The Drivers and Shapers of

Indonesia's Economic Development

in to the 21st Century

February 2010

Building on the Western Australian Boom: The Drivers and Shapers of Indonesia's Economic Development in the 21st Century

February 2010

Additional copies of this report can be obtained from our website: **www.wa.gov.au/tiac**

Contents

List of Tables

List of Figures

Executive Summary

Since independence in 1945 the Indonesian economy has faced periods of economic growth and periods of economic stagnation or decline. In the years immediately after independence, the nationalistic and inward looking policies of the Sukarno government left the country in a weak position, and by the 1960s inflation had taken hold and the economy was stagnating. However, since the fall of the Sukarno government in 1967 average economic growth in Indonesia has been substantially higher than in most other developing nations, and poverty levels have fallen substantially.

The Soeharto era (1967-1998) was not a period of uniform economic policy but rather an era where policy swung from liberal to nationalistic and then back to liberal. During times of economic hardship, such as just after the fall of the Sukarno government and during the oil price declines of the 1980s, the government introduced numerous policies aimed at opening up the economy, particularly to foreign investors. However, in times of high growth, such as during the oil boom in the late 1970s, policies tended to be nationalistic and protectionist.

During the 1980s and 1990s a range of economic liberalisation measures were introduced. Unfortunately some reforms, such as the financial and banking sector reforms were not accompanied by appropriate prudential rules and supervision. This meant that in 1997 when the East Asian Economic Crisis hit Indonesian the banking sector was in poor shape.

Within the ASEAN group of countries Indonesia was hardest hit by the 1997 financial crisis, and in 1998 the economy contracted by 13.1 percent; the rupiah fell to 13 percent of its pre-crisis level; and inflation reached 78 percent. As poverty rates increased the crisis also led to political instability, with regional, ethnic, and religious tensions re-emerging. Ultimately the instability resulted in the resignation of president Soeharto and a move to democratic government.

Since the East Asian crisis and the fall of the Soeharto government, Indonesia's economy has slowly recovered, with the country also undergoing major political reform. Starting in 1999 there have now been several largely free and fair parliamentary and Presidential elections, and in 2009 S.B. Yudhoyono was elected to a second term as President. The largely peaceful and successful transition from authoritarian rule to democracy has been a significant achievement for Indonesia.

Prior to independence Indonesia was an agrarian society, with agriculture accounting for the largest share of GDP. The structure of the economy has however changed substantially with the economy structure now: Services 39 percent, Manufacturing 27 percent, Non-manufacturing Industry 20 percent, and Agriculture 14 percent. Agriculture is however still the largest sector in terms of employment.

The Indonesian economy has been one of the best economic performers during the recent global financial crisis but if the economy is to continue to perform well the quality of human resources will need to be improved. Historically, it has been accumulation of capital rather than growth in total factor productivity that has been the main driver of growth in Indonesia, and there is a limit to how long this process can continue.

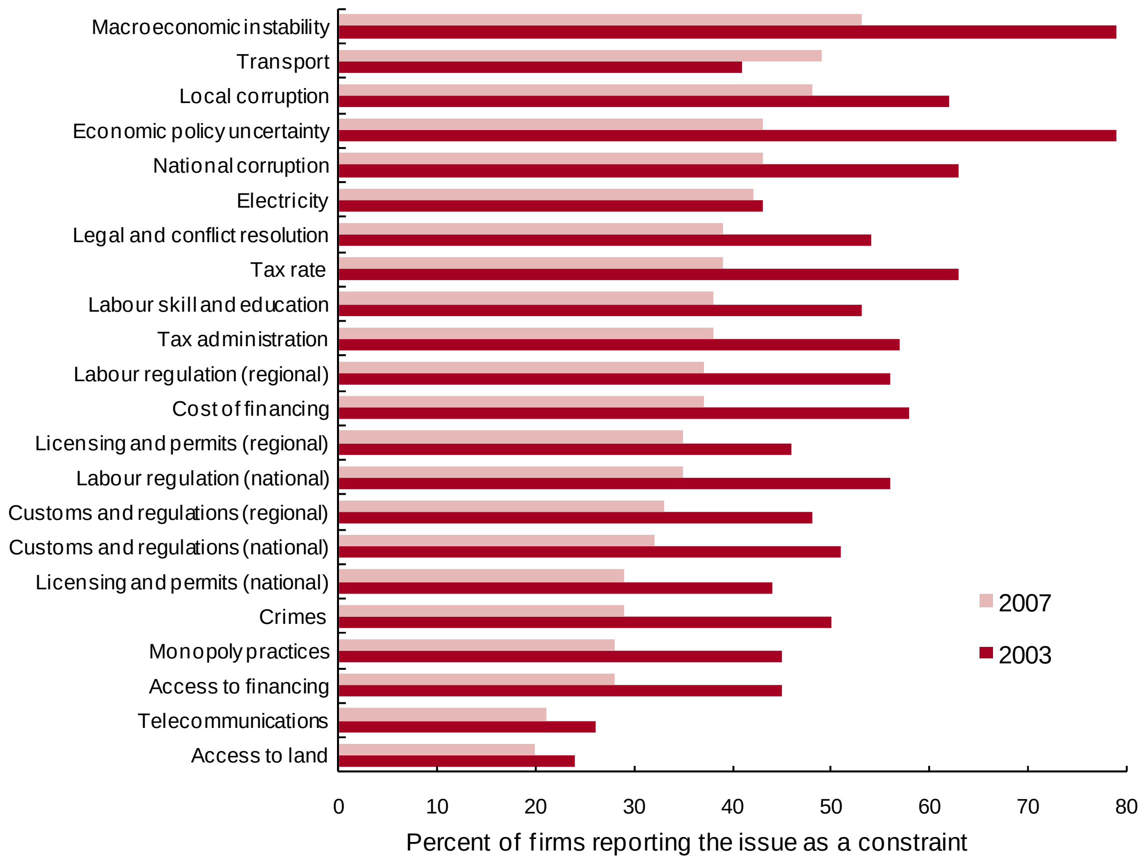
Tariff barriers to Australian exports are relatively low, and will continue to fall as part of the ASEAN-Australia-New Zealand Free Trade Agreement (AANZFTA). Tariffs that will remain following the full implementation of AANZFTA cover some areas of interest to WA, including live cattle (2.5 percent), frozen meat, some fresh and processed fruit, and until 2015 dairy (4.0 percent).

At the country level it has been estimated that a bilateral trade deal between Australia and Indonesia that saw all remaining trade barriers not covered by AANZTFA removed would result in Australia's real GDP in 2030 being $A3.2 billion higher compared to business as usual, and Indonesia's real GDP being $A33.1 billion higher. The Australian sectors that would benefit from an FTA with Indonesia include: telecommunications, machinery, transport, sugar, cattle, and dairy.

Despite relative low barriers to trade, Indonesia's trade intensity with Australia and Western Australia is relatively low. Indeed, Indonesia's trade intensity with the rest of the world is relatively low. This may be due to extent to which corruption is still perceived to be a problem in Indonesia. For example, in 2008 Indonesia ranked in the bottom third of Transparency International's corruption rankings.

Perceived corruption is a factor that limits growth in Indonesia. The state of the infrastructure is another. For example, the World Economic Forum's 2008-2009 Global Competitiveness rankings on infrastructure quality place Indonesia 94th out of 134 countries. Overall the constraints to growth in Indonesia-- from macroeconomic instability, access to finance, and access to skilled labour – are, however, falling.

ES Figure 1 Constraints to business, 2003 vs. 2007



Data source: OECD (2008)

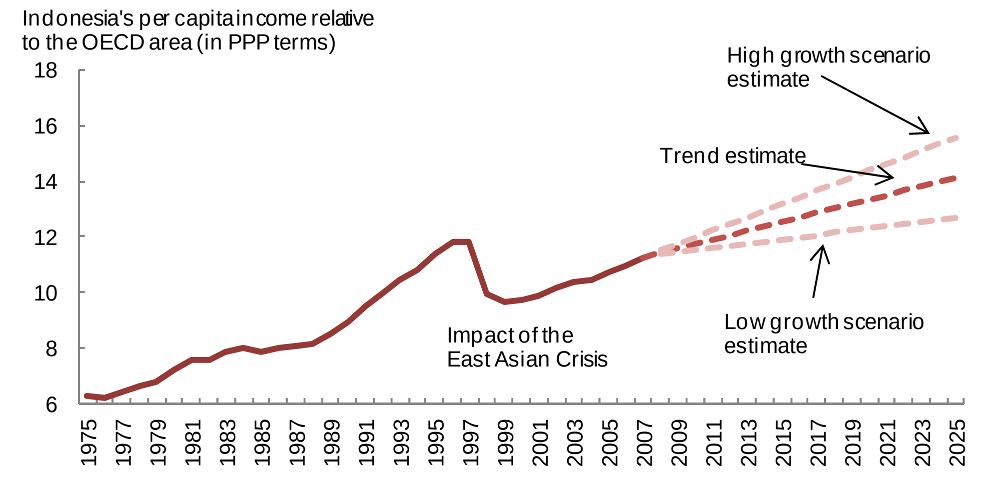
Notwithstanding the challenges Indonesia faces, there are numerous reason to be positive about the growth prospects of Indonesia. These reasons include:

- The successful transition to democracy
- Sustained sound fiscal and monetary policies
- The existence of a labour force demographic dividend over coming decades
- A broad commitment to free trade

- Government recognition of the need to invest in human resource development
- Substantial natural resource wealth
- Progress tackling official corruption and
- Indonesian business's reporting a reduction in constraints to business.

The income gap between Indonesia and the OECD will continue to fall, and on balance the rate at which Indonesia closes the gap is likely to lie somewhere between the historical rate and the high growth scenario rate.

ES Figure 2 Indonesia catching up to the income level in the rich world



Data source: OECD (2008)

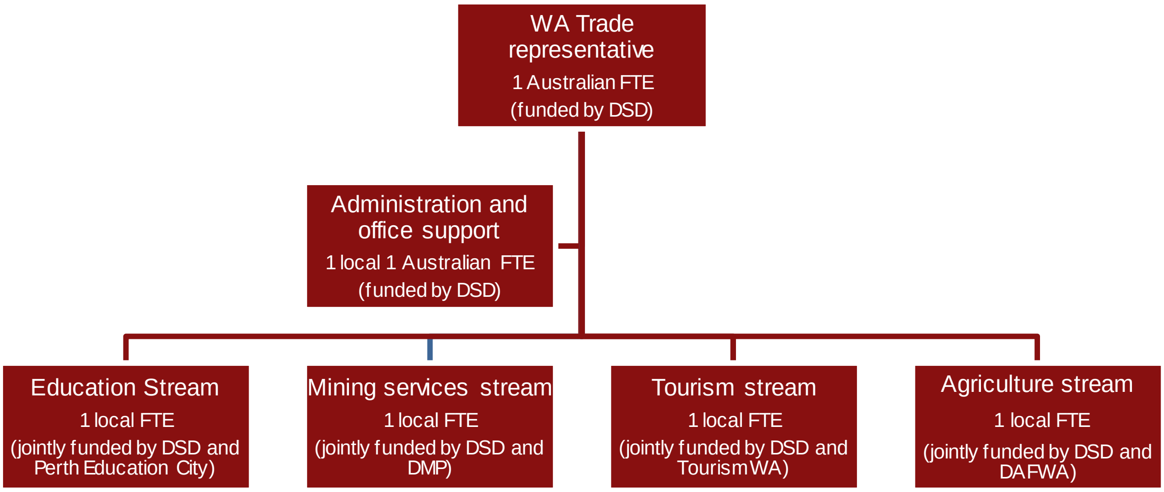
A positive outlook for growth, combined with close proximity to Western Australia and a large population make Indonesia an attractive market to develop further for Western Australia. Given the nature of the Western Australian economy, areas of focus include: education services, mining services, tourism, and agricultural exports.

The WA trade office represents a valuable existing asset that could be further developed in a cost effective manner to assist the development of trade opportunities between Western Australia and Indonesia. A possible new structure for the Western Australian trade office in Indonesia is shown below in ES Figure 3.

The structure would represent a substantial change, but the new structure represents a relatively cost effective means of substantially leveraging the capacity of the office to facilitate Western Australian export flows to Indonesia. At the same time as allowing a much greater targeted focus on promoting Western Australian exports, the proposed structure would also free up the time of the WA Trade representative to focus on ensuring Western Australian firms benefit from the ongoing FTA negotiations.

In terms of the implementation process for a new structure, an essential aspect will be to establish a clear performance evaluation system that can be used to determine the added contribution of the change.

ES Figure 3 Possible structure for WA trade office in Indonesia



1 Economic development path for Indonesia

Since the 1960s, average economic growth in Indonesia has generally been substantially higher than in most other developing economies, and this strong economic performance has resulted in Indonesia being classified as one of South East Asia's newly industrialising economies. The East Asian financial crisis of 1997 did, however, hit Indonesia hard, and it took until 2004 for the economy to reach its pre-crisis level of economic output. With GDP growth averaging around 5.6 percent over the period 2004 and 2007, the Indonesian economy, until very recently, was enjoying a return to sustained strong economic growth. The escalation of the global financial crisis following the collapse of Lehman Brothers in September 2008 has, however, had serious implications for world economic growth, and Indonesia has not been immune from the global economic slowdown. The most recent IMF forecasts are for growth in the ASEAN-5 region (Indonesia, Malaysia, Philippines, Singapore, and Thailand) of only 2.7 percent for 2009 (IMF 2009).

The remainder of this Chapter describes the Indonesian economy, and contrasts the pattern of development since the mid 1960s with the pattern of growth through time of the other ASEAN-5 countries, and also with the pattern of growth in China.

1.1 Historical overview

The Sukarno government, coming to power when Indonesia declared independence in 1945, was strongly nationalistic and authoritarian. Soon after taking office Sukarno outlined his five guiding principles for Indonesia as a unified and independent State. The five principles were theism, humanitarianism, national unity, democracy, and social justice (U.S. Library of Congress, 1993).

Unfortunately for the newly independent State of Indonesia, under the Sukarno presidency – which lasted from 1945 until 1967 – Indonesia faced political conflict and economic deterioration. During the early period of independence in the late 1940s there was much tension and negotiation as the Dutch attempted to maintain rule. Tensions only subsided in December 1949 when international pressures led the Dutch to formally recognise Indonesian independence (U.S. Library of Congress, 1993).

The formal recognition of independence by the Dutch did not, unfortunately, lead to a more stable political environment, and during the 1950s there were major power struggles as politicians placed party interests before State interests (Choi 1999, p. 29). There was also conflict between the military, communists, religious groups, and political factions. In 1957, in an attempt to reduce tension, Sukarno introduced "Guided Democracy" which combined nationalism, religion, and communism. Additional communists joined the government, and relations with China and the Soviet Union were strengthened. In particular, the Soviet Union provided Indonesia with both military aid and financial loans (Cribb 2004, p. 397).

The essential character of the Sukarno regime, as noted in Choi (1999), was that although Sukarno had succeeded in bringing the population together into one nation, he did not know how to run the nation. As Sukarno overspent on excessive monuments and government buildings the Indonesian economy weakened, food shortages developed, and hyperinflation set in (U.S. Library of Congress, 1993). Sukarno's nationalistic foreign policies and links to communism had also resulted in an absence of foreign investment and this lack of foreign investment was further restricting economic development.

By the mid 1960s excessive government spending had gotten to the point where the only option the government had was to print money. Inevitably, printing vast quantities of money, as the regime did, resulted in hyperinflation, with the annual rate of inflation reaching over 1,000 percent at its peak (World Bank 1997, p. 171). Whenever it appears, hyperinflation ultimately has a devastating impact on the economy, and Indonesia was no exception. Economic growth stalled, infrastructure began to deteriorate, and extreme poverty began to rise. In 1966 Indonesia owed over three billion dollars in foreign debt, and due to the state of the economy at this time, Indonesia was unable to meet repayments[1].

Creditors were now faced with a dilemma. If Indonesia officially defaulted on debt repayments it would make it difficult to provide aid in the future. If, however, the debt was rescheduled, western debtor nations were concerned that funds might be diverted to pay off Soviet debt (Murphy 2007, p. 327). To resolve the matter western countries and Japan met with Indonesia through the Paris Club on debt rescheduling and it was decided that loans due in 1966-67 would be rescheduled with a three year grace period and repayment over eight years. However, Indonesia's long-term problems meant that short-term debt rescheduling would not be effective. After protracted and difficult negotiations, it was finally decided that repayment would occur over thirty years, starting in 1970, with interest payments to be made over a fifteen year period. The settlement, which was considered the most liberal scheme ever implemented at the time, was adopted by western creditors in 1970.

The mid 1960s also saw power struggles between the military, communists, nationalists, and Islamists, and this conflict caused significant political instability. In 1965 there was an attempted coup on what was by then an already failing government. Although the coup was unsuccessful, it fatally weakened the regime, and in 1967 a new regime was established.

In March 1967, the Soeharto government came to power in Indonesia bringing a "New Order" administration with western ideas of economic development. The new regime had an explicit commitment to accelerate economic growth, reduce government expenditure, fight inflation, encourage private business, and develop rural infrastructure. Bringing an end to hyperinflation was an early and significant achievement of the new regime, and by 1969 inflation was down to 10 percent (Lankester 2004, p. 298).

Soon after taking office Soeharto introduced measures to encourage foreign investors to reinvest capital in Indonesia. Specific measures included: the return of previously confiscated land, a privatisation program, and the introduction of labour laws more favourable to multinational corporations. The Government also introduced the Principles of Banking Law 14, which characterised the banking sector as an instrument of national development to improve economic growth, achieve a more equitable distribution of wealth, and ensure national stability. Banks were established under a developmental view aimed at promoting national economic development, and within this framework each bank was assigned a sector within which to operate, such as agricultural and rural credit, etc.

The economy recovered quickly under the Soeharto government, and by 1968 the rate of growth in GDP had reached double-digits for the first time. More importantly for the Indonesian people, however, was the fact that high levels of economic growth were sustained. For example, between 1968 and 1982 the Indonesian economy grew at an annual rate of at least five percent (Hill 2000, p. 11).

The liberalisation and opening up of the economy started by the Soeharto government had led, by the early 1970s, to increased foreign direct investment, particularly from China and Japan. Foreign investment in Indonesia was not, however, universally welcomed, and in 1973 and 1974 anti-Japanese and anti-Chinese tensions led to rioting in Jakarta after student protests turned violent.

---

[1] Unless otherwise stated dollar values are always US dollar amounts.

The end of 1973 also brought about the beginning of a world oil crisis, during which OPEC members sought to increase world oil prices. As an oil exporter, Indonesia benefited from increased revenues from high oil prices and saw rapid growth in income, investment, and consumption. With substantial growth in revenue, the government began to invest heavily in the public sector, with significant new spending in the areas of health, rural infrastructure, family planning, and education. By 1974 the government had moved away from its liberal economic strategy and back towards nationalist ideals, increasing public expenditure, increasing protection for domestic industries, suppressing inward investment, and returning to the licensing of many imports.

