

# INDONESIA'S DEMOGRAPHIC DIVIDEND OR WINDOW OF OPPORTUNITY?

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## ABSTRACT<sup>1</sup>

As the world's fourth largest populous nation, Indonesia is predicted to reach the height of its so-called demographic dividend between 2020 and 2030 when the share of population in working ages will be at its highest level and the potential for increased output per capita and hence more productive investment will theoretically be at its peak. But the ability to maximize this potential is far from certain and depends on a variety of social and economic underpinnings, including key issues associated with human resource capacity and gender equality that will determine how well Indonesia is placed to meet the challenges involved. This contribution first reviews the history of demographic and social transformations, including the dramatic shift from anti- to pro-natalist policies that have occurred in Indonesia since independence. Set against a deterministic trend of an age-sex specific population projection, we seek to provide an assessment of these past trends in demographic and social dynamics in relationship to the current state of preparedness, with a focus on social and gender-related issues. Finally, we will outline several of the key challenges, particularly in the context of the current socio-economic and political climate that will ultimately determine whether Indonesia will move into a future real demographic dividend or only observe the world through a window of opportunity.

**Keywords:** Demographic dividend, Population, Labour, Pro-natalist policies

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## INTRODUCTION

The idea of a potential demographic dividend is a direct result of the increased attention in the development literature being paid to Age Structure Transformations or AST (Poole 2007). Attention is in particular paid to the process of population ageing, reflected in declining proportions of children and youth and increasing proportions of elderly brought on by the demographic transition from a regime of high fertility and mortality to low mortality and fertility rates at or below replacement levels. And these changes have economic ramifications. As noted by Bloom, 'because people's economic behavior and needs vary at different stages of life, changes in a country's age-structure can have significant effects on its economic performance' (Bloom *et al.* 2003: xi).

The idea of a demographic dividend emerged from the relatively straightforward observation that as the ageing process progresses there will necessarily emerge a period in which the proportion of the population in the most productive ages will be at a maximum and that this rise in the share of the working-age population will, all else being equal, necessarily lead to a rise in overall output per capita and hence in more rapid economic growth than would otherwise occur (Mason no date), in short, a demographic dividend just waiting to be realized. While more deterministic economic-demographic models more or less guarantee a positive outcome, there is a body of literature suggesting that a significant economic dividend may not be inevitable and that the dividend may be better viewed as a window of opportunity (Poole 2007; de Carvalho & Wong 1998). In fact, it could even turn out to be a 'curse' if the country is faced with a large cohort of young unemployed (Tahkur 2012.)

A pertinent question, at least for countries like Indonesia approaching the peak dividend period, is thus one of the degree to which they are prepared to maximize the potential benefits from what will inevitably be a transitory phenomenon and may thus help to ensure greater social and economic security as the population structure increasingly moves towards higher dependency, this time among the elderly. It is therefore relevant to look more closely at the current state of preparedness, especially as related to trends in areas such as education and work, and to relate this to challenges, both in terms of quantity and quality, in those areas that will ultimately determine whether Indonesia will move into a future real demographic dividend or only observe the world through a window of opportunity

## THE DEMOGRAPHIC BACKGROUND

Following the achievement of independence and in a bid to cement a position in the world stage, one of the moves taken by Soekarno, the first Indonesian president, was to take a firm pro-natalist stance, among others as a defence against perceived aggressors. Given the country's size,<sup>2</sup> Soekarno claimed Indonesia needed and could hold up to 250 million people, more than twice as many people as lived in the country at the time.

Moreover, population growth had been suppressed during the 1940s due to rising mortality and declining fertility as a consequence of Japanese occupation during World War II and the subsequent Indonesian Revolution, which not only caused suffering due to loss of life but also family separation. The perceived low population growth, particularly in Java, helped reinforce Soekarno's position to encourage couples to have many children. In any case, the 1950s did form a period of relatively high fertility as political conditions slowly stabilized and fertility returned to pre-war levels (Nitisastro 1970).

While the Indonesian post-war baby-boom was hardly unique, the important consideration was that it was backed by a highly pro-natalist regime. In the face of slowly declining mortality (as a result of greater stability and some priority applied to basic health) the stage was set for a population age structure increasingly weighted towards the young. In this environment, the first post-independence census, conducted in 1961, sixteen years after independence, counted a population of some 97 million people (BPS 1963). At the time, China's population numbered almost 650 million people (United Nations 2009). China, in particular, was considered a major threat and this further cemented the pro-natalist position of the Indonesian government.

The change in regime in the mid-1960s from the 'Old Order' to the 'New Order' government introduced drastic ideological changes. Soekarno was a nation-builder, mostly concerned with establishing Indonesia's place in the global stage as an important new nation and country. On the other hand, the New Order government emphasized development under the presidency of Soeharto, a general who still emphasized security but also promoted economic

2 The country is an archipelago consisting of some 13,000 large and small islands stretching some 5,236 kilometers between the Western-most city of Sabang in North Sumatra and the Eastern-most city of Merauke in Papua. The distance is slightly further than the longest East-West distance in China that measures some 5,026 kilometers.

and social development. A leading light here was Widjojo Nitisastro, a population economist who earned his doctorate in the anti-natalist environment of the University of California and who was soon appointed to head the National Development Planning Board (Bappenas).

