philippines	2007	36.1	15.1	48.8	0.0
Singapore	2007	...	22.6	76.2	1.1
Thailand	2007	41.7	20.7	37.4	0.1
Viet Nam	2006	54.7	18.3	27.0	0.0
<b>"Plus 3" Countries and India</b>					
China	2006	42.6	25.2	32.2	0.0
Japan	2007	4.2	27.4	67.2	0.0
Korea, Rep. of	2007	7.4	17.7	75.0	0.0
India	2004	54.0	20.0	26.0	0.0

Source: ILO, Key Indicators of the Labour Market (KILM) 5th Edition, Table 4a; National statistical office data; ILO Global Employment Trends Model, 2008.



## II.6.1. Status in employment, most recent year

(per cent)

Year	Both Sexes				Females				Males				
	Wage & salaried workers (employees) (%)	Employers (%)	Own-account workers (%)	Contributing family workers (%)	Wage & salaried workers (employees) (%)	Employers (%)	Own-account workers (%)	Contributing family workers (%)	Wage & salaried workers (employees) (%)	Employers (%)	Own-account workers (%)	Contributing family workers (%)	
ASEAN	2007	37.6	2.3	37.7	22.4	33.6	1.1	28.3	36.9	40.4	3.1	44.2	12.2
Brunei Darussalam	...	...	...	...	...	...	...	...	...	...	...	...	...
Cambodia	2004	20.0	0.1	34.4	43.3	16.6	0.1	28.8	52.0	23.3	0.1	39.7	34.8
Indonesia	2007	38.5	2.9	41.3	17.3	32.6	1.4	32.4	33.6	41.8	3.8	46.7	7.8
Lao PDR Republic	2003	14.4	3.8	55.7	26.1	...	...	...	...	...	...	...	...
Malaysia	2007	74.2	3.4	17.4	4.9	77.3	1.3	12.5	8.8	72.5	4.6	20.1	2.7
Myanmar	...	...	...	...	...	...	...	...	...	...	...	...	...
Philippines	2006/2007	51.1	4.2	32.3	12.4	49.7	2.5	28.7	19.1	51.0	5.9	33.9	9.3
Singapore	2007	84.7	5.1	9.4	0.8	89.9	2.8	6.0	1.3	80.8	6.8	11.9	0.4
Thailand	2006/2007	43.6	3.0	32.0	21.4	42.9	1.6	24.9	30.5	44.4	4.2	37.5	13.9
Viet Nam	2005	25.7	0.4	41.0	33.0	21.4	0.2	30.6	47.8	29.7	0.5	50.8	18.9
<b>"Plus 3" Countries and India</b>													
China	...	...	...	...	...	...	...	...	...	...	...	...	...
Japan	2007	86.1	2.6	7.1	3.7	86.4	1.1	4.7	7.3	86.0	3.6	8.8	1.1
Korea, Rep. of	2007	68.2	6.7	19.1	6.0	68.8	3.5	15.0	12.7	67.7	8.9	22.2	1.2
India	...	...	...	...	...	...	...	...	...	...	...	...	...

Note: Philippines and Thailand: Aggregated data are from 2007 and sex-disaggregated data are from 2006; Indonesia: Employees include casual employees.

Source: ILO, Key Indicators of the Labour Market (KILM) 5th Edition, Table 3; National statistical office data; ILO Global Employment Trends Model, 2008.

## III.1.1.1. Gross domestic product (annual growth rate) 2000-2008

(per cent)

	2000	2001	2002	2003	2004	2005	2006	2007	2008p
<b>ASEAN</b>	<b>6.3</b>	<b>2.5</b>	<b>5.0</b>	<b>5.6</b>	<b>6.3</b>	<b>5.7</b>	<b>6.0</b>	<b>6.4</b>	<b>5.6</b>
Brunei Darussalam	2.9	2.7	3.9	2.9	0.5	0.4	5.1	0.4	-0.5
Cambodia	8.8	8.1	6.6	8.5	10.3	13.3	10.8	9.6	7.2
Indonesia	5.4	3.6	4.5	4.8	5.0	5.7	5.5	6.3	6.1
Lao PDR	5.8	5.7	5.9	6.1	6.4	7.1	8.1	7.5	7.9
Malaysia	8.7	0.5	5.4	5.8	6.8	5.0	5.9	6.3	5.0
Myanmar	13.8	11.3	12.0	13.8	13.6	13.6	12.7	5.5	4.0
Philippines	6.0	1.8	4.5	4.9	6.4	4.9	5.5	7.3	5.8
Singapore	10.1	-2.4	4.2	3.5	9.0	7.3	8.2	7.7	4.0
Thailand	4.8	2.2	5.3	7.1	6.3	4.5	5.1	4.8	5.3
Viet Nam	6.8	6.9	7.1	7.3	7.8	8.4	8.2	8.5	7.3
<b>"Plus 3" Countries and India</b>									
China	8.4	8.3	9.1	10.0	10.1	10.4	11.1	11.4	9.3
Japan	2.9	0.2	0.3	1.4	2.7	1.9	2.4	2.1	1.4
Korea, Rep. of	8.5	3.8	7.0	3.1	4.7	4.2	5.1	5.0	4.2
India	5.5	3.9	4.6	6.9	7.9	9.1	9.7	9.2	7.9

Note: "p" denotes projection.  
Source: IMF; World Economic Outlook Database, April 2008.