In the early 1980s as both world oil demand and the oil price began to fall, Indonesia's current account trade surplus began to decrease, and Indonesia's economy began to slow. In response to a rapidly shrinking current account surplus the Government devalued the currency in 1983, and then again in September 1986. With growth slowing, the government once more returned to more liberal economic ideals, such as reducing public sector spending, deregulation of the financial system, and trade and investment reforms (World Bank 2004, p. 11).

In the late 1980s and early 1990s, the government introduced a series of financial sector and banking reforms which led to the rapid expansion of the banking sector. In 1983, as part of the deregulation of the banking sector, credit ceilings for banks were removed and commercial banks were permitted to issue money market securities. Unfortunately, the deregulation was not coupled with appropriate supervisory arrangements or prudential rules, and with the relaxation of credit ceilings banks began to lend aggressively. With aggressive lending the banking sector grew rapidly, but the assets behind the new lending were generally of a poor quality. In 1989, the government required banks to buy back their money market notes and shift all their deposits to the central bank.

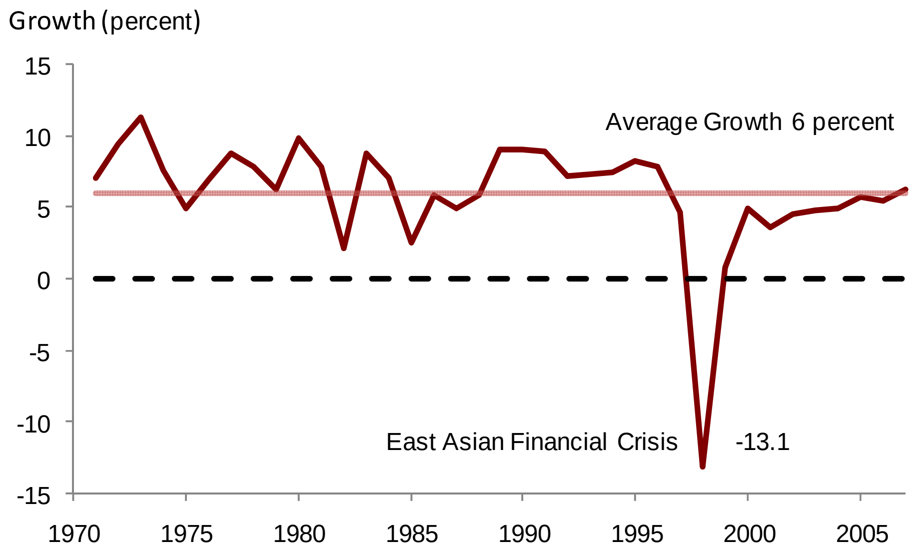
In 1992 the government attempted to encourage foreign direct investment by allowing 100 percent foreign ownership for investments greater than $50 million. The same year, the government introduced a banking reform package which reduced the different types of banks to commercial banks and rural banks. By 1994 the government had liberalised foreign investment to the point where 100 percent foreign ownership was allowed with only few restrictions.

Despite what can only be described as a poorly functioning banking sector, Indonesia's economy grew rapidly under the Soeharto regime (1967-1998), particularly during the 1980s and the first half of the 1990s. For example, in the ten years between 1986 and 1996 real GDP growth averaged 7.4 percent. Under the Soeharto regime, despite the corruption and cronyism, great steps were also made in poverty reduction. For example, Lankester (2004, p. 294) report that extreme poverty levels fell from 60 percent in 1966 to 11 percent in 1996.

Although poverty rates fell throughout the Soeharto period, the banking sector, a critical driver of economic growth in any economy, was performing poorly. The overall poor state of the banking sector meant that despite Indonesia's economic performance, the Indonesian financial system was poorly placed to respond when the East Asian financial crisis arrived in 1997.

The Indonesian economy was hit hard by the financial crisis. The economy contracted by 13 percent in 1998, and with GDP growth of just 0.8 percent in 1999, economic recovery was slow. As economic conditions began to stabilise in 1998, the government began to introduce policies to reform the banking sector. The weakest State Owned Banks (SOBs) were merged, and the International Bank Restructuring Agency (IBRA) was established to manage the non-performing loans and distressed assets of the SOBs. The dramatic impact of the crisis in terms of GDP growth can be seen clearly in Figure 1.

Figure 1 Real GDP Growth in Indonesia, 1971 to 2007 (percent)



Data source: UN Statistics Division (2009) accessible at: http://unstats.un.org/unsd/snaama/selectionbasicFast.asp

The financial crisis of 1997 caused a significant deterioration in the welfare of the Indonesian population and this impact can be seen in the change in the proportion of the population classified as poor. In 1996 the proportion of the population classified as poor was 17.5 percent, yet in 1998 the proportion of the population that was classified as poor had risen to 24.2 percent (Hartono 2007 p. 141).

The economic crisis that began in 1997 ultimately resulted in the resignation of Soeharto in 1998, and the beginning of what has turned out to be a remarkably peaceful transition from authoritarian rule to a genuine democracy. Since the transition to democracy Indonesia's economic situation has also seen sustained improvement, with annual economic growth averaging five percent between 2000 and 2007. The Indonesian economy has performed well during the recent financial turmoil that has engulfed almost all the developed world. For example, in 2008 the Indonesian economy grew by 6.1 percent, and the May 2009 IMF forecasts for growth in Indonesia in 2009 and 2010 were 2.5 percent and 3.5 percent respectively.

1.2 The sectors of the economy

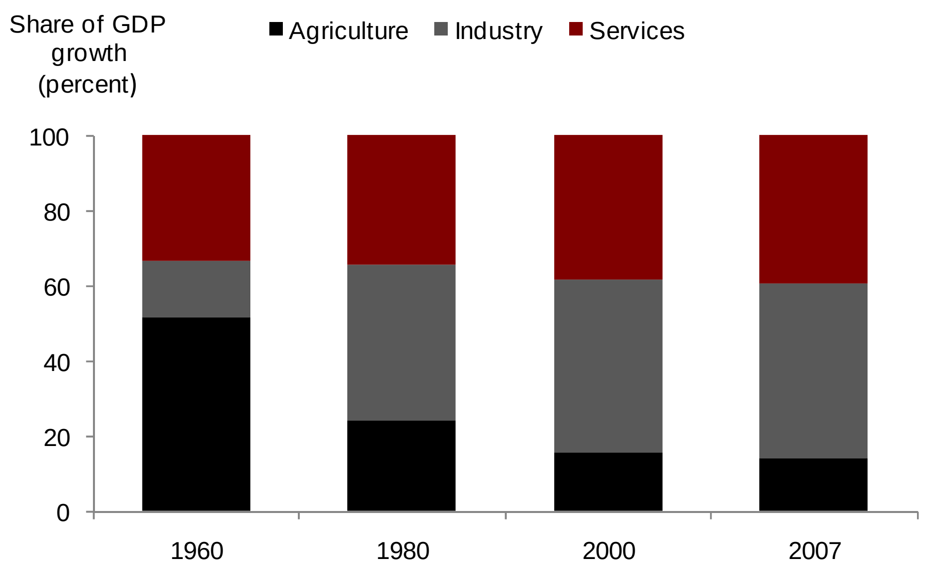
Prior to independence Indonesia was an agrarian society, with agriculture the dominant sector of the economy. After independence Indonesia initially relied heavily on the export of non-food crops such as sugar, rubber, and tea, so that although agriculture was dominant the food crop sector was relatively neglected and unproductive (ADB 2006, p. 1).

Since the fall of the Sukarno government in the late 1960s there has been dramatic and rapid structural change in the Indonesian economy. Consistent with most high growth economies in Asia, rapid growth has been accompanied by industrialisation and a significant change in production away from traditional agriculture towards industry, particularly manufacturing.

Of the three major sectors of the economy: agriculture, industry, and services, it is growth in the industrial sector that has been the most irregular. On average, since 1960, the agricultural sector has expanded more slowly than the other sectors, with growth exceeding five percent only in 1968, 1973, and 1992. With a low growth rate of output the agricultural sector's share of total output has fallen through time. The service sector has most closely followed GDP growth, with a growth rate of at least eight percent during most of the period 1968 to 1981, before slowing in the 1980s (Hill 2000, p. 13).

With the agricultural sector growing more slowly than the other sectors of the economy since the 1960s, the relative importance of agriculture has fallen substantially. Specifically, in 1960 agriculture accounted for more than half the economic output of Indonesia, but by 1980 agriculture's share of the economy had fallen to one quarter of economic output, and has continued to fall. Over the same period, there has been a corresponding increase in the importance of industrial activity to the economy. The importance of the service sector in the economy has been relatively constant through time. The extent of structural change in the Indonesian economy through time can be seen from the detail shown in Figure 2.

Figure 2 Structural change in the Indonesian economy, 1960 to 2007 (percent)

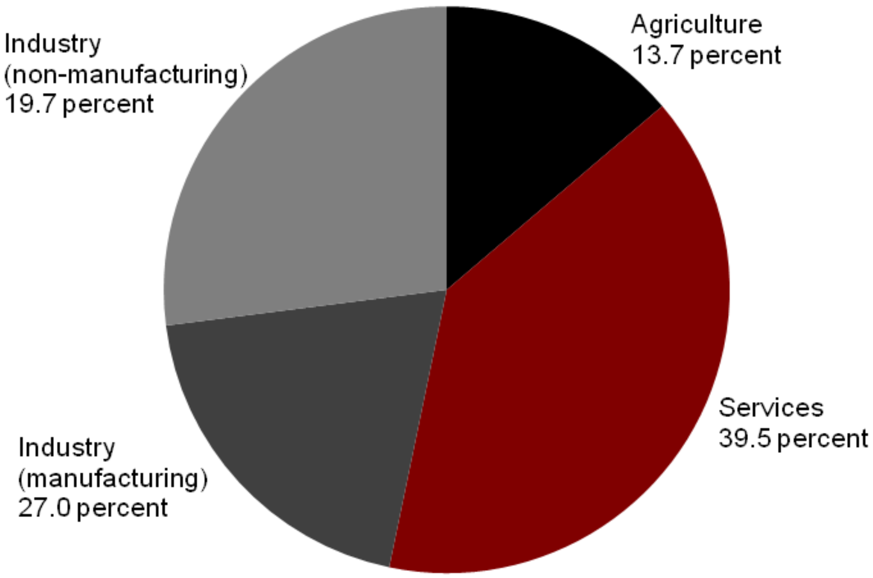


Data source: Hofman (2004) and OECD (2008, p. 19).

1.2.1 Agriculture sector

As can be seen from Figure 3, the Indonesian agricultural sector accounts for approximately 14 percent of GDP. However, as the agricultural sector provides approximately 40 percent of total employment, agriculture remains an extremely important industry. Indonesia has a substantial fishing industry, and produces a variety of agricultural commodities, including food and non-food crops. There is also a substantial animal production industry, and a substantial, if somewhat controversial forestry industry. Rice is Indonesia's largest food crop, with secondary crops including cassava and maize. Significant non-food crops include rubber and palm oil.

Figure 3 Contributions to GDP by sector, 2007 (percent)



Data source: World Bank (World Development Indicators) and OECD calculations in OECD (2008, p. 19).

During the early years of the Soeharto regime unstable export prices led to unpredictable local currency export income. Volatility in export income, combined with low productivity in the food crop sector, meant that Indonesia was relying on a volatile flow of funds from exports to pay for essential food imports. For obvious reasons this caused concern regarding food security. As a consequence, the government made self-sufficiency in relation to food in general, and rice in particular, a national objective. The importance of the agricultural sector in the initial years of the Soeharto regime can be understood by noting that between 1968 and 1973 the sector accounted for 31 percent of the growth in GDP (Marks 2005, p. 23).

The introduction of new technologies, including high-yielding crop strains, coupled with agricultural development initiatives in the 1970s and 1980s, such as subsidisation of farm inputs and increased land dedicated to agricultural production, led to rapid growth in the sector. Up-take of new approaches was not universal, but was strong. For example, in 1985 the share of farmers using high yield varieties of rice was 85 percent as compared to only 50 percent in 1975 (Hofman 2004, p. 22). In the early 1980s, stronger food crop performance, coupled with a slowing industrial sector due to falling oil prices, led to an increase in agriculture's contribution to GDP. In the recession period between 1982 and 1986, agriculture's contribution to GDP growth increased to 23 percent (Marks 2005, p. 23). Although this was still substantially less than the contribution to growth recorded in the initial years of the Soeharto regime, it nevertheless represented a reversal of a long running trend of agriculture's ever smaller importance in terms of contribution to economic growth.

Determining whether or not Indonesia produces sufficient rice to meet domestic consumption is difficult to establish. Except for brief periods in the mid 1940 and late 1980s Indonesia has been an importer of rice. Yet even if Indonesia produced sufficient rice for domestic consumption there would still be rice imports so import data alone is not sufficient to answer the question. As such, the traditional approach has been to compare consumption estimates based on the annual Susenas with production estimates produced by the central statistical agency, the BPS. Recent research by Rosener and McCulloch (2008) has however shown that production estimates systematically overstate production and that consumption estimates systematically underestimate consumption. Depending on the assumption made about the extent to which production is over estimated and consumption in under estimated the position in terms of rice self-sufficiency could be one of surplus or deficit. In the end Rosener and

McCulloch (2008, p. 87) conclude that: "…it is quite impossible to determine Indonesia's rice surplus/deficit position using existing production and consumption data."

Overall, between 1968 and 1992, the agricultural sector grew at an annual average rate of four percent. The value of agricultural exports also increased at an annual average rate of 11 percent over this same period, and on average the sector accounted for 23 percent of total exports. Details on the historical composition of agricultural output are shown in Table 1.

Table 1 Historical details on the level and composition of Indonesia's agricultural output

	Average quantity millions of tons				Average annual growth (percent)			
	1961-1965	1971-1975	1981-1985	1991-1995	1961-2000	1961-1967	1968-1992	1993-2000
Agriculture outputs, total	46.9	62.1	89.1	129.8	2.9	0.8	4.0	0.9
Crop and animal outputs, total	31.0	44.2	68.2	102.0	3.5	1.3	4.8	1.0
Food Crops, all	18.6	27.7	44.4	60.3	3.4	1.3	5.1	-0.1
Rice, paddy	12.4	21.2	35.8	47.5	3.9	1.7	5.5	0.7
Cassava	2.3	2.3	2.6	3.2	1.2	-0.5	1.9	0.2
Maize	1.5	1.5	2.4	3.8	7.1	11.3	7.8	1.6
Horticultural crops, all	5.5	7.8	9.3	14.2	3.3	2.7	3.3	3.9
Fruits, all	4.6	7.2	9.0	12.7	3.7	3.0	3.7	4.3
Vegetables, all	2.5	3.5	3.9	7.7	3.8	2.9	4.0	3.9
Non-food crops, all	5.1	6.4	10.6	19.2	4.1	0.8	5.3	2.9
Cane sugar	1.1	1.5	2.4	3.6	2.9	1.4	5.6	-4.1
Rubber	1.7	2.0	2.4	3.6	2.1	0.4	2.8	0.8
Palm oil	0.2	0.4	1.3	4.5	10.6	2.6	12.7	10.0
Animal Products, all	2.6	3.5	5.9	11.7	4.1	1.4	5.7	0.9
Meat	2.5	3.4	5.7	11.2	4.3	1.5	6.0	0.8
Milk	0.4	0.6	1.7	3.3	3.8	-0.6	5.1	2.9
Fish Products, all	2.9	3.9	6.4	11.1	4.4	4.6	4.4	4.3
Forest Products, all	12.3	12.8	12.4	13.2	-0.5	-1.5	0.7	-3.5

Data source: Fuglie (2003, p. 18)

After 1984 the Government shifted its focus away from the agricultural sector to export growth and the development of the manufacturing sector. Industrialisation in Indonesia led to increased competition for domestic resources and growth in agriculture decreased. Since 2000, the agricultural sector has contributed between 12 percent and 16 percent of GDP growth, and in 2007, the contribution was 14 percent.

Given the proportion of the population employed in agriculture, the prosperity of the agricultural sector has serious implications for the overall welfare of the population, and consequently has been identified as a key issue in the Indonesian Government's strategy for agriculture and rural development.

1.2.2 Services sector

The service sector comprises trade related services, transport, financial services, public administration, and other services. As a share of the economy the service sector has been increasing gradually since the late 1960s. In terms of a contribution to growth, the services sector gradually increased in importance from the late 1960s when the sector accounted for 34 percent of growth, to the mid 1980s, when the sector accounted for approximately 40 percent of growth. Since the mid 1980s the sector's contribution to growth has been relatively stable (Marks 2005, p. 22; OECD 2008).

One of the most significant developments in the services sector in Indonesia has been the liberalisation of trade in services that followed what is generally referred to as the Uruguay round of trade negations concluded in the early 1990s. In 1994 the Indonesian Government outlined a schedule of specific commitments in relation to the multilateral trading of services and the General Agreement of Trade Services (GATS) that was agreed as part of the Uruguay round of trade negotiations. The specific commitments included commitments to liberalising the limitations on market access in telecommunications, industrial services, transport services, tourism services, and financial services[2]. GATS came into force in July 1995.

The initial liberalisation of the telecommunications market in the early 1990s brought about increased private sector involvement and foreign investment including the partial privatisation of the country's two main state-owned telecommunication enterprises, PT Telkom and PT Indosat. In 1995 PT Telkom -- which had previously been the sole provider of fixed line local, long-distance, and leased line telecommunications in Indonesia -- gave 15 year concessions to a private consortia to operate fixed line services. As a result, there was a large inflow of foreign investment from investors including France Telecom, Media One, Telstra, NTT, Cable and Wireless, and Singapore Telecom (UNESCAP, 2003).

In 1999 the government further liberalised the telecommunications industry under Telecommunications Law No. 36/1999 which introduced competition into all market segments. In 2001-02, an additional 42 percent of PT Indosat was sold to Singapore Technologies Telemedia, taking the total share of Indosat in private hands to 77 percent (UNESCAP, 2003).

1.2.3 Industry sector

The Industry sector comprises mining, manufacturing, utilities, and construction, and the Sukarno government's poor economic policies had resulted in an underutilisation of industrial capacity and restricted demand for manufactured products in the 1950s and early 1960s. This meant that when Soeharto came to power Indonesia had a small and poor performing industrial sector. In 1965, with only 13 percent of GDP attributable to industry, Indonesia was the least industrialized ASEAN nation (Hofman 2004, p. 24). Consequently, industrialisation was a priority for the Soeharto government when it came to power.

In the late 1960s, as part of the industrialisation process, the Soeharto government opened up the economy and introduced measures to encourage foreign investors to reinvest capital in Indonesia. Foreign investors responded to the new foreign investment laws and made significant investments in both the mining and manufacturing sectors. Although, with the start of the oil boom and the government's return to nationalistic policies, growth in the industry sector began to slow.