The New Order government also came into power during a period of environmental concern when proponents took to a Malthusian platform to build their anti-natalist argument of high fertility leading to a collapse in limited resources and impeding economic development. Noted proponents of this position emphasized the necessity of population control, particularly for less developed or poor societies who bore the heavy burden of a large proportion of their population being in a state of dependency as children and consuming far more than they could ever produce.<sup>3</sup> Key proponents included Paul Ehrlich, author of the *Population Bomb* (1968), in fact written together with Anne Ehrlich, a position they reinforced several decades later (Ehrlich & Ehrlich 2009).

In this model, for development to occur, the age structure had to shift upward to become dominated by those in productive ages and this would be achieved by reducing fertility (Coale & Hoover 1958). This was the time when voices regarding an impending population explosion became louder as developments in medicine steadily reduced mortality in the developing world, whereas efforts to slow down fertility were less advanced. Population economists have continued to remind the world of the hazards of high population growth constraining economic development and poverty eradication (Kelley & Schmidt 2001, Eastwood & Lipton 2001, Frankenberg & Tomas 2008, Sachs *et al.* 2004). Similarly, the large numbers of children in a family were generally seen to be negatively related with welfare through curbing women's participation in the labour force (Bloom *et al.* 2007).

In any case, shortly after the Soeharto government took office, the government recognized the Indonesian Planned Parenthood Association (IPPA),<sup>4</sup> that had been established already in 1957, but had remained 'underground' during the Soekarno years. Only a few months after taking office, the New Order

<sup>3</sup> Concerns about high fertility hindering development continue to question whether societies shall in fact reap the benefits of the lowest dependency ratio, the so-called demographic dividend or demographic bonus (Mason 2002, Mason and Lee 2004, Poole 2007, Thakur 2012).

<sup>4</sup> IPPA is an NGO (Non-Government Organization), member of the London-based IPPF (International Planned Parenthood Federation).

government established the National Family Planning Institute in 1968, which was then superseded in 1970 to become the National Family Planning Coordinating Board or *Badan Koordinasi Keluarga Berencana Nasional* (BKKBN) as an independent body responsible directly to the President (Soetedjo & Clinton 1972). This special position for a young organization allowed it to be flexible. BKKBN was able to move imaginatively and experiment with the latest technology and social engineering methodologies to socialize the public in favour of the benefits of a small family, relying on use of contraceptives, thus delaying first births and extending inter-birth intervals. BKKBN benefited from the leadership of Dr Haryono Suyono, trained in public communication, who adapted the 'two child family' as a hallmark of the organization.

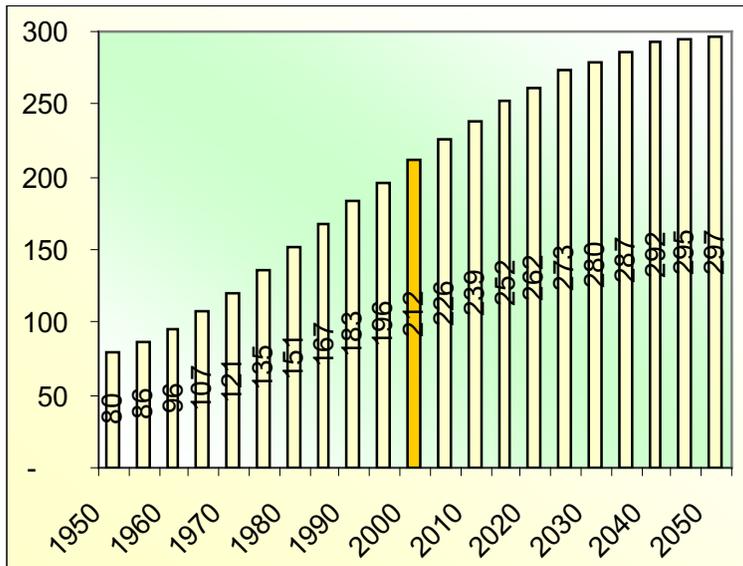
Initiated with international support, including free contraceptive distribution as well as skills development of service providers through large-scale training activities, the family planning program recorded significant success spreading the word and value of fewer children. The success story was built on a phased movement, starting in the heartland of Java and Bali in 1971, where the greatest potential lay, and then following development efforts to Sumatra in 1974 and East Indonesia in 1979. The results placed the program on the world stage of success stories. The Total Fertility Rate (TFR) declined significantly from 5.6 to 2.3 children per woman of reproductive age between the late 1950s and the end of the 1990s (Adioetomo 2004). It was this sharp decline in fertility which hailed the initial demographic transition leading to the promise of a favourable age structure underlying the concept of a demographic dividend.