## III.1.2. Gross domestic product per capita – 1995, 2000–2007

(constant 2000 US\$)

	1995	2000	2001	2002	2003	2004	2005	2006	2007p
<b>ASEAN</b>	<b>1 181</b>	<b>1 255</b>	<b>1 258</b>	<b>1 300</b>	<b>1 352</b>	<b>1 418</b>	<b>1 473</b>	<b>1 537</b>	<b>1 632</b>
Brunei Darussalam	19 043	17 996	18 060	18 327	18 432	18 113	17 787	18 304	19 085
Cambodia	225	286	303	317	338	366	408	445	439
Indonesia	827	800	818	844	872	904	942	983	1 065
Lao PDR	274	332	345	360	376	394	415	439	459
Malaysia	3 471	3 881	3 811	3 890	4 033	4 228	4 360	4 535	4 794
Myanmar	..	..	..	..	..	..	..	..	..
Philippines	913	996	992	1 015	1 043	1 087	1 117	1 154	1 195
Singapore	19 359	23 019	21 869	22 571	23 217	24 950	25 968	27 125	28 764
Thailand	2 086	2 023	2 049	2 141	2 277	2 403	2 494	2 601	2 783
Viet Nam	305	402	423	448	473	503	539	576	595
<b>"Plus 3" Countries and India</b>									
China	658	949	1 021	1 106	1 209	1 323	1 451	1 598	1 770
Japan	35 439	36 789	36 776	36 787	37 227	38 236	38 962	39 824	40 672
Korea, Rep. of	9 159	10 884	11 220	11 936	12 245	12 762	13 240	13 865	14 505
India	372	453	469	479	511	546	588	634	682

Note: "p" denotes projection. ASEAN aggregate figures exclude Myanmar; Estimates for 2007 calculated on basis of 2006 GDP figures together with GDP and population growth rates for 2007.  
Source: World Bank, World Development Indicators, 2008.

### III.1.2b. Gross domestic product per capita, PPP – 1995, 2000–2007

(constant 2005 international \$)

	1995	2000	2001	2002	2003	2004	2005	2006	2007p
<b>ASEAN</b>	<b>3 382</b>	<b>3 544</b>	<b>3 573</b>	<b>3 693</b>	<b>3 844</b>	<b>4 026</b>	<b>4 187</b>	<b>4 370</b>	<b>4 645</b>
Brunei Darussalam	50 309	47 543	47 711	48 418	48 694	47 851	46 991	48 357	50 419
Cambodia	795	1 009	1 069	1 119	1 193	1 291	1 440	1 569	1 548
Indonesia	2 816	2 724	2 787	2 873	2 971	3 078	3 209	3 348	3 627
Lao PDR	1 199	1 452	1 509	1 573	1 643	1 721	1 814	1 919	2 005
Malaysia	9 297	10 395	10 209	10 420	10 803	11 326	11 678	12 149	12 841
Myanmar	419	571	629	699	788	805	838	..	..
Philippines	2 415	2 636	2 627	2 686	2 760	2 876	2 956	3 055	3 162
Singapore	30 922	36 768	34 932	36 053	37 085	39 853	41 479	43 328	45 946
Thailand	5 907	5 728	5 802	6 063	6 448	6 805	7 061	7 364	7 879
Viet Nam	1 214	1 597	1 684	1 780	1 883	2 002	2 143	2 290	2 367
<b>"Plus 3" Countries and India</b>									
China	1 853	2 674	2 875	3 115	3 406	3 727	4 088	4 501	4 985
Japan	27 551	28 601	28 591	28 600	28 942	29 726	30 290	30 961	31 620
Korea, Rep. of	14 717	17 489	18 028	19 178	19 676	20 506	21 273	22 278	23 307
India	1 404	1 710	1 770	1 808	1 931	2 062	2 222	2 393	2 575

Note: "p" denotes projection. ASEAN aggregate figures exclude Myanmar; Estimates for 2007 calculated on basis of 2006 GDP figures together with GDP and population growth rates for 2007.  
Source: World Bank, World Development Indicators, 2008.