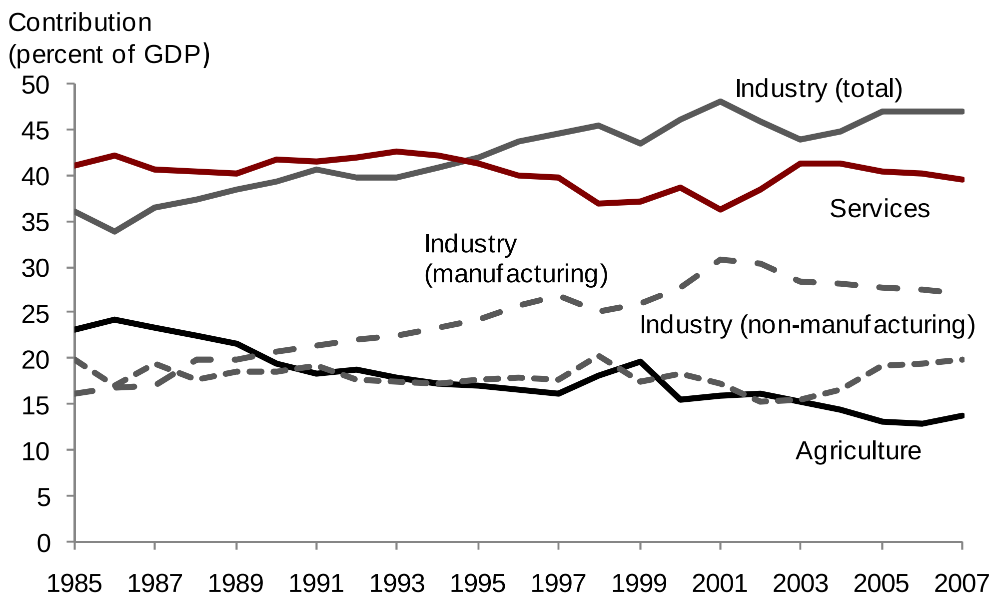
---

[2] Supplements to Indonesia's schedule of specific commitments were made in 1997 for the telecommunication services sector, and in 1998 for the financial services sector.

After the oil boom subsided the government returned to more liberal trade and investment policies. Investment controls were relaxed, and deregulation measures were introduced. Policies that promoted exports were also introduced, and foreign investment began to return to Indonesia. A return of foreign investment, coupled with an export focus, saw Indonesian manufacturing exports grow substantially in the late 1980s and early 1990s.

From 1985 to 2007 the industrial sector's share of GDP increased from 36 percent to 47 percent, and can be seen from Figure 3, the industry sector overtook the services sector as the largest sector of the economy in 1995. If the growth is decomposed into manufacturing and non-manufacturing, as has been done in Figure 3, it can also be seen that it has been an increase in manufacturing activity that has been responsible for the rise in importance of the Industry sector.

Figure 4 Contributions to GDP by sector, 1985 to 2007 (percent)



Data source: OECD calculations in OECD (2008, p. 19).

Since the end of the East Asian economic crisis, industries such as electronics, electrical appliances, and automotives, have grown relatively strongly (OECD 2008, p. 18).

The oil industry

Indonesia is one of the world's oldest oil exporting countries, with the various forerunners to the Royal Dutch Shell company active in the country since the late 1800s. The oil and gas industries remain two of Indonesia's most significant industries, and oil and gas prices have a significant impact on the performance of the Indonesian economy. In 2008, exports of oil and gas from Indonesia were valued at $12 billion and $13 billion, respectively. Indonesia is however also an importer of oil products and in 2008 imports of oil included $10 billion in crude oil and almost $13 billion in non crude oil (UNSD 2009). From an Australian perspective bilateral trade in oil products currently runs substantially in favour of Indonesia. For example, during the 2008 financial year Australia exported $AUD 259 million in crude petroleum to Indonesia and imported $AUD 2.2 billion from Indonesia (AusTrade 2009).

The Indonesian regions of Sumatra, the Java sea, Natuna, and East Kalimantan are the major oil producing regions of the country, with Sumatra producing over half of Indonesia oil and having the large majority of Indonesia's oil reserves. The major regions for gas production include East Kalimantan, North Sumatra, Natuna, and West Papua.

During the 1950s and early 1960s the Sukarno government increased control over Indonesia's oil sector, increasing the operations of State-owned oil companies, and tightening contracts with foreign companies. In 1968, under the Soeharto government, the various State-owned oil related enterprises where merged into a single company, *Pertamina*. Additionally, a new production sharing contract was also introduced at this time. This new type of contract involved splitting oil production between the contractor and the government and allowing the government to take ownership of structures and equipment used for oil exploration in Indonesia (U.S library of Congress, 1993).

The end of 1973 brought the beginning of a world oil crisis with OPEC members driving up world oil prices. As a member of OPEC Indonesia benefited substantially from this. For example, Indonesia's net oil revenues increased from $0.4 billion in 1973 to $2.6 billion in 1975. To put some context around the size of this increase it can be noted that in 1975 oil exports represented more than 50 percent of total Indonesian exports (Hofman 2004, p. 17). In 1981, following the second oil price shock, oil exports peaked in value at $15 billion, which represented approximately 70 percent of total Indonesian export earnings that year (Frederick and Worden, 1993).

Unsurprisingly, the oil industry responded to the price signal and began to invest substantial sums in expanding capacity and developing new fields. In the case of *Pertamina* increased oil revenues led the company to invest heavily in new projects between 1973 and 1975. In order to fund the projects *Pertamina* took on $10 billion in US dollar denominated debt, mostly in the form of short term financing instruments. Despite the price of oil remaining substantially above the pre-shock level of $4 per barrel, a tightening of international money market conditions in 1975 led to liquidity problems for *Pertamina,* and the company was unable to refinance its short term debt. Consequently, *Pertamina* was unable to meet its debt payment obligations. To resolve the situation the Indonesian government was forced to intervene and transfer responsibility for the debt repayments to Bank Indonesia (Hofman 2004, p. 19).

The recession of the early 1980s saw both the demand and price of oil fall. For Indonesia, production actually peaked in 1977 at around 1.65 million barrels per day. Prices fluctuated substantially throughout the 1980s but were generally quite low. In 1989 the value of oil exports had fallen to around $6 billion, which represented around 40 percent of merchandise exports.

In the early 1990s the production of oil in Indonesia remained relatively stable, however, at the end of the 1990s and beginning of the new millennium, oil production began to drop. In part this reflects the ageing of Indonesia's largest oil fields, and in part it reflects uncertainty that emerged at the end of the Soeharto regime. Under the Soeharto regime, in practice *Pertamina* was answerable only to the President. Although corruption was widespread during this period, production sharing agreements were common which meant that foreign investment and expertise was also invested in the sector. Following reforms to the oil sector post-Soeharto, foreign oil companies have had much less success negotiating production sharing agreements for new developments, as evidenced by the many years of protracted negotiations between *Pertamina* and ExxonMobil regarding the Cepu block in East Java.

Corruption in the oil industry is still seen as an issue, and the use of inflated shipping rental rates has long been a favourite method of corruption. As such, the decision in 2008 to drop corruption charges in respect of the on-sale of two super tankers by *Pertamina*, where use of the super tankers would have substantially reduced the number of shipping rental agreements, was seen as a setback for the industry by many external observers. However, some of the more recent blocks auctioned for oil exploration have seen significant commitments from international companies to invest in exploration in Indonesia. For example, in October 2008 100 percent rights were awarded to Hess Corporation which paid a signing bonus of $40 million to the government, and out bid *Pertamina*, for the rights to Semai block V. If the project progresses as expected, Hess will spend over $140 million over the next three year on exploratory drilling. Total expected exploratory activity expenditure over three years on the nine exploration blocks auctioned at the same time as Semai block V is expected to be greater than $450M.

Details of the most recent round of exploration rights issued are shown in Table 2. The government received $23 million in signing payments, and exploration expenditure over three years on the blocks auctioned is expected to be $195 million. That international companies such as Hess and ExonMobil (via Esso) are exploring in Indonesia is a positive sign.

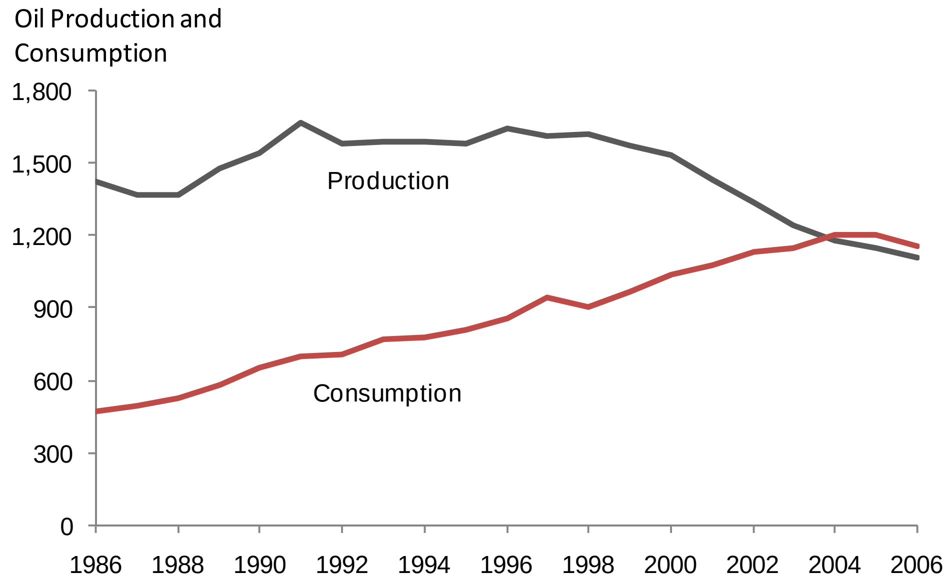
Table 2 Results the 2008 bids for petroleum exploration blocks

Block	Operator	Partner
South Block A	PT Realto Energi Nusantara	PT Prosys Oil and Gas International
East Pamai	PT Northern Yamano Tech Oil Resources	-
West Belida	Orchard Energy West Belida LTD	PT Bayu Energi Lestari
Terumbu	AWE Terumbu NZ LTD	-
S. E. Madura	PT Bama Bumi Sentosa	PT Toba Sejahtera
Pasir	PT Archipelago Resources	-
South Sesulu	HESS Indonesia South Sesulu	-
Kofia	Niko Resources Overseas IX LTD	Black Gold Kofiau LLC
Kumawa	Marathon Indonesia	Black Gold Kumawa LLC
Cendrawasih	ESSO Explotation Cendrawasih LTD	Black Gold Cendrawasih LLC
Papua North	Sarmi Papua Asia Oil LTD	-

Data source: Deloitte Petroleum Service available: www.psg.deloitte.com [accessed 14 July 2009]

From 1962 to 2008 Indonesia's oil production was governed by an OPEC quota allocation. However, in September 2008 Indonesia suspended its membership of OPEC. At the time Indonesia suspended its membership of OPEC the price of oil was around $140 per barrel. As such, the decision by Indonesia to suspend membership of OPEC may appear strange. The key issue for Indonesia with respect to oil is however that in 2004 Indonesia became a net oil importer. Net oil import country status, combined with a system of domestic fuel subsidies and a high oil price continues to provide a challenge for the Indonesian government. Domestic oil production and domestic oil consumption details are shown in Figure 5, and some details relating to the cost of fuel subsidies in Indonesia are shown in Box 1.

Figure 5 Indonesian Oil production and consumption (thousands of barrels)



Data source: Energy Information Administration (2009) International Energy Annual

Box 1 Impact of oil subsidies

Indonesia fuel subsidies to grow 40 percent due to high oil prices, legislator says

The Indonesian government expects fuel subsidies to increase nearly 40 percent this year due to rising global crude oil prices, a parliament member said late Wednesday.

The fuel subsidies of 127 trillion Indonesia rupiah (US$13.9 billion) will make up about 13 percent of the country's total budget of 987.4 trillion rupiah for 2008.

The projections are based on budget revisions, due to be passed this week, that raise the assumption of the average Indonesian crude oil price to US$95 a barrel from US$80 a barrel, said Emir Moeis, the chairman of the parliament's budget committee.

The government has promised not to increase retail prices of certain petroleum products again after more than doubling them in October 2005, which sent inflation soaring and clipped economic growth. Fuel subsidies were then making up about a quarter of the budget.

Analysts said the government is also reluctant to increase retail petroleum prices as such a move would hurt President Susilo Bambang Yudhoyono's reelection chances next year.

Global oil prices topped US$100 a barrel for the first time early this year.

Indonesia, the world's fourth most populous country, is Southeast Asia's only member of the Organization of Petroleum Exporting Countries. However, it has imported oil since 2004 because of aging fields and declining investment in exploration.

Data source: Associated Press Jakarta Post *Thursday 27 March 2008*

A final point relating to oil and gas production in Indonesia that cannot be ignored relates to the location of the resources and regional tensions.

Following the Indonesian occupation of East Timor in 1976, the East Timorese conducted a low level independence campaign. Due to the extent of oil and gas reserves in the Timor Sea, the conflict attracted significant international interest. Prior to East Timor gaining independence from Indonesia in 2002, Australia and Indonesia had an agreement on the maritime boundary in the Timor Sea which was thought by many to be overly favourable to Australia. When East Timor gained independence there was a need for the boundaries to be renegotiated. In January 2006 Australia and East Timor signed the *Treaty on Certain*

Maritime Arrangements in the Timor Sea which allows for the equal distribution of revenue from the overlapping gas and oil field between the two countries, a deal which some regarded as unfair to the East Timorese.

The Indonesian territory of Aceh has also faced conflict in the past three decades that is not unrelated to the substantial oil and gas reserves in the area. In the 1970s, as Aceh's oil and gas resources were developed, the benefits captured by Indonesia from this development largely flow to the central government. The local population of the region were unhappy about the relatively small benefit exploitation of the natural resources was bringing to the area, and tensions surrounding the distribution of revenue from oil fields in the region led to calls for independence by the native Aceh people.

In the late 1980s increased insurgency activity resulted in the national government sending military forces to Aceh to suppress dissent. When the Soeharto regime fell in 1998, a renewed rebellion emerged. In 2001 the Indonesian government responded to renewed tensions by increasing Aceh's autonomy under Aceh Autonomy Law 18/2001. As well as increasing local revenues from oil and gas to 70 percent, the law gave Aceh "special autonomy". In effect special autonomy status meant the transfer of power to the local government over all areas except foreign relations, defence, and monetary matters. Despite these concessions the uprising continued, and in 2003 a state of military emergency was declared. The 2004 Tsunami that caused widespread destruction throughout the Asian region hit the Aceh province especially hard, but ultimately provided an impetus for a lasting peace settlement. In 2005 a peace agreement was signed by the Indonesian government and the major separatist group the Free Aceh Movement.

Mining, LNG and forestry

In addition to substantial oil and gas deposits, Indonesia has an abundant supply of minerals and metals, including: tin, nickel, bauxite, copper, coal, gold, and silver. Some perspective on the size of the mining industry in Indonesia can be gained by noting that Indonesia is the world's second largest producer of tin (after China); the world's third largest exported of thermal coal (after Australia and South Africa); and the world's third largest producer of copper (after the USA and Chile).

In 2007, the value of mineral production accounted for over nine percent of Indonesia's GDP, with total exports of $114 billion. In terms of value, the main contributors were bauxite, coal, copper, nickel, and LNG. Production in the mining industry is dominated by majority-owned state companies, including Antam in bauxite, gold, nickel, and silver; Timah in tin; PT Krakatau Steel in steel; and PTBA Tbk in coal (Kuo 2007, p. 12.1)

With a new industry law taking force in January 2009 that replaced the old 1967 law, there has very recently been substantial change to the rules under which mining in Indonesia takes place. These changes are outlined below:

Licensing system – under the old law contracts were signed between foreign investors and the central government. Under the new regime there is a common licence-based system for foreign and domestic firms. The need to now engage with various levels of government has been criticised as an added complication for mining companies. The requirement that new mining concessions be granted by tender should, however, help improve transparency over the longer term.

Foreign Investment – unlike the provisions under the old law, foreign investors can hold a 100 percent interest in a licence, although there remains some uncertainty about the proportion that must be divested to domestic ownership within five years of production starting.

Value adding – the new law requires new operations to engage in processing within Indonesia, with existing projects required to comply with the provisions within five years. This is perhaps one of the more serious issues facing many existing and future prospective developments.

Local content – priority has to be given to domestic mining service companies, with explicit provisions included in the bill that make it difficult for a multinational firm to just engage a local subsidiary.

In addition to mineral resources, Indonesia also possesses some of the most extensive forests in the world, with its tropical forests ranking only behind the forests of Brazil and the Democratic Republic of the Congo in terms of extent (FWI 2002). Indonesia harvests substantial quantities of timber from it forests, and in 2007 Indonesia produced over 8.5 million cubic metres of logs (BPS, 2009).

Under the Soeharto regime forestry activity was governed by the 1967 basic forestry law. The law placed all forests under State control and provided a framework for the government to issue large scale logging and plantation concessions to the private sector. Corruption and illegal logging were however a substantial problem throughout the Soeharto years. By the late 1990s forest destruction and underlying corruption had become a matter of international concern. Although the Soeharto government implemented several regulations to limit forest destruction, these regulations were only half-hearted implemented and were largely ignored by those operating in the sector (Lindsay 2008, p. 251). For example, prior to the economic crisis in 1997, it is estimated that over half of Indonesia's wood-processing companies obtained their wood supplies from illegal sources (FWI 2002, p .ix).

In September 1999 a new forestry law was introduced. The new law reasserts the State's rights to national forests, but also acknowledges customary forest uses and sustainability, and allows rights to forests to be issued for education, research, social, indigenous, and religious reasons. There remains significant uncertainty regarding the extent of illegal logging in Indonesia. For example, in 2003 the Indonesian Minister for Forestry, Muhammad Prakosa, stated that total losses from illegal logging in Indonesia amount to $600 million annually, four times the annual government budget for the sector. However, in 2005 the Economist magazine cited a report by an environmental group suggesting that $600 million worth of timber was being smuggled out of Indonesia each month. While it is necessary to treat the claims of environmental organisations with appropriate caution, it can be noted that the World Bank report of Kishor and Oksanen (2006) indicates that in both absolute volume terms and expressed a percentage of the total logging in a country, illegal logging is most problematic in Indonesia. Despite the dire state of the industry at the time, Kishor and Oksanendo do however go on to note that things are improving.

1.3 Fundamental sources of economic growth

Economic growth in Indonesia during the Soeharto years was substantially higher than in most other developing economies. Although growth contracted significantly during the 1997 economic crisis, Indonesia has slowly recovered with GDP growth averaging 5.6 percent between 2004 and 2007. The remainder of this section describes the fundamental sources of economic growth and discusses some of the historical drivers of growth in Indonesia.

1.3.1 Decomposition of growth

Economic growth occurs when there is an increase in the quantity of goods and services produced by an economy. Improvements in technology, and improved levels of productivity for both capital and labour contribute to economic growth, as do increases in the physical quantities of human and physical capital.