## THE DEMOGRAPHIC TRANSITION IN INDONESIA

The demographic transition refers to the changing composition in the age structure of a population. The Indonesian demographic transition has been well documented by Adioetomo (2004, 2005). It started during the years following independence with at least some emphasis on improving health conditions, yet only accelerated when the New Order Government seriously implemented the national family planning program. It coincided with the government's increased emphasis on development, not just directed towards achieving high economic growth but also investing in social development in key areas such as education and health.

When the National Family Planning Program started, Indonesia was blessed with windfall profits from sudden rising oil prices allowing for the social investments. Welfare improved through creation of employment opportunities, not just for men but also for women, particularly young women. This occurred both in the public sector, notably in health services and education, and in the private sector as Indonesia adopted an import-substitution labour-intensive policy to produce goods domestically. In the meantime, health services became more available and accessible through expansion in numbers of community health centers aimed not just for the better off but also the poor. Education policy, which targeted having at least one primary school in every village in rural and urban areas alike, made schools closer to home resulting in girls too being sent to school with their brothers.

**Figure 1**  
**Growth in Total Population, Indonesia 1950-2050**



Source: United Nations 2009

All these programs and conditions set the stage for a rapidly expanding and widely accepted family planning program. As parents realized that their children were more likely to survive, they also realized that they did not need as many children as insurance to guarantee care in old age. They

were also faced with increased costs for child rearing. And thus when the means to prevent pregnancy become available and accessible, mothers were more willing to use them whether to delay or extend inter-birth intervals. Consequently, parents had fewer children. And as fewer children were born over time it resulted in relatively smaller cohorts of young children and a start of an ageing process of the population.

The success story of Indonesia's family planning program has been well recorded (Hull, Hull & Singarimbun 1977). The consequent slowdown in overall population growth is shown in Figure 1. Indonesia's population is projected to grow from 80 million in 1950 to 297 million, a century later when Indonesia added more than 200 million people.

The slowdown in the growth rate is striking. During the first fifty years of the projection period, the population expanded by more than 165 per cent, rising from 80 to 212 million. During the last fifty years, up to the middle of the current century, Indonesia's population is expected to increase by only a further 40 per cent to 297 million people (United Nations 2009 [High Variant]). At its peak, between 1965 and 1970, Indonesia's population grew at 2.35 per cent per year. The growth rate has more or less continuously declined ever since to 1.39 per cent for the period 1995-2000 and is projected to reach around 0.98 per cent for the period 2010-2015.

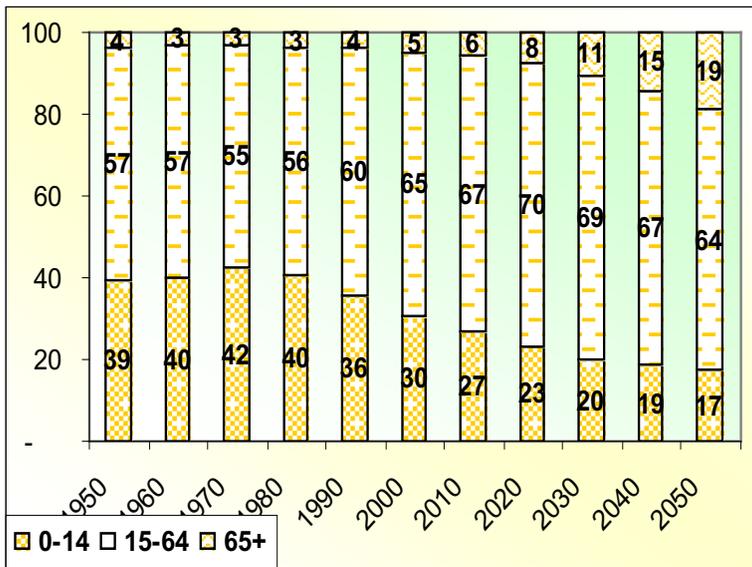
## THE DEMOGRAPHIC DIVIDEND

As a consequence of Indonesia's strong and successful fertility control program the slowdown in overall population growth has also changed the age structure. Fertility reduction has led to a contraction of a broad-based pyramid composed of children to one where there is an expanding proportion in the prime working ages that will ultimately lead to a more rapidly increasing share among the elderly as the country moves on to the future.

The population projections prepared by the United Nations reflect these demographic dynamics. As mentioned above, when the country stabilized after independence it experienced a baby boom resulting in a rise in the share of children in the overall population with the share of the population aged 0-14 increasing from 39 per cent in 1950 to 42 per cent in 1970 (Figure 2). However, as the family planning program started to take hold the percentage

also started to decline, reaching 40 per cent in 1980 and 30 per cent by the turn of the century; it is projected to decline to only 17 per cent by 2050 (United Nations 2009).