## III.1.3. Output per worker - 1995, 2000-2007

*(constant 1990 international \$)*

	1995	2000	2001	2002	2003	2004	2005	2006	2007p
<b>ASEAN</b>	7 700	7 992	8 023	8 272	8 584	8 932	9 321	9 738	10 020
Brunei Darussalam	...	...	...	...	...	...	...	...	...
Cambodia	2 297	3 037	2 765	2 873	2 885	2 926	3 258	3 530	3 772
Indonesia	8 205	7 926	8 142	8 415	8 707	9 056	9 546	9 941	10 066
Lao PDR	...	...	...	...	...	...	...	...	...
Malaysia	18 473	20 118	20 032	20 703	21 173	22 360	23 323	24 154	25 045
Myanmar	2 328	3 017	3 229	3 478	3 819	4 174	4 553	4 944	5 082
Philippines	6 200	7 034	6 739	6 827	7 029	7 246	7 383	7 685	8 075
Singapore	38 886	42 892	38 678	41 085	42 654	45 787	48 203	47 037	46 494
Thailand	11 871	11 984	12 067	12 420	13 148	13 568	13 946	14 626	14 999
Viet Nam	3 094	3 803	3 970	4 144	4 328	4 553	4 832	5 131	5 453
<b>"Plus 3" Countries and India</b>									
China	5 092	6 021	6 589	7 323	8 352	9 106	9 961	10 939	12 101
Japan	38 765	40 771	41 063	41 704	42 387	43 461	44 101	44 882	45 534
Korea, Rep. of	26 624	31 826	32 410	33 735	34 828	35 798	36 813	38 158	39 512
India	4 086	5 005	5 138	5 201	5 501	5 815	6 198	6 614	7 003

Note: "p" denotes projection. Regional aggregate excludes data for Brunei Darussalam and Lao PDR.

2007 productivity figures are projected based on 2006 productivity figures together with 2007 real GDP and employment growth rates.

Source: The Conference Board and Groningen Growth and Development Centre Total Economy Database, January 2008.

### III.2.1. Population size – 1995, 2000, 2005, 2008, 2010, 2015, 2020

*(thousand)*

	1995	2000	2005	2008	2010	2015	2020
<b>ASEAN</b>	<b>480 438</b>	<b>519 178</b>	<b>556 602</b>	<b>578 642</b>	<b>592 943</b>	<b>626 534</b>	<b>656 841</b>
Brunei Darussalam	295	333	374	398	414	453	491
Cambodia	11 395	12 780	13 956	14 697	15 224	16 641	18 102
Indonesia	197 411	211 693	226 063	234 342	239 600	251 567	261 868
Lao PDR	4 692	5 224	5 664	5 963	6 173	6 699	7 223
Malaysia	20 594	23 274	25 653	27 027	27 920	30 047	32 020
Myanmar	43 134	45 884	47 967	49 221	50 051	51 998	53 780
Philippines	68 587	76 213	84 566	89 651	93 001	101 090	108 748
Singapore	3 478	4 017	4 327	4 490	4 592	4 809	4 965
Thailand	57 523	60 666	63 003	64 316	65 125	66 763	67 990
Viet Nam	73 330	79 094	85 029	88 537	90 845	96 467	101 656
<b>"Plus 3" Countries and India</b>							
China	1 213 732	1 269 962	1 312 979	1 336 311	1 351 512	1 388 600	1 421 260
Japan	125 472	127 034	127 897	127 938	127 758	126 607	124 489
Korea, Rep. of	45 008	46 780	47 870	48 388	48 673	49 117	49 221
India	954 282	1 046 235	1 134 403	1 186 186	1 220 182	1 302 535	1 379 198

Note: Medium Variant.

Source: UN World Population Prospects 2006 Revision Database.

## III.2.2. Population growth rate - 1995, 2000-2007

(per cent)

	1995	2000	2001	2002	2003	2004	2005	2006	2007
<b>ASEAN</b>	1.7	1.5	1.5	1.4	1.4	1.4	1.3	1.3	1.3
Brunei Darussalam	2.6	2.4	2.4	2.3	2.3	2.2	2.2	2.1	2.1
Cambodia	2.7	1.9	1.8	1.7	1.7	1.7	1.7	1.7	1.8
Indonesia	1.4	1.4	1.3	1.3	1.3	1.3	1.2	1.2	1.2
Lao PDR	2.5	1.8	1.6	1.6	1.6	1.6	1.7	1.7	1.8
Malaysia	2.6	2.2	2.0	1.9	1.9	1.8	1.8	1.8	1.7
Myanmar	1.3	1.0	0.9	0.9	0.8	0.8	0.9	0.9	0.9
Philippines	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0	1.9
Singapore	3.2	2.0	1.6	1.4	1.3	1.2	1.3	1.2	1.2
Thailand	1.1	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.7
Viet Nam	1.7	1.5	1.5	1.5	1.5	1.4	1.4	1.4	1.3
<b>"Plus 3" Countries and India</b>									
China	1.0	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6
Japan	0.3	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0
Korea, Rep. of	0.9	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.3
India	2.0	1.7	1.7	1.6	1.6	1.6	1.5	1.5	1.5

Note: Medium Variant.

Source: UN World Population Prospects 2006 Revision Database.