In a 1994 article Nobel laureate Paul Krugman argued that the "Asian economic miracle" was a myth, and that the growth in East Asia was not due to new economic models or improved technology, but rather from increased capital investment and an increase in labour. In the sense that the East Asian growth story could be readily explained by the increased use of human and physical capital, there was indeed no miracle. The increase in living standards was however a phenomenal and unprecedented achievement that many would readily accept falls into the miraculous category.

In terms of the sources of economic growth, recent research relating to Indonesia has tended to support the arguments originally put forward by Krugman for the East Asian nations. For example, for the period 1960 to 2000 Frankema and Lindblad (2006) found that capital accumulation accounted for between 52 percent and 61 percent of growth, increases in the stock of labour accounted for between 15 percent and 33 percent of growth, and technical progress accounted for between 7 percent and 27 percent of growth. Hossain (2006) considered the period 1966 to 2003 and came to similar conclusions, estimating that increases in capital accounted for approximately 60 percent of economic growth in Indonesia, increases in labour accounted for approximately 32 percent of growth, and technical progress accounted for approximately 8 percent of growth.

GDP per capita, as opposed to total GDP, is however largely driven by increases in productivity. Growth in output per worker can be decomposed into a contribution from improved labour productivity, changes in the participation rate, and changes in the dependency ratio. Details are provided in Table 3 that show a decomposition of growth in GDP per capita for Japan, China, Indonesia, India, and the so called newly industrialised group of countries as a whole. The detail shown indicates that while changes in the participation rate and the dependency ratio have made a positive contribution to GDP per capita growth in Indonesia, improvements in labour productivity have played the major role. Improvements in labour productivity occur as a result of increased human capital, increased physical capital per worker, and increased efficiency in the use of capital and labour.

Table 3 Contribution to GDP growth per capita (percent of output)

	Output per capita	Labour productivity	Participation rate	Dependency ratio
Japan	100	94	8	-1
Indonesia	100	81	8	11
China	100	90	-1	10
India	100	100	-10	10
NIE	100	84	3	13

Note: Newly Industrialised Economies (NIE)
Data source: Hofman et al., (2007 p. 175)

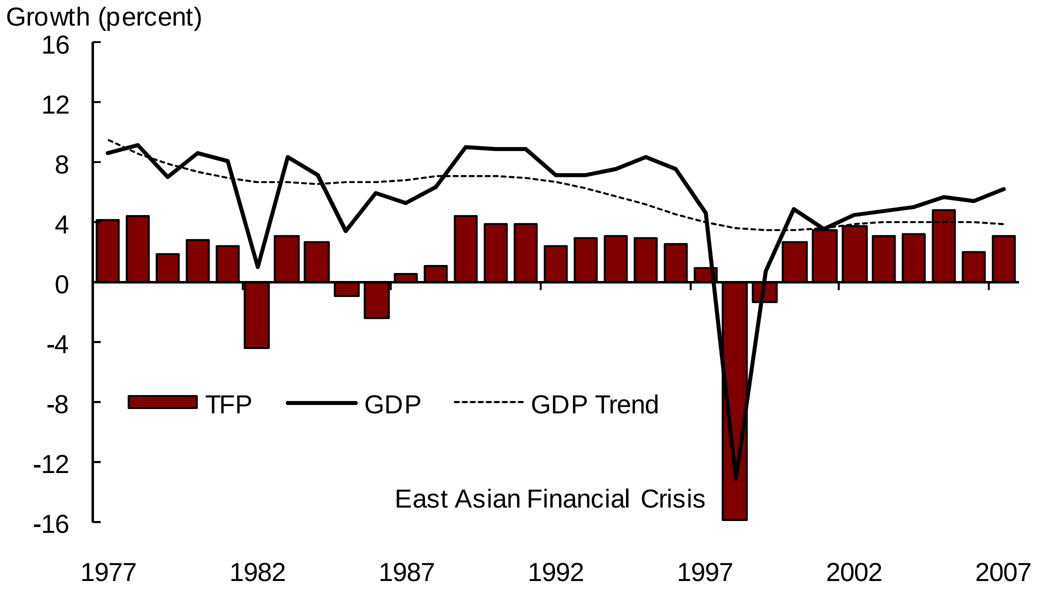
1.3.2 Total Factor Productivity

Total Factor Productivity (TFP) is a measure of efficiency improvements in the economy, including factors such as technological improvements. At its simplest, it is a measure of the change in output relative to the change in inputs.

Historically, improvements in TFP in Indonesia have made less of a contribution to improvements in economic growth than other factors such as capital accumulation. A key issue that needs to be understood in relation to all such analysis regarding Indonesia is however the reliability, or lack or reliability of historical data. Where data is unreliable it is unwise to place great emphasis on the estimated relationships. For example, OECD (2008) raises the issue of Indonesian TFP measures. The particular issue raised in the report is that across the OECD the share attributed to labour in the national accounts is around 0.6 to 0.7 whereas in Indonesia it is only 0.2. Understatement of the share of national income attributable to labour will ultimately result in underestimation of TFP growth in Indonesia.

Figure 5 shows the growth of TFP in Indonesia as measured by the OECD between 1980 and 2006. Since the end of the 1997 financial crisis, the contribution of TFP to economic growth has increased significantly. For example, over the period 2000 to 2007 OECD (2008) estimate that TFP represented 35 percent to 40 percent of the growth in GDP; a result broadly consistent with the estimate of Van der Eng (2008). In terms of an explanation for the increased importance of TFP in driving growth in recent years, Van der Eng (2008, p. 12) states that, as capital formation was relatively low and employment growth was steady during this period, TFP growth may have been due to productivity overcapacity by 1999 that has been used more efficiently, as well as improvements in efficiency caused by institutional changes such as deregulation and competition enhancing regulation in previously non-tradable sectors. Such a view is consistent with the widely reported positive relationship between TFP and microeconomic reform.

Figure 6 Total Factor Productivity (TFP) and economic growth, 1980 to 2006



Data source: OECD (2008).

Table 4 shows the percentage point growth in TFP in Indonesia and other Asian countries since 1966. The growth in contribution for Indonesia is similar to that of other Newly Industrialised Economies in the region over the entire period. Performance over the most recent period is however substantially lower than in the other countries. This is due to the very large negative value for 1998 (-15.8 percent) which distorts the average performance for the remainder of the decade.

Table 4 Contribution of TFP per decade (percentage point growth)

	1967-1976	1977-1986	1987-1996	1997-2006
Japan	NA	2.31	0.39	0.20
NIE	1.05	1.49	2.33	0.85
China	3.30	3.40	2.20	NA
India	1.52	1.50	3.17	NA
Indonesia	2.79	1.37	2.80	-0.68

Note: Newly Industrialised Economies (NIE), For China and Indonesia, TFP is estimated assuming an initial capital–output ratio of 1.1 (1960 for Indonesia, 1965 for China), and a depreciation rate of 4 percent. The capital share for Indonesia is taken to be 0.35—equal to the IMF (2006) estimate for other countries; for China it is 0.5, following Kuijs and Wang (2005).
Data source: Hofman et al., (2007, p. 177) and OECD (2008) for Indonesia

1.3.3 Human capital

Education in Indonesia is based on the 1945 constitution and Law 20/2003, and consists of kindergarten, primary education, secondary education, and higher education (Ministry of National Education, 2009). In 2005 public and private schools in Indonesia enrolled 50.6 million students in over 270,000 schools. This makes the education sector in Indonesia the fourth largest education system in the world (World Bank, 2007).

All children are required by law to attend basic education from seven to 15 years, and basic education is government funded. Each year Indonesia spends approximately 16.5 percent of its budget on education, which is broadly consistent with other developing and OECD nations. Relative to other East-Asian countries, education spending in Indonesia has however been somewhat lower, and this has been suggested by the World Bank as a factor contributing to lower learning outcomes relative to these countries (World Bank 2007, p. 1). In recent years, public expenditure on education has increased rapidly. Specifically, between 2001 and 2006 education spending increased from 2.5 percent of GDP to 3.5 percent of GDP, which is a level comparable to other middle income countries and some OECD countries.

The oil boom in the mid 1970s was a factor in allowing education investment. For example, in 1973 the Soeharto government set aside oil revenue for the construction of new primary schools, and by the late 1980s nearly 40,000 primary schools had been refurbished or constructed (U.S. Library of Congress, 1993). Following this investment in education infrastructure, and as can be seen from Table 5, there was a substantial increase in the enrolment for both primary and secondary education.

Table 5 Gross and net enrolment rates for education in Indonesia, 1995 to 2004

	Net enrolment rate			Gross enrolment rate		
	Primary	Secondary (Junior)	Secondary (Senior)	Primary	Secondary (Junior)	Secondary (Senior)
1970	72.0*	17.0*	17.0*	80.0	16.0	16.0
1980	88.0	-	-	107.0	29.0	-
1995	91.5	51.0	32.6	107.0	65.7	42.4
1998	92.3	58.4	36.9	109.3	70.3	46.4
2000	92.4	61.7	39.5	110.1	76.0	51.5
2002	92.7	60.9	36.8	106.1	79.5	50.4
2004	93.0	65.2	42.9	107.0	82.2	54.4
2005	93.2	65.2	41.7	107.1	81.7	52.9

Note: *data points correspond to the year 1975
The gross enrolment ratio in education is the total enrolment at that education level, regardless of age, as a percentage of the official school age population for that level. The ideal ratio is a 100 percent, but ratios greater than 100 can occur when there are high

numbers of students in a level that does not officially correspond with the education level's age group. A high (greater than 100) gross enrolment ratio can be indicative of inefficiencies in the educational system. The net enrolment ratio provides the number of students that are of the required age group and are enrolled in school divided by the total number of students in that age group
Data source: World Bank (2007, p. 6)

The development of human capital contributes significantly to technical progress and so economic growth. The improvements in enrolment rates in the education sector should therefore make a lasting contribution to the sustainability of economic growth in Indonesia over the coming decades.

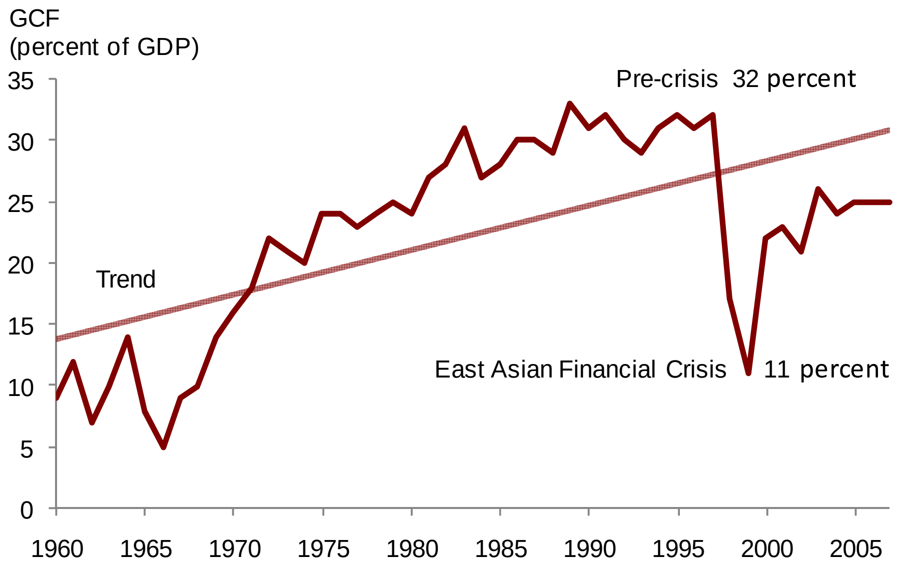
1.3.4 Savings and investment

As noted above, previous studies into GDP growth in Indonesia, such as Hossain (2006) and Frankema and Lindblad (2006), have found capital accumulation to be the most significant contributor to economic growth. A country's capital stock refers to goods which are used in the production of other goods and services such as buildings, equipment and machinery. Capital stock accumulates as a result of investment in capital formation and contributes to the production of output, and consequently economic growth. A low rate of investment in capital formation as a result of limited domestic savings or restricted access to foreign funds will restrict economic growth.

During the Sukarno period Gross Fixed Capital Formation (GFCF) averaged approximately eight percent of GDP, which Van der Eng (2008, p. 6) suggests was just sufficient to recover depreciated capital stock. So, while there was accumulation of new capital during this period, there was essentially no growth in the capital stock of the nation.

After the Soeharto government came to power and introduced more liberal investment laws, investment and savings in Indonesia began to increase, with GFCF increasing from around eight percent in the mid 1960s to 24 percent in the 1980s. The rate of GFCF continued to increase through the 1990s so that just prior to the 1997 economic crisis GFCF was 32 percent of GDP. During the crisis GFCF in Indonesia fell to 11 percent, and it was not until 2007 that GFCF appeared to reach levels that were broadly comparable with the pre-crisis level.

Figure 7 Gross Capital Formation, 1960 to 2007 (percent of GDP)

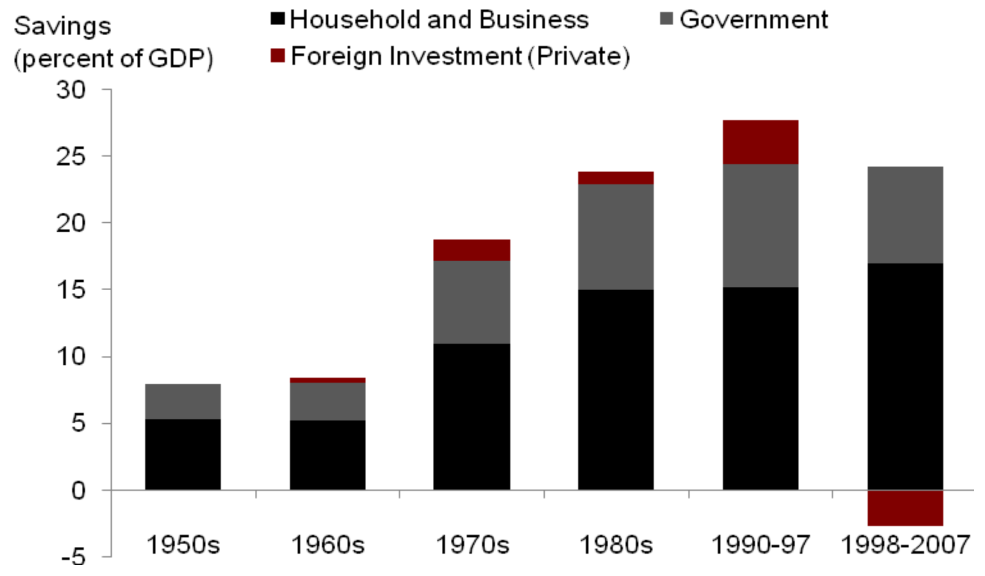


Data source: World Bank Development Indicators (2008)

GFCF is financed by the domestic savings of households and private companies, government saving (including savings by state-owned enterprises), external borrowing for private investment, and net foreign investment. The sources of savings in Indonesia from 1950 to

2007 are shown in Figure 8. As can be seen from the figure, domestic household and business savings, which comprise term and savings deposits and other savings, have consistently been the major source of saving in Indonesia since the 1950s.

Figure 8 Sources of savings in Indonesia, 1950 to 2007 (percent of GDP)



Data source: Van der Eng (2008, p. 25)

Government investment has been largely in infrastructure and has been funded from government savings, foreign aid, and borrowing. Until the 1990s Indonesia's capital account was strictly controlled by the central bank, with most foreign borrowing being for investment rather than financing government expenditure.

As can be seen from Figure 8, foreign funds have never been an especially large source of funds, but following the East Asian crisis foreign investors called in their loans and removed investment from Indonesian firms.

1.3.5 Foreign direct investment

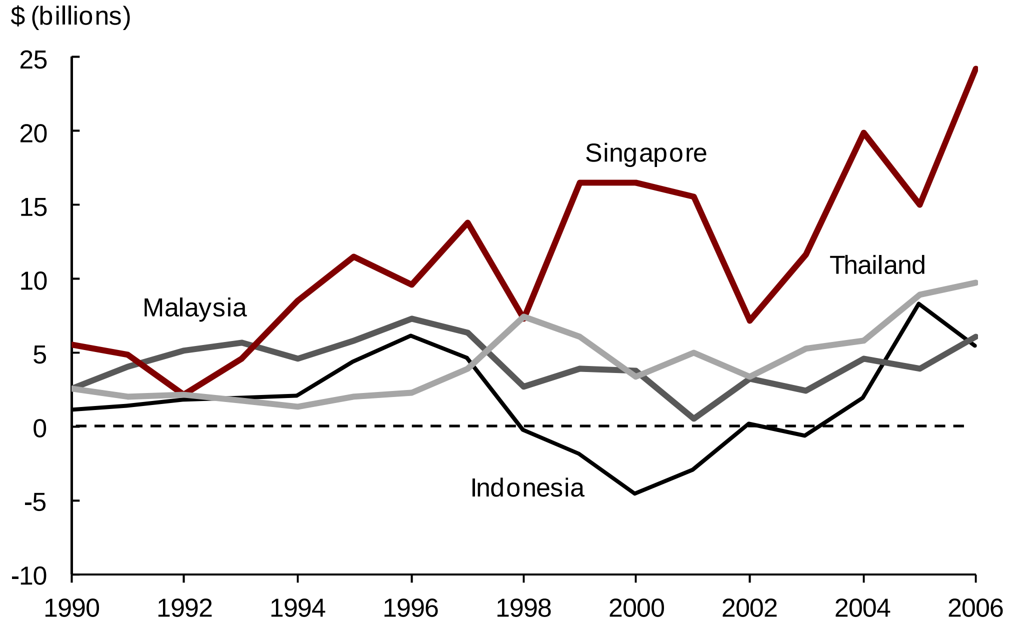
The Sukarno government had very inward focused economic policies and there were significant restrictions on the type and extent of Foreign Direct Investment (FDI) allowed. During this period FDI was therefore very limited. For example, Holland (1995) found that between 1959 and 1965 FDI into Indonesia was only $84 million, and the investment that did take place was undertaken exclusively by foreign oil companies.

When the Soeharto government came to power in 1967, policies in relation to FDI began to liberalise and foreign owned business that were confiscated under the Sukarno regime were returned to their previous owners. Laws to encourage foreign direct investment were also introduced, the first of which was Foreign Capital Investment Law 1/1967 which provided tax incentives, placed fewer restrictions on foreign employers, and provided greater investor security with the promise of no nationalisation for at least 30 years (Holland 1995). Following these changes FDI began to increase and the annual flow of FDI approved by the national government increased from $333 million in 1972 to $521 million in 1973, and $1.05 billion in 1974 (Encyclopedia of the Nations, 2009).

By the mid 1970s improved economic conditions led the government to once more impose tighter FDI restrictions. New limitations required investors to undertake joint ventures with Indonesian firms where the Indonesian equity comprised a minimum of 51 percent within ten years; minimum capitalisation requirements and restrictions on expatriate employment were imposed; less transparent more complex and costly entry procedures were established; and foreign investment was excluded from certain sectors (Holland 1995). Unsurprisingly, following these changes FDI began to decrease.