**Figure 2**  
**Age Composition of Indonesia's Population 1950-2050**



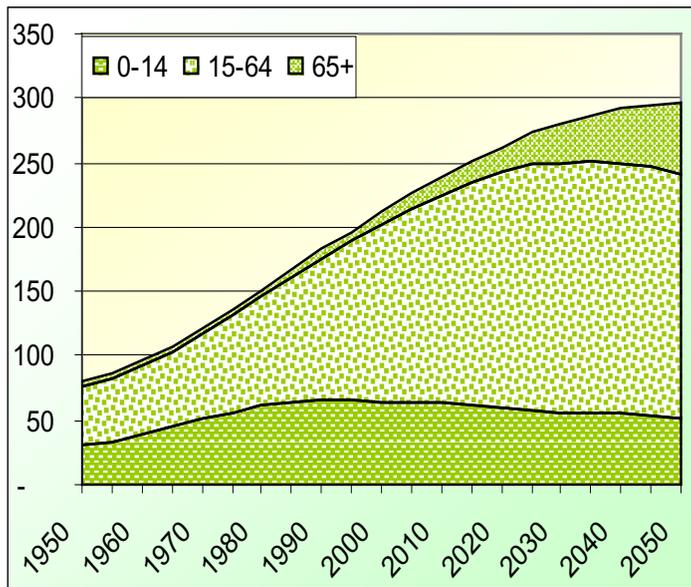
Source: United Nations 2009  
Note: Based on medium projection

The decline in the share of children has resulted in a complementary increase in the share in the productive or so-called ‘working ages’, here using the common definition of the population aged 15-64 years. From a low point at 55 per cent in 1980 the proportion in this age group reached 65 per cent in 2000 and is expected to peak around 70 per cent in the period 2020-2030 before declining, due to the increase in the share of the elderly (ages 65 and over) to closer to 64 per cent by the middle of the century. It is this period between roughly 2020 and 2030 that is seen as the core of the window of opportunity for Indonesia.

Yet because of the relatively low proportion of elderly in countries like Indonesia and in spite of a call by a number of scientists for more attention to an impending increase in this ratio (*Preparing for the Challenges of Population Ageing in Asia* 2010; AIPI 2011), little attention is being paid to their well-being. Until today, the share of the elderly, here defined as those aged 65 and over, has remained less than one in ten and, not surprisingly, the issue of ageing continues to take a back seat. Basically, the elderly remain the responsibility of their offspring with the state paying extremely limited attention to their needs. Until today in Indonesia the elderly have little voice (Oey-Gardiner 2011).

But the elderly in Indonesia are, in fact, rapidly becoming the fastest growing group in the country. Based on the projections used in Figure 2 this will happen from 2030 onwards and, once ‘unleashed’ there will be no return; the share of the elderly will continue to grow as the share of younger age groups continues to contract.

**Figure 3**  
**Population Growth, Indonesia 1950-2050**



Source: United Nations 2009.

Note : Based on Medium Projection.

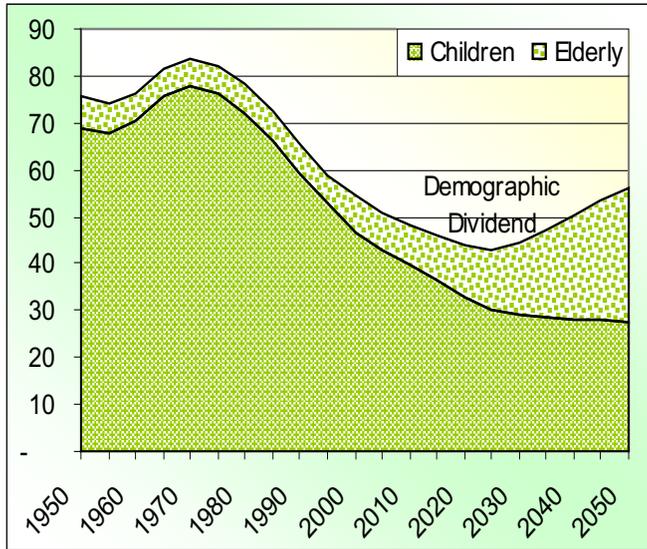
The absolute numbers are equally staggering. Using the medium projection of the United Nations, at the beginning of the projection period (1950), children

aged 0-14 years numbered some 31 million, the working-age population (ages 15-64 years) some 45 million, with only 3 million counted as elderly at ages 65 years and over (Figure 3). Half a century later in 2000, the number of children had doubled to 64 million, the working-aged population had become threefold larger at 137 million, and the number of elderly had grown even faster, proportionately reaching a total of more than 10 million people. By the middle of the twenty-first century, when the total population is projected to reach close to 300 million, numbers of children are actually projected to decline to around 52 million, the working-aged population to increase moderately to 190 million, but with numbers of elderly increasing by more than five times from 2000 nearing 55 million people. Such is the rapidity of the ageing process when it takes hold.