In the early 1980s as both the oil price and world demand for oil fell, the economic performance of Indonesia began to worsen and the government returned to more liberal FDI laws. The reform process was sustained, with reforms to encourage investment occurring in 1988, 1992, 1993 and 1994 (Holland 1995). The impact of FDI liberalisation is considered in Oktaviani (2000, p. 10) where it is reported that as a result of the removal of FDI restrictions, the flow of FDI into Indonesia increased approximately 15 fold from an average of $200 million over the period 1981-86 to $3.0 billion in 1994. Figure 9 shows the pattern of FDI flows into Indonesia and other South East Asian nations since 1990.

Figure 9 Net FDI inflows in Southeast Asia, 1990 to 2006 (billions $)



Data source: OECD (2008, p. 61)

Despite the increase in FDI from the 1980s through to the mid 1990s, the 1997 economic crisis led to a fall in investor confidence and foreign investors withdrew funds from Indonesia. In the years following recovery, FDI into Indonesia has increased back to its pre-crisis level.

While there have been significant reforms to FDI rules in recent decades that have improved the attractiveness of Indonesia as a destination for foreign investment, it remains true that the nation attracts less FDI than other smaller countries in the region. This can be explained by considering the relative performance of Indonesia on the OECD's FDI restrictiveness scale. On the OECD's scale of FDI restrictiveness zero is equivalent to full openness and one is equivalent to total restriction. The measure for Indonesia is 0.266 and this places Indonesia 34th out of the 44 countries examined in the OECD's FDI regulatory restrictiveness index.

1.4 Macroeconomic policy settings

Since 1966 Indonesia has introduced numerous reforms, including waves of radical reform and periods of back-tracking. Liberalising reforms occurred mostly during periods of economic crisis, such as after the fall of the Sukarno government, the state oil company debt crisis, and the East Asian Financial crisis of 1997. The remainder of this section outlines the history of Indonesia's macroeconomic policies, including exchange rate regimes, trade and investment policies, monetary and fiscal policies, and agricultural policy. A summary of significant policy reform since 1966 reproduced from Hofman et al (2007, p. 186) is outlined below in Table 6.

Table 6 Major reform in Indonesia, 1966 to 2004

Year	Major Reform
1967	Soeharto comes into power, Economic Stabilisation and Rehabilitation plan is introduced, first Paris Club debt rescheduling
1967	Foreign Investment Law passed, Indonesia co-founds ASEAN
1968	Central bank law passed, foreign banks allowed
1969	First 'Five-year Development Plan'
1970	'Commission of four' against corruption appointed, removal of foreign capital and exchange controls, exchange rate unified, second Paris Club agreement
1973	First OPEC oil price hike
1974	'Malari' riots against foreign investment during Japan Prime Minister Tanaka's visit
1975	Pertamina crisis (state oil company unable to meet its foreign debt obligations)
1977	Jakarta Stock Exchange opens
1978	Devaluation of rupiah by 50 percent against the US dollar as the oil price drops
1979	Second OPEC oil price hike
1983	Budgetary retrenchment; devaluation of rupiah by 38.5 percent; elimination of bank credit ceilings; introduction of new taxes
1985	Soeharto honoured for Indonesia's achievement of food self-sufficiency; transfer of most customs functions to Swiss firm SGS
1986	Paken reforms include simpler investment approvals, more liberal foreign ownership, a duty exemption and drawback scheme. Devaluation of the rupiah by 45 percent
1987	'Sumarlin shock': banks required to buy back money market securities (SBPUs); state-owned enterprises required to put deposits at central bank
1988	Pakto: a major banking reform and deregulation. Pakdes II: Non Bank Financial Institutions authorised and regulated; foreign ownership in securities companies allowed; state-owned investment bank Danareksa's privileges limited
1990	Bank Duta crisis; normalisation of relations with China
1991	Pakfeb: tighter banking supervision measures issued; loan team established to limit overseas borrowing of state-owned firms, Bank Summa collapse
1992	Banking law enacted; Intergovernmental group on Indonesia (IGGI) abolished
1993	Prudential regulations on banks relaxed; central bank head of supervision fired due to vested interests of Soeharto
1994	New investment law allows 100 percent foreign-owned companies; new Tariff and Fiscal Team imposes 'surcharge' on imports
1995	Company law, capital markets law approved
1996	Customs takes back duties from SGS; ASEAN Free Trade Area (AFTA) tariff reduction schedule announced
1997	Rupiah floated; first IMF-supported program
1998	Indonesian Bank Restructuring Agency (IBRA) established; Soeharto resigns; new banking law passed
2001	Decentralisation law implemented
2002	Law on anti-corruption commission passed
2003	State finances law passed; graduation from IMG-supported program
2004	Closure of IBRA

Data source: Hofman et al (2007, p. 186)

1.4.1 Exchange rate policy

Since the 1960s Indonesia has had three exchange rate regimes: a fixed exchange rate regime, a managed floating exchange rate regime, and a freely floating exchange rate regime. Prior to 1967 Indonesia tightly controlled foreign exchange and all foreign exchange transactions were prohibited unless explicitly allowed. The government required all foreign exchange received by the public to be surrendered, and the supply of foreign exchange was rationed using multiple exchange rates and strict procedures.

In 1967 there was a major restructuring of the foreign exchange system and a system of multiple exchange rates, all pegged to the US dollar, was introduced. Under the system there were different exchange rates for general imports, aid imports, other imports, and major exports, and by the end of 1970 all restrictions of foreign exchange transactions had been removed. Management responsibility for the exchange rate also passed to the central bank, and both residents and non-residents were permitted to hold and trade foreign currencies (Soesastro 2005, p. 313).

From 1971 to 1978 the rupiah remained pegged to the US dollar with multiple exchange rates for general exchange and aid exchange. Despite inflation increasing by a factor of five over the period, the official exchange rate remained constant at 415 rupiah per US dollar (Hardiyanto 2007, p. 6). In 1978 both the oil price and foreign currency reserves began to drop at an alarming rate. Increased inflation, coupled with fixed interest rates and a fixed foreign exchange rate had led to a substantially overvalued currency, and a currency devaluation was required to stabilise matters. In November 1978 the rupiah was devalued by 50 percent, and a new exchange of 625 rupiah per US dollar was established. Recognising that flexibility could be required in the future, rather than set a new fixed exchange rate the government decided to move to a managed floating exchange rate regime at the same time.

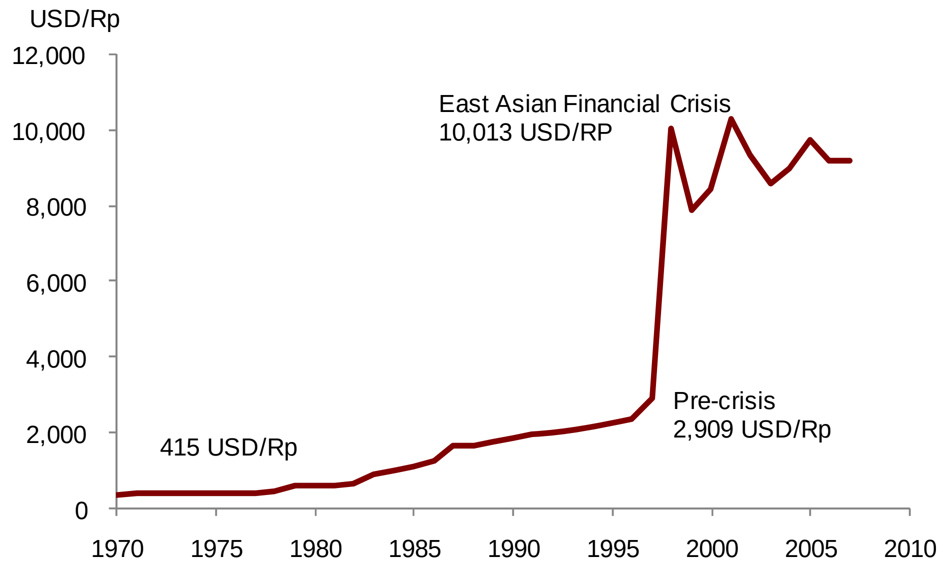
As the world recession of the early 1980s saw oil demand and prices fall, the value of exports dropped, foreign reserves dropped, and a trade imbalance became apparent. Following the start of the managed float era the rupiah drifted down in value so that in March 1983 one US dollar was worth 702 rupiah. In order to promote exports and improve the balance of trade, in March 1983 the government decided to devalue the rupiah by a further 28 percent to 970 rupiah per US dollar. Indonesia's trade performance in the first half on the 1980s continued to be poor so that by September 1986, when the next devaluation took place, the value of the rupiah had fallen to 1,134 rupiah per US dollar. The 1986 devaluation took the exchange rate to 1,664 rupiah per US dollar. Until the East Asian Crisis arrived in 1997 the subsequent pattern for the exchange rate in the decade following the 1986 devaluation was one of periodic adjustment downwards through time.

During the East Asian economic crisis the exchange rate fell below the lower managed exchange rate bound despite substantial government intervention, and in August 1997 the rupiah was allowed to float freely. By October, when the Indonesian government sought IMF assistance, one US dollar was worth 3,640 rupiah. Immediately following the announcement of IMF assistance the value of the rupiah recovered to 3,300 rupiah per US dollar. However, a failing banking sector saw the value of the rupiah fall to 5,915 per US dollar over Christmas 1997 (Hardiyanto 2007, p. 9).

In January 1998 the government announced a rescue package for the banking sector, and also guaranteed all deposits. Despite this package the value of the currency continued to plummet, passing through the 10,000 rupiah per US dollar mark. The continuing collapse in the currency has been attributed to a significant increase in the perceived risk of holding Indonesian assets by both foreign and domestic investors (McLeod 2003).

The startling collapse in the value of the currency can be seen in Figure 10. Although, with respect to currency depreciations, if, following the depreciation there is a substantial increase in inflation, the real exchange rate depreciation effect can be much lower. In the case of Indonesia McLeod (2003) has calculated that despite the collapse in the nominal exchange rate, the fall in the real exchange rate, at approximately 50 percent, was broadly consistent with the fall in Thailand's real exchange rate.

Figure 10 Us dollar rupiah exchange rate, 1970 to 2007



Data source: IMF based exchange rates

1.4.2 Trade and investment policy

Liberalising reforms in the area of trade and investment in Indonesia have largely been implemented following periods of economic crisis in the mid 1960s, the early 1980s, and the late 1990s.

The Sukarno regime focused on nationalistic policies with high tariff and non-tariff barriers so that after independence in 1945 the Indonesian economy was closed and highly protected. On coming to power the Soeharto government faced high government debt levels, low investment, and uncontrolled inflation. As part of the initial reforms the Soeharto government liberalised trade and investment through dismantling import licences, introducing new export bonuses, simplifying import-export procedures, and eliminating many capital inflow controls (Hartono 2007, p. 2). With high oil prices the government temporarily abandoned liberal trade policies and moved back towards protectionism and an import substitution strategy. When oil revenue began to fall sharply in the early 1980s the central government returned to more liberal trade policies and an export focus. The government lowered the tariff ceiling to 60 percent, reduced the number of tariffs from 25 to 11, converted several import licences into tariff equivalents, and established a reduction path for tariffs that would see the simple average tariff rate fall from 27 percent in 1986 to 20 percent by 1991. Other reforms included the abolition of some import monopolies, the introduction of a tariff team (Tim Tarif), the simplification of customs procedures, and the outsourcing of substantial customs responsibilities to the Swiss firm, Societe Generale de Surveillance (Hartono 2007, p. 2). Tariff reductions were not, however, universal, and during this period protectionist strategies were introduced for both the national car industry and some chemical products.

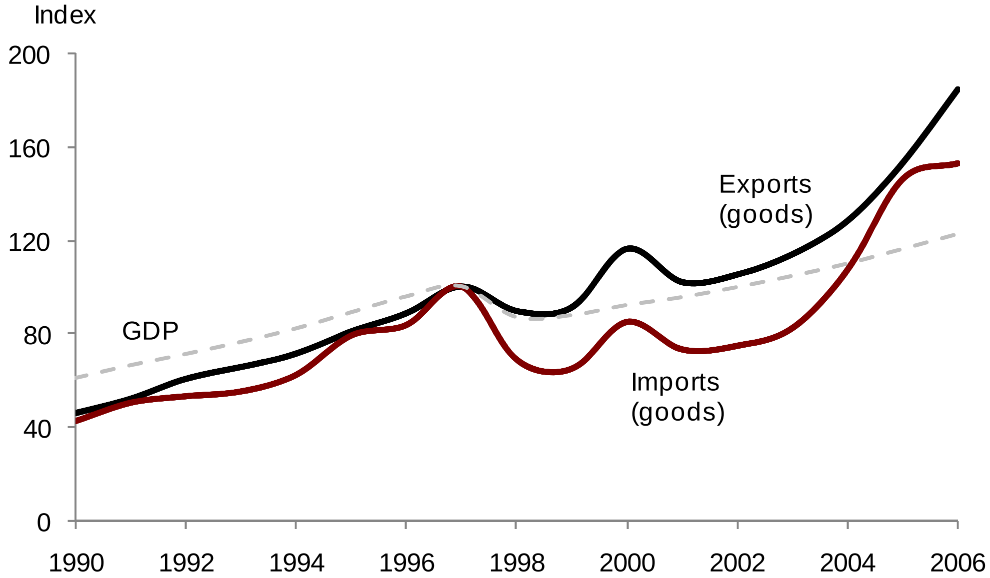
IMF assistance generally comes with conditions, and in the case of Indonesia the assistance provided in 1997 was no exception. Among the reforms required by the IMF was a trade reform package that included the gradual reduction of import tariffs to between five and ten percent for chemical products, iron, steel, and fisheries products; the reduction of wheat tariffs to five percent; and tariff free importation of wheat flour, soybean, and garlic under a General Importer license.

With respect to agriculture, in early 1998 the government made a commitment to remove import licences, eliminate non-tariff barriers, and introduce competition into the sector.

Marketing arrangements in cement, plywood, and paper were ended, and restrictions on investment in the wholesale and retail trade sector were removed (Soesastro 2005, p. 8). The reforms undertaken at this time were substantial, and by 1999 the average tariff level in Indonesia was less than in both China and Thailand.

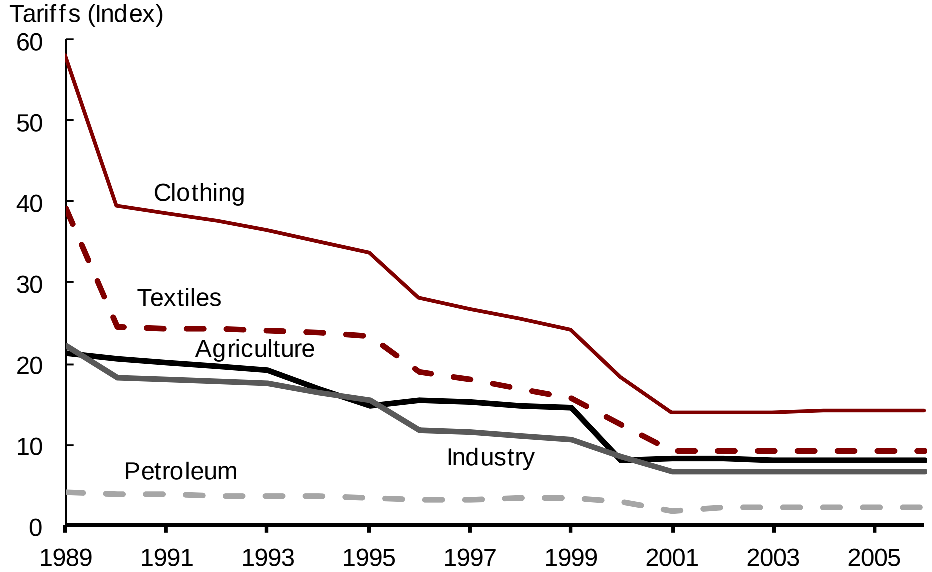
As can be seen from Figure 11, exports have rebounded strongly since 2001, and as can be seen from Figure 12, the average level of protection in Indonesia is quite low.

Figure 11 Imports and exports of goods in Indonesia, 1990 to 2005 (1997=100)



Data source: OECD (2008, p. 17) and World Bank Development Indicators (2008)

Figure 12 Trade protection by sector, 1989 to 2006



Data source: OECD (2008)

Relative to other ASEAN nations, Indonesia's trade intensity is low. Trade intensity can be measured as the sum of exports and imports divided by GDP, and using this measure, for the period 2000 to 2007 Indonesian trade intensity was around 50 percent. This compares poorly to the average trade intensity of the other ASEAN nations which according to OECD (2008, p. 24) is around 130 percent. Trade intensity measures are typically higher for small countries, and given Indonesia's size this measure may understate Indonesia's engagement in terms of trade with the rest of the world.

The gravity trade model of Jan Tinbergen (joint recipient of the first Noble prize in Economics) is a widely used model for predicting trade flows between countries. Although the specific econometric form used to estimate gravity trade models has evolved, the basic idea is that trade flows between any two countries depend on the economic mass of each country (which is measured by GDP) and the distance between the two countries. The work of Jain-Chandra (2007) shows that Indonesian trade flows are substantially less than predicted by a well specified gravity trade model. It can also be noted that over the past ten years while Indonesia's share of international trade has remained relatively constant, the share of trade attributable to the other ASEAN nations has increased (OECD 2008, p. 24).

1.4.3 Monetary policy

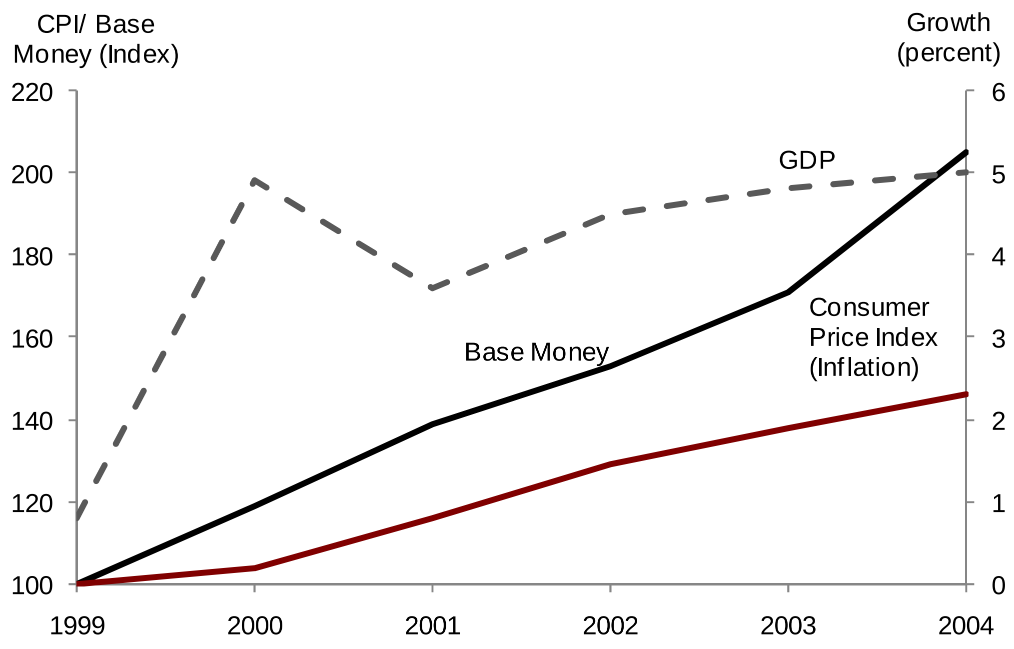
Monetary policy in Indonesia has moved from a direct control system in the 1960s to an indirect control system that is based on open market operations. Prior to the East Asian Economic Crisis, monetary policy was focused on controlling the exchange rate. Secondary objectives for monetary policy included low unemployment, high economic growth, an acceptable level of inflation, and a stable balance of payments. Worldwide, monetary policy that targets the exchange rate has proven to be increasingly difficult to implement, and in the case of Indonesia the economic crisis starting in 1997 proved too great a shock for the system.