The so-called burden on society represented by the young and old is reflected in the dependency ratio, measured as the number of people aged 0-14 and 65 and over to the working-age population aged 15-64. It indicates the 'burden' borne by those in the more productive years in supporting those who generally are seen to consume more than they produce (Mason no date). In a high-fertility regime the dependency ratio is relatively high with most of the burden being caused by a high proportion of children who, particularly in a more modern society, require significant social investments in areas such as health and education. Although they may also contribute economically, including as unpaid labour in housework and with future expectations of their being able to care for their ageing parents, these contributions and expectations also tend to diminish with development with children becoming more of a cost to their parents.

With extended fertility decline there is a shift of the age pyramid towards the working ages and a concomitant decline in overall dependency caused by a relatively high proportion of both children and the elderly. But later, there comes a time when, even though the burden of children continues to decline, the burden of the elderly starts to rise at an increasingly rapid rate. It is the period when the dependency burden is the lowest that demographers identify as 'the demographic dividend', when the opportunity presented by their productive forces can be utilized to the greatest benefit of society.

**Figure 4**  
**Dependency Ratio Contributed by Children and Elderly, Indonesia 1950-2050**



Source: United Nations 2009.

Note: Dependency ratio = ratio between children and elderly over the working-aged population.

The reason for referring to this phenomenon as a ‘dividend’ arises from recent macroeconomic analysis on the consequence of population dynamics on economic development. Various studies using aggregate level panel data show the impact of demographic factors on saving rates (Bloom, Canning & Graham, 2003; Schmidt & Kelley 1996; Kinugasa 2004; Williamson & Higgins 2001) and on economic growth (Bloom & Canning, 2001; Bloom & Williamson 1998, Kelley & Schmidt 1995). Moreover, the Asian economic miracle attests to the important contribution of the demographic dividend to economic success.

Under the authoritarian New Order regime of President Soeharto and in large part due to a booming economy and a highly centralized set of development policies spreading access to basic services more widely across the country, Indonesia was able to make significant strides in education and health, albeit from a relatively low base, during the 1980s and 1990s, which was even noted by the World Bank in its famous study of the Asian economic miracle (1993).

It appeared that Indonesia was well positioned to take advantage of an age structure transformation that was starting to occur at the same time

But things changed following the 1998 financial crisis. The financial crisis became a political crisis and there was both a change in government and a change in focus in the economy towards greater austerity as a condition for the bailout provided by the IMF. While there may have been some legitimate fears that this forced austerity and hardship would derail at least some of the previous progress, this now appears to have been less the case; such that by the middle of the first decade of the twenty-first century, one of Indonesia's noted demographers even hailed the possibility of an imminent demographic dividend (Adioetomo 2004, 2005).

Thus even though the height of 'demographic advantage' will not be reached until the 2020s, with the now significant movements of previously larger cohorts of youth into prime working ages some of the benefits of the Indonesian demographic dividend are currently already being realized. It is no accident that Indonesia advertises itself on TV as having a young and dynamic population with half of them under the age of 30.

Here, the century long UN demographic projections from 1950 to 2050 (Figure 4) tell the overall story of an initial rise in dependency followed by decline as fertility rates fell and family planning became more widely adopted. The declining share of children is being met in recent years with concomitant increases in the share of the working-age population and only moving into marked increases in the share of the elderly in the second quarter of the twenty-first century. Thus, while the nature of the demographic transformation and the timing of this 'window of opportunity' is clear, numbers alone are not necessarily sufficient to create the welfare circumstances supportive of taking advantage of this change. To clarify our position we shall turn to a discussion on whether the country will be able to realize her potentials.

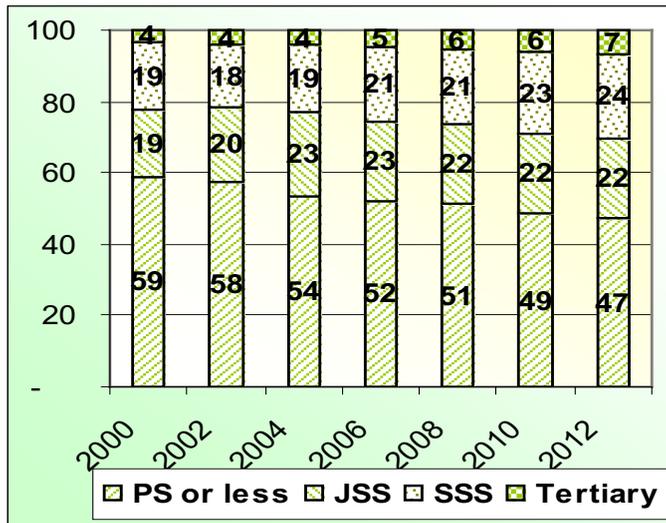
### REALIZING INDONESIA'S POTENTIAL

Whether Indonesia will realize her potentials depends not just on quantity but also on the quality of the workforce as exploiting the dividend has as much to do with productivity as with the simple numbers of workers. Here we need to focus our attention on education which continues to expand and improve, at least in quantitative terms. Improvements in education

are a result of the dynamics between growing numbers of youth creating demand for continuously increased schooling that has a mutual impact on the quality of labour and on economic growth. We also look briefly at labour force transformations that can impact on the capacity to take advantage of the demographic dividend.