Following the move to a floating exchange rate in 1997 there was a fundamental rethink about the approach to monetary policy. The immediate problem faced by the central bank was to prevent the collapse of the financial system by providing liquidity support. This support resulted in an increase in the money base of 68 percent between the end of 1997 and mid 1998. Sustained growth in the money base of this scale can lead to serious inflation problems and so the central bank outlined target growth paths for the money base in several letters of intent to the IMF in late 1997 and early 1998.

The central bank was however initially unsuccessful in meeting money base growth targets, and it was only after the fall of the Soeharto government when President Habibie came to power that a very tight monetary policy was introduced and the targets began to be met. Interest rates and inflation then began to fall and the exchange rate began to appreciate (Fane 2005, p. 175). In around three months, the exchange rate recovered from around 15,000 rupiah per US dollar to 7,500 per US dollar, and within 12 months the one month central bank bill rate fell from 70 percent to 13 percent (McLeod 2003 p. 306).

In May 1999 the Habibie government introduced a new law which gave the central bank independence and freed it from government interference. Despite being free of political interference, as with the previous exchange rate based monetary policy, targeting the money base proved to be a difficult policy to implement, and from the end of 1999 until early 2002 the base money targets were regularly missed (McLeod 2003 p. 306).

Figure 13 Base money and inflation, 1999 to 2004 (Index 1999=100)



Data source: Fane (2005) p. 178, UN Statistics Division (2009), World Bank Development Indicators (2008)

Since 2005 monetary policy in Indonesia has been conducted through an inflation targeting regime. Inflation targeting is a forward looking policy approach. For example, OECD (2008, p. 10) states that the Indonesian central bank should pre-emptively tighten monetary policy if the outlook for inflation deteriorates. This forward looking aspect is crucial for the credibility of policy given Indonesia's short track record with inflation targeting. In the longer term, the OECD suggests Indonesia focus on lowering inflation to a level similar to that of its main trading partners. Indonesia's inflation targets were 4-6 percent in 2008 and 3-5 percent over the medium term (OECD 2008, p. 10). It can be noted by way of comparison that the inflation target in Australia is 2-3 percent over the course of the business cycle.

1.4.4 Fiscal policy

The initial years of the Soeharto regime saw a relatively conservative approach to fiscal policy. There was however a rapid expansion of government spending following the oil boom that saw government spending as a share of GDP rise to a peak of 24 percent. Following the collapse in oil revenue in the 1980s the Indonesian government returned to a conservative approach to fiscal policy, and this approach continued until 1997. The financial crisis that began in 1997 placed significant pressure on government finances. As can be seen in Table 7, prior to the crisis Indonesia had enjoyed a sustained period of budget surpluses which had been used to reduce the stock of government debt.

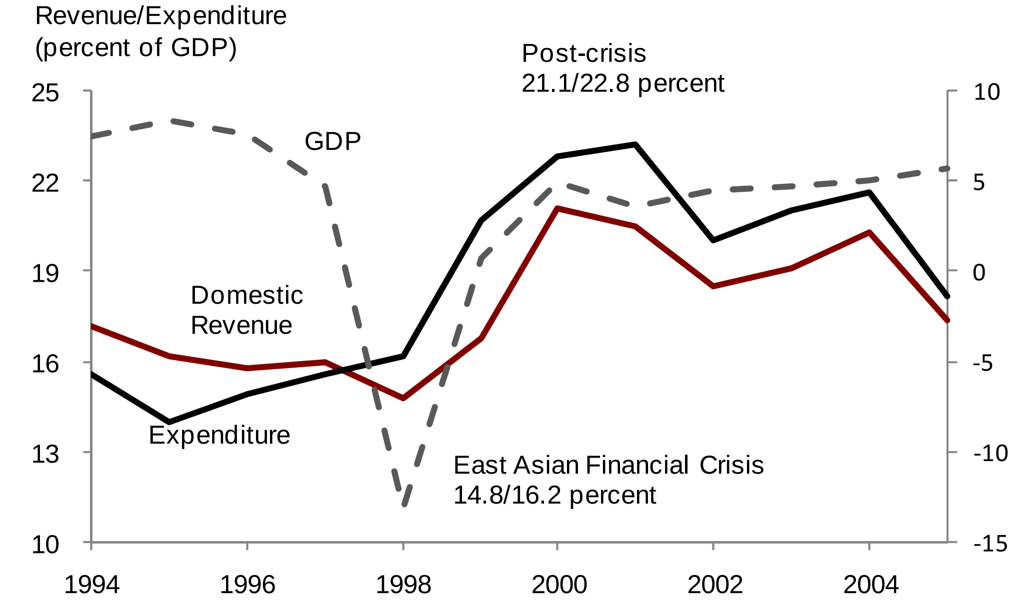
As part of the bank recapitalisation programme required during 1998 and 1999, the Indonesian government issued bonds with a face value approximately equivalent to one half of annual national output. Consequently, government debt levels and interest expenditure soared. Fiscal restraint has however seen a substantial improvement in the overall fiscal position of the central government in the years since the crisis, and in 2007 Gross government debt was down to 35 percent of GDP.

Table 7 Fiscal balance in Indonesia, 1990 to 2007 (percent of GDP)

Indicator	1990	1995	2000	2005	2006	2007
Revenue	18.1	14.2	14.8	17.8	19.1	17.9
Expenditure	17.1	13.0	15.9	18.3	20.1	19.1
Balance	1.0	1.2	-1.2	-.05	-1.0	-1.2
Gross Debt	42.4	30.8	83.8	45.5	39.2	35.0

Data source: OECD (2008) and World Bank (Development Indicators)

Figure 14 Budget revenue and expenditure, 1994 to 2005 (percent of GDP)



Note: * Until March 2000, fiscal years ran from April to March. The fiscal year in 2000 was 9 months after which fiscal years coincide with financial years, monthly GDP data has been used to adjust GDP data to coincide with fiscal years; 2004 and 2005 are based on estimates and forecasts.
Data source: Booth (2005, p. 200); UN Statistics Division (2009).

Indonesia is a geographically dispersed archipelago with substantial variation in per capita output and welfare across the regions. It is therefore appropriate that responsibility for welfare service delivery be at the local level rather than the national level. Reflecting this, in the post-Soeharto era the most significant development in the area of fiscal policy has been the move to fiscal decentralisation. The basic characteristic of fiscal decentralisation in Indonesia has been for expenditure responsibility to be pushed down to the local level, but with the central government retaining almost all taxation powers. Where expenditure is a local government responsibility but taxation power is a central government function, it is possible for local authorities to commit to spending plans that cannot be financed. The Indonesian approach to the issue of vertical fiscal imbalance has been to subject local government spending plans to an approvals process, and to restrict the ability of sub-national governments to take on debt.

Despite legislative uncertainty, and a history of central authority, the process of fiscal decentralisation in Indonesia has largely been a success. The only notable negative has been the proliferation of local level levies that have been designed to fall outside the scope of central authority review, and the related potential for corruption to then emerge at the local level.

1.4.5 Agricultural policy

Long term trends in agriculture have been discussed earlier in the report and so here comment is made on more recent changes. During the 1980s and the first half of the 1990s Indonesia pursued a policy of self sufficiency in agriculture through the subsidisation of key inputs and the use of Bulog, a State agency, to intervene in the market to keep prices high (ABARE 2007). The powers and scope of activity for Bulog were however substantially scaled back after the East Asian Crisis and are now limited to rice.

While agriculture remains the most important sector in terms of employment in Indonesia, the share of public spending devoted to agriculture has been falling through time. This is a pattern not confined to Indonesia, but is a pattern common to many developing nations (Table 8).

Table 8 Public spending on agriculture as a share of total public spending (percent)

Country	1975	1980	1985	1990	1993	1998	2000-04
China	12.1	12.2	7.7	10.0	9.5	10.7	6.5
Indonesia	9.8	9.6	6.8	7.6	6.6	7.2	5.9
Philippines	9.0	5.3	5.7	6.0	7.3	6.0	3.7
Thailand	5.9	8.1	11.7	10.4	10.4	7.5	7.3

Data source: ADB (2008, p. 26).

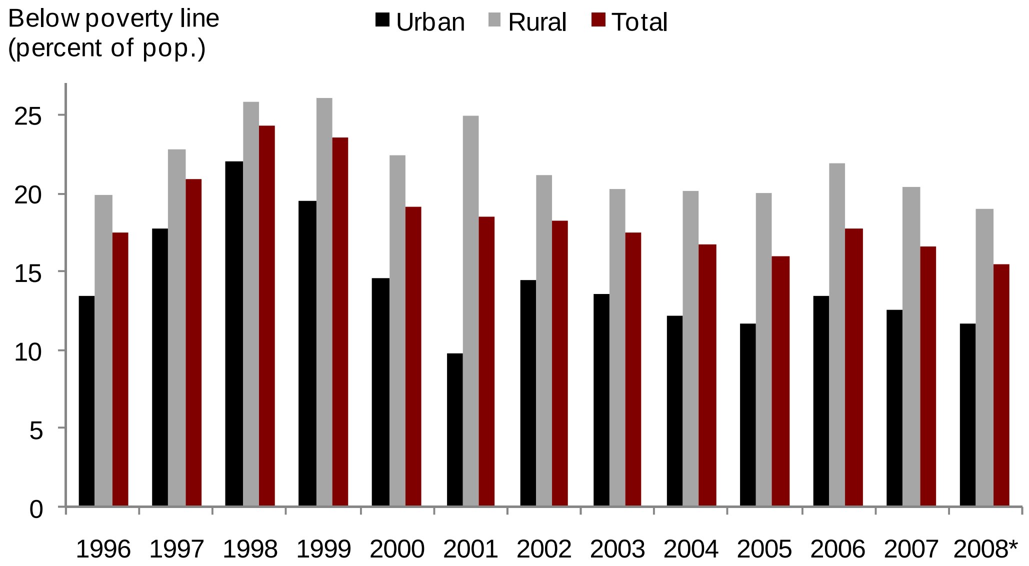
In recent times the decline in public investment in agriculture has substantially impacted the extent of public research and development spending in agriculture and government funded agricultural extension activity undertaken in Indonesia. For example, in 2000 the ratio of government spending on agricultural research and development to total government spending was 0.06 percent, but by 2005 had fallen to 0.02 percent (ADB 2008, p. 28). Reduced emphasis on research and development is a concern for future improvement in crop yields, and reduced outreach expenditure will slow the rate of adoption of new practices in the future.

1.5 Social indicators and outcomes

Although actual achievement in the area of welfare improvement has varied, improving social welfare has been a goal of all Indonesian governments since independence. In the late 1950s the Sukarno government tried to increase funding for social welfare by implementing policies to increase household income and improve education, health, and housing. When the Soeharto government came to power in the late 1960s, new social welfare programs focusing on education, health, reproductive health, and poverty eradication were introduced (UN 2007, p. 4). The Soeharto government is rightly criticised for many things, but overall it does need to be noted that the living standards of tens of millions of people improved substantially during the Soeharto regime.

The financial crisis of 1997 saw an increase in poverty rates, but the setback was only temporary and poverty rates in Indonesia over the past ten years have again been falling. For example, the share of the population living in poverty decreased from 24.2 percent in 1998 to 15.4 percent in 2008 (Central Bureau of Statistics, 2008). The change in the poverty rate for the urban population, rural population, and total population of Indonesia from 1996 to 2008 can be seen in Figure 15.

Figure 15 Percentage of population below the poverty line, 1996 to 2008



Note: * as at March 2008, 1997 is an arithmetic average of 1996 and 1998.
Data source: Central Bureau of Statistics (2008) based on National Socio Economic Survey

In 2004, the Indonesian government released its *National Mid Term Development Plan* for the period 2004 to 2009 that identified a range of development challenges. As recorded in UN (2007, p. 5) the challenges included: below optimum rate of economic growth, poor quality education; disparities in inter-regional development; infrastructure quality; social and political instability; ineffective legislation; and corruption and weak political institutions. In relation to the agenda of improved welfare for Indonesia's citizens, the plan outlined policy directions that emphasise poverty eradication and the reduction of unemployment; increased investment; agricultural revitalisation; development of fisheries and forestry industries; rural development and the reduction of inter-regional disparities; increased access to education and quality health services; improved social protection and welfare; and the acceleration of infrastructure development (UN 2007, p. 5).

Some context regarding the progress made by Indonesia can be seen by comparing select development indicators for Indonesia with those of other countries. As a relatively populous nation located in Asia the natural comparisons countries are India and China. Additionally, given it is both a Muslim country and a neighbour, Malaysia is also a good comparison country. As can be seen by reviewing the summary measures in Table 9, as a rough and ready approximation it might be said that Indonesia scores somewhere between India and China on most measures, and that living standards in Malaysia are fundamentally higher than in India, Indonesia, and China.

Table 9 Select development indicators for Indonesia, India, China, and Malaysia, 2007

Indicator	Indonesia	India	China	Malaysia
Population, total (millions)	225.63	1,124.79	1,318.31	26.55
Population growth (annual %)	1.2	1.3	0.6	1.7
Surface area (sq. km) (thousands)	1,904.6	3,287.3	9,598.1	329.7
GNI, Atlas method (current US$) (billions)	372.63	1,071.03	3,126.01	170.48
GNI per capita, PPP (current international $)	3,570	2,740	5,420	13,230
Income share held by lowest 20 %	7.1	8.1	5.7*	na
Life expectancy at birth, total (years)	71	65	73	74
Fertility rate, total (births per woman)	2.2	2.7	1.7	2.6
Adolescent fertility rate (births per 1,000 women ages 15-19)	40	62	8	13
Contraceptive prevalence (% of women ages 15-49)	61	56#	85	na
Mortality rate, under-5 (per 1,000)	31	72	22	11
Immunization, measles (% of children ages 12-23 months)	80	67	94	90
Primary completion rate, total (% of relevant age group)	99	86	na	98*
Ratio of girls to boys in primary and secondary education (%)	98	91	100	104
Prevalence of HIV, total (% of population ages 15-49)	0.2	0.3	0.1	0.5

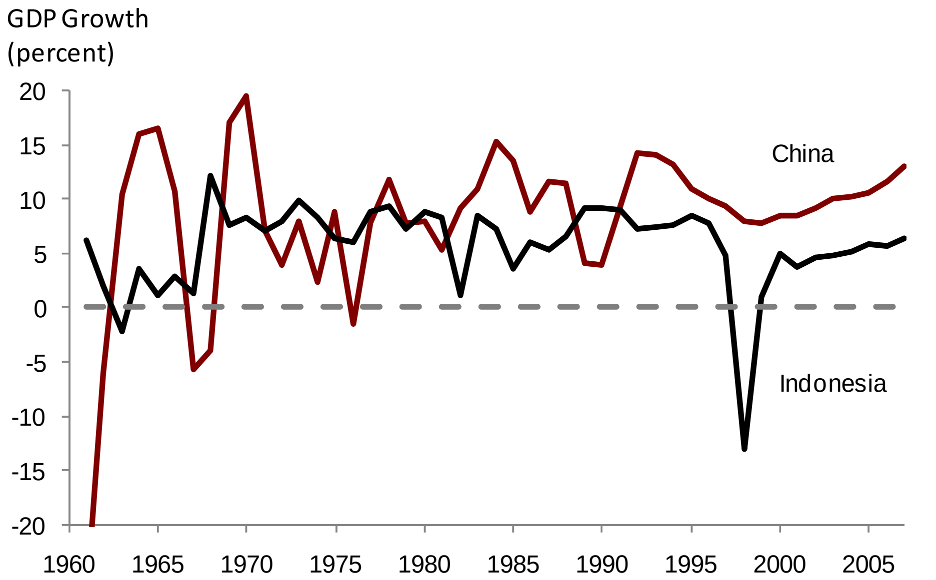
Data source: World Bank Development Indicators available: www.woldbank.org accessed 17 August 2009.

1.6 Pattern of economic growth in China and ASEAN countries

Since the late 1960s, the average rate of economic growth in Indonesia and South East Asia has been substantially higher than in most other developing nations. This trend saw the phrase newly industrialized economies, which had originally been coined in respect of several Latin American countries, become associates with the ASEAN countries. Starting the reform process somewhat later, China has also experienced rapid growth since the 1980s.

While Indonesia and other South East Asian nations experienced strong growth after the 1960s, the growth has not been as dramatic as that of the Chinese economy, and given the compounding nature of economic growth small differences can have a dramatic impact over time. Perhaps the most dramatic illustration of this impact can be seen by comparing the change in per capita income in China and Indonesia from the point at which each economy first broadly adopted market reforms. For Indonesia 1966 maybe thought of as a point just prior to when liberal economic policies were adopted for the first time, and for China 1978 can be considered an appropriate reference year for just prior to the introduction of liberal economic policies. In Indonesia per capita GDP in 1966 was $195, and in China per capita GDP in 1978 was $165. So, just prior to the point in time when liberal economic policies were introduced, income levels in both countries were broadly similar. In the case of Indonesia, in the 25 years following the initial reforms income rose four fold, which is a performance not matched by many economies. China, however, managed to increase income seven fold in the first 25 years after reforms began. That relatively small differences in average growth rates translate in substantial differences in income levels over time can be seen by observing the relatively small difference in growth rates between the two countries (Figure 16) and noting that in 2007 GNI in PPP terms was $3,570 in Indonesia and $5,420 in China. Figure 16 also clearly shows that while the East Asian crisis had a dramatic impact on economic growth in Indonesia, China escaped the crisis relatively unscathed.

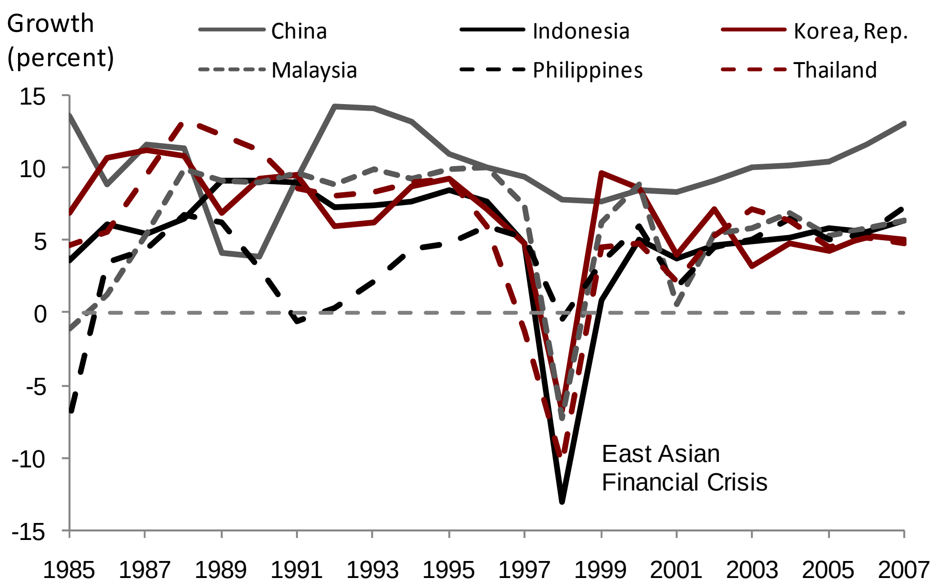
Figure 16 GDP growth in China and Indonesia, 1990 to 2006 (percent)



Data source: World Bank (2008) *World Development Indicators*

Unlike some of the other ASEAN nations, at the time of the crisis Indonesia did not have significant private investment over savings. However, the financial deregulation of the banking sector coupled with a lack of prudential rules and supervision had led to excessive lending and large scale borrowing in foreign currencies by Indonesian banks. Thus, when the crisis hit, investor confidence fell, capital outflows increased, and the rupiah collapsed. As can be seen from Figure 17, of all the ASEAN countries, Indonesia was hardest hit by the economic crisis. Since the crisis the ASEAN economies have steadily recovered, with Indonesia being one of the slower economies to recover. World Bank (2007) notes that a decade after the crisis income levels in East Asia had significantly increased, and were continuing to grow steadily.

Figure 17 GDP growth in China and ASEAN countries, 1985 to 2007 (percent)



Data source: World Bank (2008) *World Development Indicators*

1.7 Summary of the path to development

Since independence the Indonesian economy has faced periods of economic growth and periods of economic stagnation or reversal. In the years immediately after independence nationalistic policies left the country weak, with high levels of inflation and low economic growth. Since the late 1960s economic growth in Indonesia has been substantially higher than in most developing nations, resulting in Indonesia being classed as a newly industrialising economy.

The Soeharto era cannot, however, be seen as a uniform period, and during the Soeharto era economic policy swung from liberal to nationalistic and then back to liberal. During times of economic hardship, such as after the fall of the Sukarno government and after the oil price drops of the 1980s, the government introduced numerous policies aimed at opening up the economy, particularly to foreign investors. However, in times of high growth, such as during the oil boom in the late 1970s, policies reverted back to being nationalistic and protectionist.

Financial reforms to open up the economy were not accompanied by appropriate prudential rules and supervision of the banking sector. This meant that by 1997 when the East Asian Economic Crisis hit, there had been a period of sustained aggressive lending and there was a large volume of non-performing loans in the banking sector.

Within the ASEAN group of countries Indonesia was hardest hit by the 1997 financial crisis, and in 1998 the economy contracted by 13.1 percent; the rupiah fell to 13 percent of its pre-crisis level; and inflation reached 78 percent. As poverty rates increased the crisis also led to political instability, with regional, ethnic, and religious tensions re-emerging. Ultimately the instability resulted in the resignation of president Soeharto and a move to democratic government.

Since the crisis and the fall of the Soeharto government, Indonesia's economy has slowly recovered and the country has undergone major political reform. The largely peaceful and successful transition from authoritarian rule to democracy has been a significant achievement rarely matched in the 20th century.

The Indonesian economy has also been one of the best economic performers during the most recent economic turmoil.

2 The East Asian financial crisis: The impact on Indonesia

The East Asian financial crisis of the late 1990s, which started as a currency crisis, had a significant impact on Indonesia, Thailand, South Korea, Malaysia, Singapore, and the Philippines. The impact of the financial crisis on Indonesia was notably worse than for most other East Asian nations. The impact was felt more strongly in Indonesia for a number of reasons, but a key issue for Indonesia was poor prudential supervision of the banking sector which had led to a weak financial system. Another feature at the time that made the impact of the crisis more severe in Indonesia was the collapse in the oil price. The collapse in the world oil price was a significant benefit to the other East Asian countries, but as Indonesia was an oil exporting nation at the time, it was an additional negative for Indonesia.

The starting point of the crisis is generally seen to be the collapse of the Thai baht in July 1997. In the early 1990s there had been a trend toward significant private investment in Thailand. An excess of private investment over private savings led to a large increase in Thailand's external debt, and the current account deficit doubled between the mid 1980s and early 1990s (Liew 1998 p. 303). The deterioration of Thailand's current account position and mounting external debt led to speculative attacks on the Thai currency. The Bank of Thailand attempted to protect the fixed Thai exchange rate by raising interest rates and purchasing billions of baht in open market operations. However, even with substantial foreign currency reserves, there is a limit to the extent of intervention possible, and in July 1997 the central bank was left with no alternative but to allow the exchange rate to be determined freely by market forces.

Following the collapse of the Thai currency, speculation around the Indonesian financial system began to place pressure on the Indonesia rupiah. At the time Indonesia operated a managed exchange rate system where the currency was allowed to trade within a target trading range. The government initially responded to pressure on the currency by widening the official exchange rate band. This, however, proved unsustainable, and by August 1997 the managed exchange rate regime was abandoned in favour of a freely floating currency. As soon as the currency was allowed to freely float the value of the rupiah fell substantially and the dramatic fall in the value of the currency had significant implications for the real economy. The severity of the impact on the real economy can be understood by considering the change in GDP (13 percent fall) and the change in the price level (up 78 percent) for 1998. Substantial increases in food and fuel prices, along with increases in unemployment led to a fall in the welfare of Indonesia people. Poverty rates began to increase, and regional, ethnic, and religious tensions began to emerge.

The crisis had a profound impact on the economic and political landscape in Indonesia, and the remainder of this chapter examines the economic, political, and social causes and impacts of the crisis.

2.1 The economic impact of the crisis

Prior to the 1997 economic crisis, growth in Indonesia and South East Asia had been relatively strong, government budgets were generally balanced or in surplus, and domestic savings were generally high. Between 1990 and 1996 annual economic growth averaged 7.7 percent in Korea, 8.6 percent in Thailand, 8.8 percent in Malaysia, and 8.0 percent in Indonesia (Liew 1998, p. 303). However, these four economies shared several structural weaknesses, such as high levels of corporate debt and poor bank lending practices, which made them susceptible to a currency shock.

In the early 1990s private investment across all of the South East Asian nations began to increase. A useful metric for illustrating this trend is to consider the shortfall between domestic savings and private investment. In Thailand, between 1992 and 1996 excess private investment over private domestic savings increased from 4.9 percent of GDP to 7.7 percent of GDP, and in Malaysia between 1990 and 1995 excess private investment over private domestic savings increased from 3.3 percent of GDP to 9.5 percent of GDP (Liew 1998 p. 303). In the case of Thailand, during the 1990s there was also a significant increase in the size of the current account deficit and the level of external debt. In the end it was the deterioration in Thailand's current account, and the mounting external debt that was the catalyst for the speculative attack on the Thai baht.

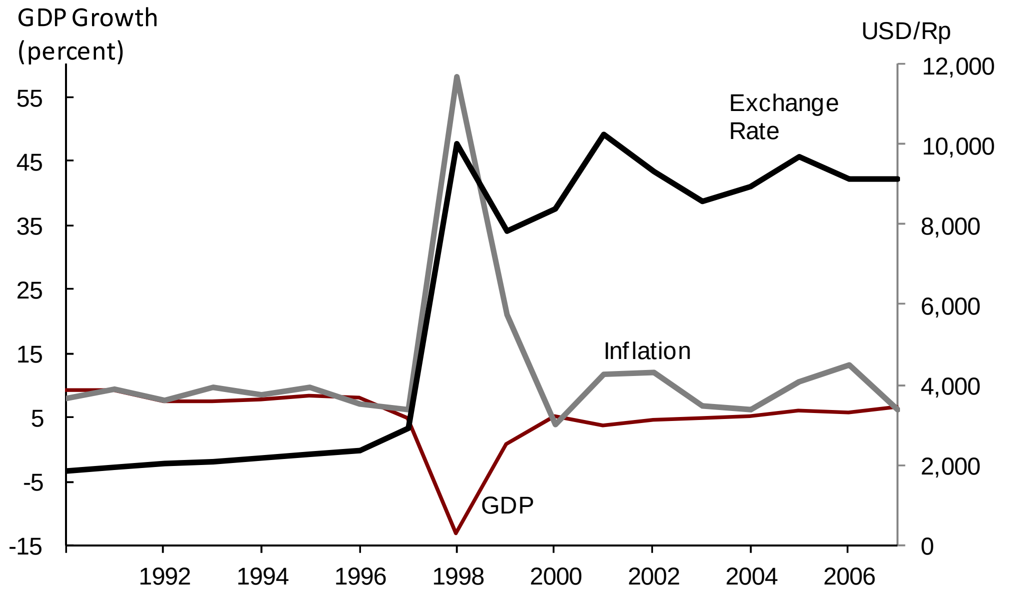
In response to these speculative attacks the Bank of Thailand attempted to protect the currency, which at the time was fixed to the US dollar. To maintain a fixed exchange rate in the face of a sustained increase in selling activity the central bank can raise short-term interest rates to attract foreign capital flows, intervene directly in the foreign exchange market by purchasing local currency and selling foreign currency, or do both. The Thai central bank intervened directly in the market and increased short-term interest rates, but despite this intervention, in July 1997, as foreign currency reserves fell, the central bank had no option but to allow the currency to float freely.

Unlike Thailand, in the first half of the 1990s Indonesia had an excess of private savings over investment and a stable current account position. However, financial deregulation of the banking sector, coupled with a lack of prudential supervision and endemic corruption had left the Indonesian financial sector vulnerable at the start of the crisis. In the case of Indonesia, the relatively unconstrained lending to domestic corporations by domestic banks had been in large part financed by short-term borrowings in foreign currencies, and in June 1997, just prior to the start of the crisis, Indonesian bank debt was 59 percent short-term debt (Liew 1998, p. 308). Non-performing loans, and the banking sector's reliance on short-term foreign currency denominated debt meant that despite Indonesia's history of strong economic growth and conservative government budgets, in the late 1990s Indonesia's real economy was especially venerable to a currency devaluation.

Although Indonesia has been the focus of much attention regarding poor lending practice in the early 1990s, the issue was not confined to Indonesia. For example, at the end of 1996 non-performing loans as a percentage of GDP were 5.5 percent in Indonesia, 9.2 percent in Thailand, 6.0 percent in Korea, and 5.6 percent in Malaysia. In 1997 non-performing loans had reached 17.1 percent of GDP in Korea and 8.6 percent of GDP in Indonesia (Liew 1998, p. 306).

Following the floating of the Thai baht, the initial response of the Indonesian government was to widen the official exchange rate band within which the rupiah was allowed to trade. However, as soon as the official band was increased the currency immediately fell to the lower bound of the official trading band. As the exchange rate fell, banks began to default on their credits, investor confidence fell, and capital outflows increased. To maintain the rupiah within the official trading range required substantial government intervention in the currency markets, and this proved to be unsustainable. In August 1997 the rupiah was therefore allowed to float freely. At the start of the crisis the US dollar rupiah exchange rate was approximately 2,200, but by October 1997 when the Indonesian government asked for support from the IMF, the rupiah had fallen to 3,640 per US dollar. After seeking the assistance of the IMF the rupiah initially rallied to 3,300 per US dollar. However, as the scale of the problems faced by the Indonesian banking sector were realised the rupiah began to fall again. The reputation of Indonesia with respect to corruption -- a matter ignored by many during the years of strong growth -- also began to emerge as an issue, and during Christmas of 1997 the exchange rate hit 5,915 rupiah per US dollar. A negative feedback spiral of a falling exchange rate causing further banking sector defaults, resulting in falling investor confidence, resulting in a falling exchange rate, etc., then developed.

Figure 18 GDP growth, inflation, and exchange rates, 1990 to 2007



Data source: International Monetary Fund (2009), UN statistics division (2009).

The dramatic impact of the financial crisis on the Indonesian economy can be seen from Figure 18, where details on inflation and the growth rate of GDP are read from the left-hand axis, and exchange rate information is read from the right-hand axis. As can be seen from the figure, the rupiah fell in value from around 2,200 per US dollar in mid 1997 to around 6,000 per US dollar in December 1997. While the data in the figure comprises annual averages, the exchange rate actually crashed to an all time low of almost 17,000 on 8 January 1998, before recovering somewhat. Since the crisis the exchange rate has continued to trade, in broad terms, around the 10,000 per US dollar mark. In other words, the currency stabilised at around 20 percent of its pre-crisis value.

With such a dramatic fall in the currency a substantial spike in inflation was inevitable. Annual inflation in Indonesia peaked in 1998 at almost 60 percent, before falling to around 20 percent in 1999, and then falling within a range broadly consistent with the pre-crisis rates of inflation. The collapse in the currency also meant that several government subsidies were no longer financially viable, and the removal of these subsidies represented a substantial additional economic shock. For example, the reduction of the fuel and power subsidies on 5 May 1998 saw the price of gas rise by more than 70 percent.

While the collapse in the currency and the resultant inflation are important features of the crisis, perhaps the most significant impact of the financial crisis was the impact on GDP. In 1998 Indonesian GDP fell by 13 percent, which is more than in any of the other countries affected by the crisis. Furthermore, there was no respite in 1999, with GDP growing by only 0.8 percent. Even though economic growth in Indonesia has been relatively strong since 2000, it has been below the rate of growth realised prior to the crisis.

2.2 Political change and the democracy movement

Prior to the 1997 economic crisis, corruption was widespread within the Indonesian government, particularly in relation to loans for unproductive investments. These unproductive loans in turn resulted in a high level of non-performing loans for banks, and left the Indonesian financial system in a weak position to handle the economic impact of the crisis. The following sections describe the extent of corruption just prior to the crisis and the changes in the political environment that have emerged since the crisis.

2.2.1 Endemic corruption

Corruption was particularly evident under the Soeharto regime. Yet despite the high level of corruption, and as noted in World Bank (2003), the Soeharto government was able to deliver substantial and sustained economic growth and poverty reduction. This was largely because as widespread as corruption was during this period it did not deter investment and economic activity. However, economic success came at a cost in terms of weak and corrupt institutions, the accumulation of public debt through the mismanagement of the financial sector, and the rapid depletion of national resources.

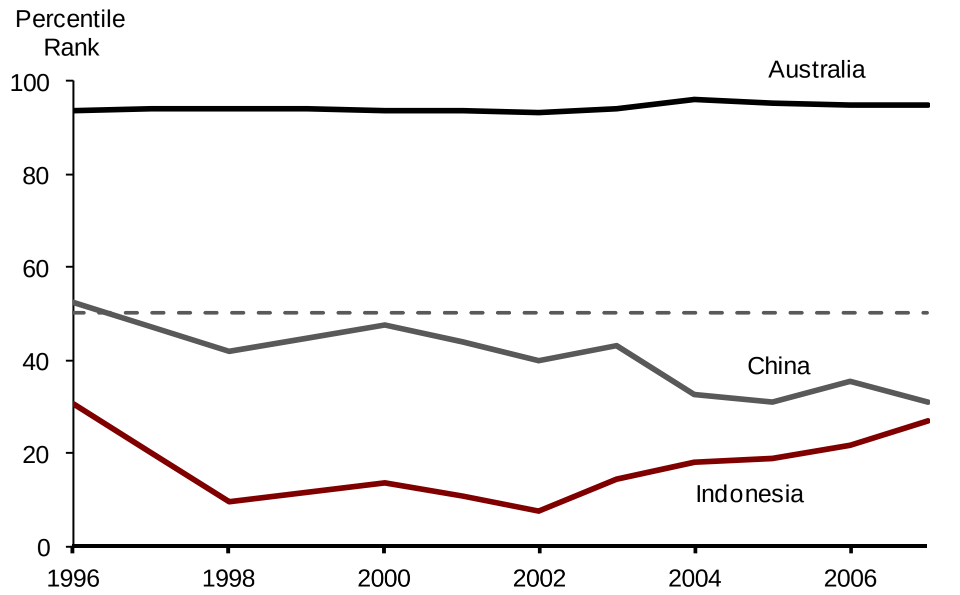
The system of corruption and patronage that developed under the Soeharto regime enabled politically connected private businesses to access loans at preferential rates. From the banks perspective the compensation for providing preferential loans was the belief that the government would guarantee their investments and provide assistance should investments fail. In terms of the state of the economy prior to the financial crisis, the key point made by many analysts after the event was that the endemic corruption of the Soeharto regime had led to excessive lending for unproductive investments to well connected member of the business elite, and so a high level of non-performing loans in the financial sector (Liew 1998, p. 309). Although just prior to the crisis the official loans in arrears statistics in other countries were higher, this is possibly due to lax reporting standards in Indonesia at the time rather than the relative quality of Indonesian banks' loan books.

Some of the key beneficiaries of business-government relationships during this period were the Indonesian military and the Soeharto family. For example, the military had business interests in banking, insurance, property, and transport, and provided over 60 percent of non-budget finance; while Soeharto's children were able to obtain substantial business interests in property, banking, and electricity generation. During the Soeharto era the nature of the relationship between the parliamentary parties and individual members in charge of legislation and government administration has been described by McLeod (2005b p. 373) as one where the parties and individuals owed their presence in government to Soeharto. Given this reliance on the president for their position in parliament, every five years these members would duly re-elect Soeharto as president, and in return they would continue to reap the rewards of office available in a country where corruption was endemic.

In 1998, after the fall of the Soeharto government, an anti-corruption reform process was introduced with the aim of reducing the opportunities and incentives for corruption (Hamilton-Hart 2001, p. 68). As part of the reform process, a new anti-corruption law was passed in 1999 which included tougher penalties for corruption, as well as the establishment of an anti-corruption commission.

Importantly, the relationship between the parliament and the president has fundamentally changed in the post crisis era. For example, McLeod (2005b, p. 373) states that although Indonesia now has a democratically elected president, it also has a parliament with the power to remove him and the relationship between the president and government has moved from one of cooperation to confrontation. Although substantial improvements have been made, corruption remains a significant issue in Indonesia. To gain some understanding of the extent of corruption in Indonesia Figure 19 plots the percentile country rank of corruption in Australia, China, and Indonesia for the period 2003-07. The figure shows the percentage of countries in which corruption is worse than the country plotted. As can been seen from the figure, despite improvements in recent years, approximately 75 percent of the countries in the world have less corruption than Indonesia. The potential impacts of corruption on the achievement of Indonesia's national objectives are discussed in a subsequent section.