In some ways Indonesia stands at a crossroads in education. Policies under the New Order government led to rapid expansion in elementary education in the 1980s and 1990s such that in most parts of the country primary school completion was nearly universal by the turn of century. This has led in turn to subsequent increases in secondary school enrolment that are now starting to work their way into the labour force as well.

**Figure 5**  
**Trends in Education Composition of the Working-age Population (15+), Indonesia 2000-2012**



Sources: BPS 2000-2012.

Admittedly the current labour force structure does not yet demonstrate these trends to a great degree and skeptics are quick to emphasize low education levels in the labour force. The latest available annual National Labour Force Survey (SAKERNAS) data for 2012, for example, shows that seven of every

ten persons of working ages has had at the most completed junior secondary schooling; and at the other end that only three of every ten had graduated from senior secondary school or enjoyed post-secondary education.

On the other hand, the trends are promising. Even if we only focus on the period starting this century from the year 2000, changes in the education composition of the Indonesian population are impressive. Based on the same SAKERNAS surveys, the share of the population aged 15 and over with primary schooling or less has declined from nearly six in ten at the beginning of the century to only less than one-half (47 per cent) in 2012 (Figure 5). The proportion of those with junior secondary schooling also expanded slightly through 2006, but by 2012, this had already started to contract in favour of those with senior high school credentials.

The most impressive increase can perhaps be seen among those with senior secondary schooling, where the share rises from one of five to one of four over the period 2000-2012. Even tertiary education shows a positive trend although still at relatively low levels with only a 7 per cent share among those aged 15 and over in 2012, up from 4 per cent in 2000.

What do the above trends imply? As indicated above, these are largely a result of past education policies in line with the UNICEF call for countries to ensure 'Education for All'. Indonesia has translated this commitment into the provision of 'basic education' facilities<sup>5</sup>, including six years primary and three years junior secondary school. This is now moving upward as Indonesia has basically achieved universal primary school attendance and is progressing toward meeting targets at the secondary level in any parts of the country. In recent years this has been facilitated by provision of free schooling as a political platform and supported by a legal framework requiring 20 per cent of state and local budgets to be allocated to education.

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<sup>5</sup> Indonesia has generally taken a supply side approach, through provision of facilities which are brought 'closer to home' by targeting villages for primary schools and at least initially sub-districts for junior secondary schools, districts/municipalities for senior secondary schools and with public universities targeted at the provincial level. As it stands current incentives are for local governments to split up causing continuous growth in the numbers of local governments. By the end of 2012 there were already 79,075 villages from 75,666 in 2008; sub-districts grew from 6,520 to 6,793; while districts and municipalities were prevented from splitting up resulting in a relatively stable number of 399 districts and 98 municipalities and 33 provinces (BPS 2012).

Classified by the World Bank as a 'lower-middle income' country, Indonesia compares favourably with other middle-income ASEAN countries in terms of human resource potential. Indonesia's secondary net enrolment ratio is comparable to Malaysia and Thailand, both classified as 'upper-middle income' countries (Table 1).

**Table 1**  
**Selected Indicators for ASEAN Countries in 2009 and 2010**

Country	WB Income Class	Per Cap GDP (PPPS)	% Population Living on <\$2/day	Per Cap Public Expenditures on Health (US\$)	Net Secondary Enrollment	
					Female	Male
		2010	2009	2009	2010	
Cambodia	Low	2,150	56	9	32	36
<b>Indonesia</b>	<b>Lower Middle</b>	<b>4,293</b>	<b>51</b>	<b>29</b>	<b>68</b>	<b>69</b>
Laos	Lower Middle	2,543	66	7	33	39
Malaysia	Upper Middle	14,591	2	151	71	66
Myanmar	Low	-	-	1	50	49
Philippines	Lower Middle	3,940	45	23	66	55
Thailand	Upper Middle	8,490	12	127	77	68
Vietnam	Lower Middle	3,181	38	31	-	-

**Source:** Population Reference Bureau 2012.

**Note:** No data available for Brunei Darussalam.

In general socioeconomic terms, however, Indonesia most closely compares to the Philippines (Table 1). Both countries enjoy comparable levels of per capita GDP of around \$4,000 PPP (Purchasing-Power Parity) with about one-half of the population living in poverty (using the World Bank definition of \$2 PPP per day); public sector expenditures on per capita health at still less than \$30 but with Indonesia showing slightly higher secondary enrolment than the Philippines, with net enrolment rates of 68 and 69 per cent for females and males respectively in Indonesia and 66 and 55 per cent for the Philippines.

In fact, a similar pattern emerges when measured at the tertiary level. Focusing at the turn of the decade in 2010, it seems that Indonesia with a gross tertiary enrolment rate of 23 per cent is already catching up with the Philippines at 28

Per cent although still well behind Thailand and Malaysia yet noticeably ahead of other ASEAN countries.

Table 2 shows that Indonesia has made significant strides in increasing access to tertiary schooling during the recent past, a phenomenon extensively described in the literature (Hill & Thee 2012). This trend is in response to both rising demand caused by the rapidly growing population of young adults with secondary education seeking further qualifications and similarly by the rising supply of tertiary education institutions in both the public and especially the private sectors. Here, the private sector has been particularly responsive with more than 1,000 new private institutions of higher education being created during the first decade of this century; from 1,944 to 3,011 between 2000 and 2010. Even so, most of the increase in numbers of registered students that went from 2.9 to 4.3 million over the same period occurred in public institutions (58 percent), which expanded and competed with private schools (based on statistics from the Ministry of Education).

**Table 2**  
**Tertiary Education Enrolment Rates for ASEAN Countries, 2005-2011**

Country	2005	2010	2011
Brunei Darussalam	16.9	17.3	19.6
Cambodia	3.4	12.9	14.5
<b>Indonesia</b>	<b>16.5</b>	<b>23.1</b>	
Malaysia	29.3	40.2	
Myanmar			14.8
Philippines	24.5	28.2	
Thailand	43.9	46.2	47.7
Vietnam	15.7	16.7	

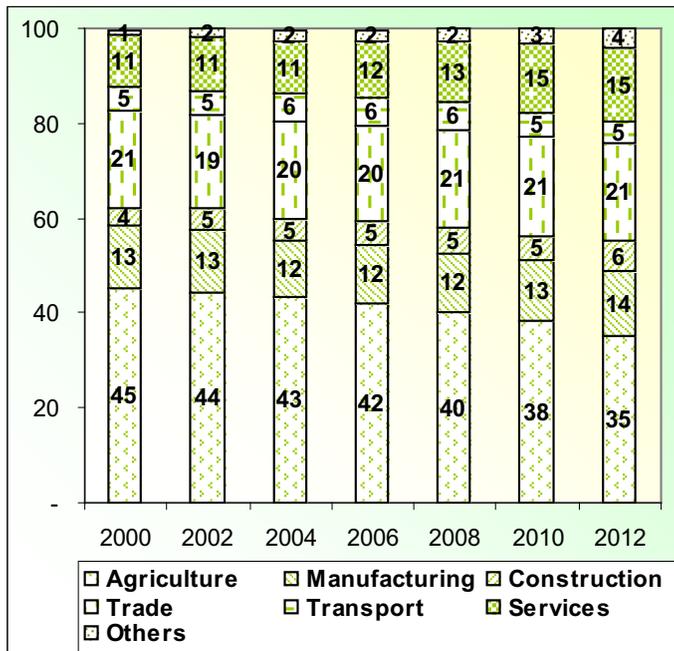
Source: World Bank country education indicators

These dynamics in the education sector affect the labour market. At the personal level education is a means to improve one's life chances and at the population level it is usually noted that level of education is positively related to earnings. The impact of improved education in the overall population is reflected in the transformation of the Indonesian labour market, the focus of analysis in the next section.

### LABOUR MARKET DYNAMICS

As education of the population improves the labour market is being similarly transformed, away from agriculture. Education is usually regarded a ticket to exit out of agriculture, particularly small-scale agriculture which is associated with lack of education and poverty. This exit out of agriculture has been a continuous process. When Indonesia conducted her first Population Census in 1961, three of every four workers found their livelihood in agriculture. By the turn of the century less than one-half (45 per cent) of the workforce remained in agriculture, and the decline has continued so that now only one in three workers remain in agriculture, according to the latest national labour force survey in 2012 (Figure 6).

**Figure 6**  
**Workforce Growth by Sector, Indonesia 2000-2010**



Source: BPS, 2001-2012.  
Note: Others include mining and quarrying and finance.

Complementary to the decline in the share of workers in agriculture has been the expansion of the service sector, rising from 11 to 15 per cent between 2000 and 2012. This is an interesting phenomenon. Whereas labour markets in many currently developed countries transformed from agriculture through industry to move on to the services sector, Indonesia seems to have followed a somewhat different path. Indonesia's manufacturing sector did grow during the 1990s with the expansion of import-substitution industries opening up to multinational labour-intensive production, but the sector was also severely affected by the 1998 financial crisis in Indonesia when many international footloose industries moved away to other low-labour cost countries in the region offering more competitive opportunities (Sugiyarto, Oey-Gardiner & Triaswati, 2006). Since then, manufacturing has remained relatively stagnant as a share of the workforce at around 13 per cent and with the service sector picking up most of the slack (Figure 6).

Here, of course, trade remains the most significant part of the service sector absorbing around one of five workers throughout the past decade. While some and an increasing number of jobs in modern businesses do require education, petty trade remains widespread not just in urban but also in rural areas. This is generally seen as a sector that is easy to enter and that can absorb excess labour when no other jobs are available.

Public services have also seen significant change since 2000, heavily influenced by the massive decentralization of governmental authority that was legislated (after the fall of the New Order government) in 1999 with key bills dealing with central-local relations and with regional finance,<sup>6</sup> and implementation starting in 2001. Because of this legislation, regional (provincial, district and municipal) leadership is now directly elected whereas before they were appointed by higher level authority and these leaders (and regional legislative bodies) are now responsible for much of the public sector planning and administration that was previously directed from the centre.

The financial conditions of this legislation also made it advantageous for regions to split into two or more new regions of the same status, particularly where the main region would not be negatively affected and the new regional government would benefit from additional funding from the centre to support their activities. This also meant that the establishment of these

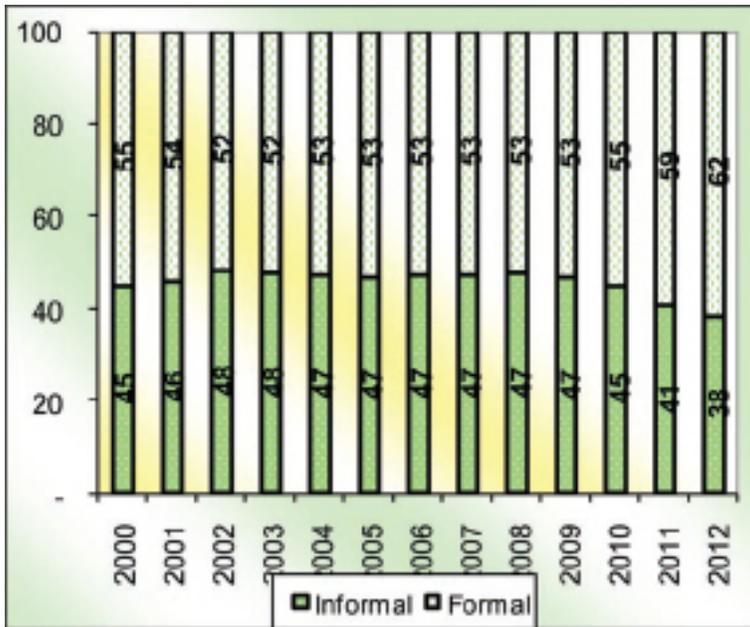
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<sup>6</sup> These bills were later amended in 2004, but the principles remained the same.

new governments would necessarily allow for new employment creation to serve in the government bureaucracy and local parliaments. Since the turn of the century a significant number of autonomous governments have been established – numbering 4 new provinces, 136 new districts and 14 new municipalities giving a current total of 34 provinces, 404 districts and 99 municipalities (BPS 2012).

Transformation in the Indonesian labour market can be seen not only in terms of changes in sectoral composition but also in changes in status composition. In this case we can differentiate workers in terms of whether they work as formal or informal sector workers. This differentiation is based on information collected on the workers' status. Formal sector workers are composed of those categorized as (1) employers (assisted by permanent workers);(2) employees; and (3) non-agricultural casual workers. Informal sector workers include (1) own account workers; (2) self-employed with temporary or unpaid assistants; (3) casual workers in agriculture; and (4) unpaid family workers.

**Figure 7**  
**Status Composition of the Labour Market in Indonesia, 2000-2012**



Source: BPS 2000-2012

Formal sector work is generally more desirable given generally higher earning potential as well as greater benefits including legal protection. As a result, it is also the better educated who have access to such employment. Anecdotal evidence has it that numerous modern employment opportunities such as security and sales jobs, for instance, require at least senior secondary schooling and cleaning in modern buildings require at least a junior secondary certificate.

Most important to the discussion here, as with movement out of agriculture, movement from informal to formal sector jobs is more indicative of a situation of greater advantage in terms of the demographic dividend. In this regard, over the past decade, the labour market has transformed favourably. Even though the formal sector initially contracted from 55 to 52 per cent between 2000 and 2003 it then increased significantly, reaching 62 per cent according to the latest available SAKERNAS, for 2012 (Figure 7). This rather rapid transformation over the past several years is one to watch as it may portend a major shift in the Indonesian labour market and one that could turn out to be favourable for taking advantage of the so-called dividend.

## CONCLUSION

The analysis presented here on the transformation of Indonesia's human resources shows marked levels of progress in a positive direction: the population continues to be better educated (even if mainly still in terms of quantity) and the labour force shows that employment creation and transformation is leading towards the more desirable outcome of higher proportions of the workforce in non-agricultural and formal sector activities. This is in line with meeting conditions required to take the most advantage from the first demographic dividend where the high proportions of people in the more productive ages favour the kinds of savings and investments that can further spur economic growth and prosperity over the longer term.

While it does appear, at least from the point of view of human capital and job structures, that Indonesia, is moving in the right direction, the question remains from a political as well as a social and economic perspective of just how much the country will be able to reap the potential rewards provided by this so-called 'window or opportunity'. In a competitive international economic environment, Indonesia has fared relatively well over the past several years and has turned this into what appears to real social and economic change. But it is

not clear how this will continue and continuation of this progress, including an increased quality as well as quantity in human capital, will be critical if the benefits of the demographic dividend are to be maximized to the benefit of the Indonesian people.

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