Figure 19 Control of corruption 1996-2007 (Percentile Rank)



Note: The percentile rank indicates the percentage of countries worldwide that rank below the specified country
Data source: World Bank: Worldwide Governance Indicators (2008)

2.2.2 Political environment and new institutions

The 1997 economic crisis demonstrated to the Indonesian people that the Soeharto regime could no longer deliver effective government and was the catalyst for the disintegration of the New Order regime and the rise of democracy (McLeod, 2005 p. 367). The non-performing loans on bank balance sheets, which led to their collapse, were directly related to the corruption that had taken hold of the nation under Soeharto. The collapse of the banking sector in turn led to real negative consequences for the Indonesian population as inflation took off and economic output and employment fell. Although the crisis had made it clear to much of the general population of Indonesia that the New Order regime was now a failure, President Soeharto and the cronies that surrounded him did not see the crisis in the same manner. So, despite the collapsing economy and reports of ill health, in January 1998 Soeharto announced his intention to seek another term as president.

In early 1998, with rapidly rising prices, tensions between ethnic groups began to reappear, and riots periodically broke out across the archipelago. When riots did break out it was the ethnic Chinese community that was the target of much of the violence. Following the reappointment of Soeharto in March 1998 to his seventh five year term as President, students began to demonstrate against the regime. The ultimate unravelling of the regime can however be traced to the death of six student protestors in Jakarta on 12 May 1998. The students were shot dead by police, and following the student funerals the next day, the Indonesian capital Jakarta, and other major Javanese cities such as Solo, erupted in a wave of violence, looting, and race attacks against ethnic Chinese that lasted several days.

Following the riots, a massive protest march organised for Jakarta on May 20 and expected to attract one million demonstrators was called off for fear of the response by the Indonesian military. A massive peaceful student protest did however take place in Yogyakarta, the cultural centre of Java, and the coverage of the protest made it clear that public support was with the student demonstrators. On May 21 in a televised address to the nation Soeharto resigned and handed power to Vice President Habibie.

The transfer of power from Soeharto to Habibie ultimately resulted in Indonesia taking a dramatic turn towards democracy (Usman 2001, p. 1). On taking power President Habibie announced that restrictions on forming political parties were to be removed and that new open elections would be held, and in June 1999 relatively free and fair elections for parliament were held.

Under Soeharto only three political parties were allowed to participate in elections. Prior to the 1999 elections one hundred and forty eight political parties registered. Not all of these newly formed political parties went on to contest the election, but forty eight political parties did participate in the July 1999 election. The seven largest parties included the Indonesian Democratic Party – Struggle, the Party of the Functional Groups, the United Development Party, the National Awakening Party, the National Mandate Party, the Justice Party, and the Crescent Star Party. The Indonesian Democratic Party – Struggle (PDI-P), led by Megawati Sukarnoputri, the daughter of Sukarno, the first Indonesian president, received the largest share of the votes and ended up with 153 seats in the 462 seat parliament. In total 20 political parties won seats in the parliament, with no grouping of parties able to form a clear coalition.

In October 1999 the People's Consultative Assembly met to elect the president, and following political negotiation by the elected parties Abdurrahman Wahid was elected by the parliament as president. As the party of Wahid, the National Awakening Party (PKB), held only 12 percent of the seats in the national parliament, his election as president was a surprise. Specifically, as the PDI-P had achieved a clear plurality, if not majority, the leader of to the PDI-P, Megawati Sukarnoputri, had been expected to become president.

The process of moving towards an open democracy from authoritarian rule involved free elections, freedom of the press, and nation-wide calls for reform. Due to authority being so centralised under the Soeharto government, decentralisation also became one of the key priorities of the reform movement. In particular, the regions demanded the central government decentralise power to the local level so that government services could be delivered more effectively. In 1999 two laws on decentralisation were introduced, one on regional government, and one on fiscal balance between the centre and the regions (McLeod 2005b, p. 375).

The law on regional government (law no. 22/1999) saw authority decentralised to the local level in all areas except foreign affairs, defence and security, justice, religion, and monetary and fiscal affairs. This meant that local governments were made responsible for service delivery in critical areas such as health, education, and transport. The fiscal balance law (law no. 25/1999) allowed regions to secure a significant proportion of their own revenues with reallocated equalization funds consisting of revenue sharing from taxes and natural resource exploitation. In January 2001, after decades of highly centralised government, these new laws came into effect.

Political turmoil also returned to Indonesia in 2001, although unlike 1998 where political turmoil resulted in violence and looting in major cities, in 2001 the turmoil was confined to the political area. Since becoming president in 1999 opposition to Wahid's tenure had gradually increased, both within the parliament and with the Indonesian population at large. In mid 2001 Wahid was impeached and replaced by the vice president, Megawati Soekarnoputri. In 2004 the first direct presidential election was held and Susilo Bambang Yudhoyono (SBY) was elected president. In July 2009 SBY was elected to a second five year term as president with a vote of over 60 percent in the first round of voting. In the April 2009 parliamentary election the party of SBY, the Demokrat Parti, increased their representation in the parliament from 55 seats to 150 and became the largest party in the parliament. The next two largest blocks in the parliament are Golkar (107 seats) and the PDI-P (95 seats).

The overall focus of political reform in Indonesia since the fall of the Soeharto regime is well summarised by MacIntyre and Ramage (2008) who state that political reforms have focused on improved governance and better services, with a national priority of restructuring of the country's political institutions, particularly in relation to electoral and constitutional matters.

Since 2005 there have been over 350 local elections, with Indonesians voting in more elections than any other democracy. A wide range of political parties have enjoyed success in these elections, for example, over 40 percent of elections have been won by nationalists or Islamic parties. Unlike during the Soeharto regime, where power was held entirely by the Soeharto family, the central bureaucracy, and the military; the current system of government relies on the dispersion of power. The power of law making is shared between the legislature and the executive government, and additional powers have been allocated to the regions. As such, the natural checks and balances one expects to find in a well functioning democracy have started to emerge in Indonesia.

Judiciary and military

The role of political institutions have also changed since deregulation and decentralisation began, with reforms to both the judicial system and the security sector being especially important. For example, MacIntyre and Ramage (2008, p. 12) report that during the Soeharto era the judiciary and military were progressively politicised, with the courts and the security apparatus taking on political functions. In 2001 the Indonesian judiciary was separated from the executive arm of government and became independent. Further, in 2003 a law was introduced that established a constitutional court to oversee parliament and State institutions, and to act as a final arbiter on matters of constitutional law.

There has also been much effort placed on reducing corruption in Indonesia, with Indonesia's current political system including a system of checks and balances between the legislative, judicial, and executive branches of government. Government institutions and processes continue to be refined, and uncertainty regarding how the government operates is lessening. Although close relationships between business and government remain, the relationship is now more competitive with less overt favouritism (MacIntyre and Ramage 2008, p. 11).

Progress against corruption has been mixed, but in a country where corruption has been endemic for decades this is to be expected. In recent years there have been increasingly positive signs that political connections alone are no longer sufficient to avoid prosecution. Details on local corruption cases can be found in Rinaldi et al. (2007), but one of the most high profile corruption cases to date has been the prosecution of former central-bank governor Burhanuddin Abdullah for his role in an attempt to buy votes in favour of banking legislation. In October 2008 Mr Abdullah was sentenced to five years jail. A further four men, including one with links to President Yudhonoyo via the marriage of his son to the president's daughter, were sentenced in July 2009 to terms of between four and four and one half years jail. However, despite substantial progress, MacIntyre and Ramage find that the courts still fail to uphold the convictions of some senior officers and officials for human rights violations.

The security sector in Indonesia has also undergone major reform since the end of the Soehatro regime. Specifically, the Indonesian army no longer has an explicit political role. Under Soeharto the military played a key role in the politics of the nation. Under the policy *dwi fungsi* (dual function) that operated throughout the New Order period the military had both a policy function and a security function. In practice the policy function was implemented via a system that included reserved seats for the military in parliament, and reserved senior positions within the central bureaucracy. After the fall of Soeharto there were calls for the removal of the dual function of the military, and as a result the number of military seats in parliaments was reduced from 75 seats to 38 seats. Under President Wahid the presence of the military was further reduced, with a civilian appointed as the Minister of Defence and the appointment of a non-army chief of the armed forces. After Megawati was appointed president at the end of 2001, a constitutional amendment was passed such that the final 38 seats would be removed from the military by 2004 (Kuppuswamy, 2002).

The influence of the military in Indonesia does however remain strong. This can be seen by considering the presidential and vice presidential candidates of the three main political parties that contested the 2009 presidential election, where either the presidential candidate or the vice presidential candidate was a former senior military officer.

- The PDI-P team consisted of Sukarnoputri (president) and Subianto (vice president), where Subianto is a former head of Indonesian special forces
- The Demokrat Parti team consisted of Yudhoyono (president) and Boediono (vice president), where Yudhoyono is a retired army general who had a long and successful military career and was a member of the parliament in the reserved military seats at the time of Soehartos's resignation
- The Golkar team consisted of Kalla (president) and Wiranto (vice president), where Wiranto is a retired general that was a member of parliament in the New Order regime, and was head of the military when Soeharto resigned.

2.3 The impact on poverty

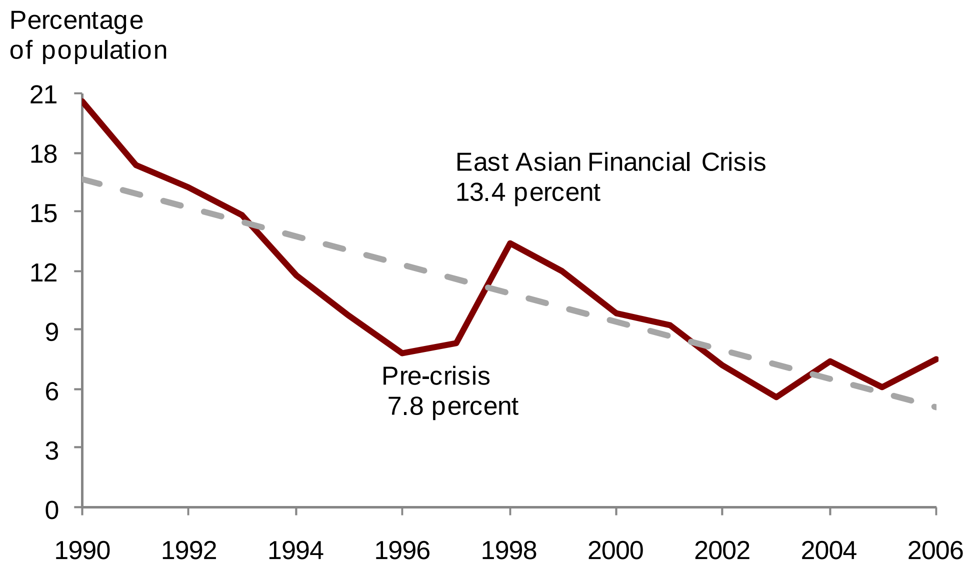
The 1997 economic crisis had a significant negative impact on the Indonesian economy and consequently the welfare of ordinary Indonesians. The collapse of the Indonesian currency resulted in dramatic increases in the price of basic food stuffs and the social impact of the crisis was both immediate and substantial.

In the year from mid 1997 prices increased rapidly and the real wages of workers in the formal employment sector of the economy fell by approximately one third. One of the most telling statistics regarding the impact of the crisis was the change in the proportion of the population classified as poor. There are several measures of poverty but the various estimates are broadly consistent in terms of the magnitude of the change. As a specific example the estimates of the poverty rate in Indonesia reported in Suryahadi (2003, p. 21) suggest the poverty rate increased from a low of 15 percent at the onset of the crisis to 33 percent by the end of 1998.

The scale of this change can be understood if one considers that a change of this magnitude implies an additional 36 million people were temporarily pushed into absolute poverty as a result of the crisis. The poverty rate peaked towards the end of 1998, and as general inflation was stabilised the poverty rate began to decline reaching the pre-crisis level by the end of 1999.

Another commonly used metric regarding poverty is the proportion of the population that has consumption expenditure of one US dollar per day or less, including own production and consumption. Figure 20 provides detail on this measure for Indonesia over the period 1990 to 2006 and the impact of the crisis on poverty levels can be seen clearly. Just prior to the crisis 7.8 percent of the population was living on less than one dollar per day, but in 1998 this shot up to 13.4 percent of the population.

Figure 20 Percentage of population living on less than $1 per day, 1990 to 2006



Note: $1 a day poverty line actual means $1.08 per day measured in 1993 dollars at international prices.
Data source: United Nations (2007, p. 12)

Unfortunately the financial crisis and resulting increase in poverty also fuelled religious, ethnic, and regional tensions.

2.3.1 The role of religious movements

At the time of independence the issue of Indonesia as an Islamic State was one of the most important challenges faced by the Sukarno government (Bertrand 2003, p. 72). During the creation of the 1945 constitution the inclusion of what would become known as the *Jakarta Charter* was debated extensively. The charter comprised the addition of the words "with the obligation to live according to Islamic law for Muslims" to the first principle of the national ideology of "Believe in the one and only God". In the end the charter was omitted. This was a welcome development for the various religious minorities in Indonesia, but not a development welcomed by some Muslim groups. Indonesia's Christian and Hindu communities are concentrated in communities outside of Java, and at the time it was feared that any special recognition for Islam in the constitution would encourage these communities to fight for their own independent States (Emmerson 1999, p. 23).

The 1997 economic crisis and fall of the Soeharto regime led to an intensification in religious conflict across the Indonesian archipelago. Bertrand (2003, p. 102) suggests the authoritarian nature of the Soeharto regime contained religious tensions as they emerged but did nothing to address the underlying cause of the tension. As such, it was only after the fall of the Soeharto regime when violence erupted across Indonesia that the nation was forced to address religious tensions.

Over 80 percent of the Indonesian population follow the Islamic tradition, and Indonesia is the largest majority Muslim nation in the world. Indonesia is however home to substantial populations of Hindus, Buddhists, and Christians. For example, although the islands of Java, Sumatra, Maluku, Sulawesi, and Kalimantan have Islam as the majority religion; on the island of Bali over 90 percent of the population is Hindu; the island of Flores is almost entirely Roman Catholic; and Papua and the eastern lesser Sunda islands are largely Christian. There is also a sizable Protestant population on Sulawesi; Jewish communities in the two major cities on Java (Jakarta and Surabaya); as well as ancient religions such as the religious practices of the Dayak population in Kalimantan.

2.3.2 Ethnic tensions and issues

The early 1970s liberalisation of foreign investment laws resulted in substantial investment in Indonesia from China and Japan, which fuelled existing anti-Chinese and anti-Japanese sentiment in the nation. Socio-economic differences between the Chinese and non-Chinese Indonesian communities were identified by Bertrand (2003, p. 59) as the major source of the dispute. The commonly held view was that a minority of Chinese were accumulating wealth and power as peasants from other ethnic groups were becoming further impoverished. During the authoritarian Soeharto era most protests were suppressed, although rising anti-Japanese and anti-Chinese tensions did see in rioting in Jakarta in 1973 and 1974.

The fall of Soeharto led to a freer political environment, and as a result, in the late 1990s Indonesia experienced unprecedented ethnic violence, with widespread destruction of property and numerous deaths. For example, between 1997 and 2002 over 10,000 people were killed in Indonesia as a result of ethnic violence (Bertrand 2003, p. 1). More recently ethnic conflict has been substantially reduced.

2.3.3 Regional tensions

Indonesia comprises thousands of islands with hundreds of ethnic identities and characteristics. During the Soeharto era, government policy was directed at promoting political and economic unity to ensure that a culturally disparate and geographically separate people remained a unified State. National resources, such as oil and gas, are unevenly distributed across the archipelago, and trade links and industrialisation are concentrated in only a few locations. This necessarily results in regional disparities in production and wealth. Under the Soeharto regime the central government promoted regional equality, and so wealth from richer regions was transferred to less well off regions. Up until the 1997 financial crisis, the transfer policies of the central government had resulted in relatively equal development in the quality of life across the regions, and so can be considered successful.

The richer regions were however never especially happy with this arrangement, and overtime socio-political tensions began to develop as the richer regions became resentful over the extent to which they subsidised the poorer regions (Tadjoeddin 2001, p. 284). With a clear focus on maintaining national unity, the Soeharto regime suppressed any political grievances that arose from the richer regions. This meant that as soon as a less oppressive political environment emerged, the regions began to openly demand increased regional autonomy, and in some cases independence. In response, in 1999 two decentralisation laws were introduced and subsequently enacted in 2001. As part of the reforms, additional to their own revenues, regions would receive equalization funds that consisted of revenue sharing from taxes and natural resources exploitation, a general allocation grant, and specific grants (Pohan 2002, p. 3).

The most spectacular example of regional tension following the end of the Soeharto era occurred in East Timor. Over a period of many hundreds of years starting in the late 1500s both the Portuguese and Dutch were colonial powers in the region. In the case of the island of Timor, both nations were active, and in 1916 ultimately agreed an international border separating the island between a western half where the Dutch were recognised as the colonial power and an eastern half where the Portuguese were recognised as the colonial power. For East Timor the move from colony through civil war to independence and then to Indonesia's 27th province was a relatively quick one. Over the five month period ending in July 1975 the Portuguese held elections in East Timor that were dominated by parties that differed in their approach to seeking independence, but not about the goal of independence from Portugal. Following a relatively short period of conflict between the two main parties -- Fretilin and the Timorese Democratic Union (UDT) -- Fretlin declared East Timor an independent State on 28

November 1975. Busy with the decolonisation process in Mozambique and Angola, the Portuguese essentially abandoned East Timor and the East Timorese to their fate. On 7 December 1975 the Indonesian army invaded, and East Timor was declared the 27th Indonesian province in July 1976.

Despite the UN condemning the invasion, United States concern about communist activity in Asia ensured the UN Security Council imposed no substantive sanctions on Indonesia following the invasion. As Indonesia sought to control the territory in the decades following the invasion, many people died. Establishing exactly how many people died is a difficult task, but in work for the *Commission on Reception, Truth and Reconciliation of Timor-Leste* the estimate of people directly killed as a result of the conflict is 18,600 (± 1,000) with a further 84,200 (± 11,000) deaths due to malnutrition and disease representing deaths above the level expected if the rate of death due to disease and malnutrition had remained at the pre-invasion rate (Benetch 2006).

So, at the end of the Soeharto era, East Timor was a province still fighting for independence, and this desire would represent a serious issue for president Habbie. Following international pressure, in August 1999 the Indonesian government held a referendum on independence, with the two options presented to the East Timorese being independence or special autonomy within Indonesia. The East Timorese overwhelmingly voted for independence. Following the vote there was a wave of violence and property destruction that is widely believed to have been supported by the Indonesian military, and approximately 1,400 people were killed. The violence saw Australia lead a peace and stabilisation mission to East Timor in September 1999 that subsequently became a United Nations peacekeeping and transition mission. Administrative responsibility for East Timor was taken over by the UN Transitional Administration in October 1999, and East Timor formally became an Independent State in May 2002.

East Timor represents an extreme of a pattern that emerged in Indonesia following the East Asian Crisis. Throughout the Soeharto years tensions slowly built up across the regions of the archipelago, but with an authoritarian central government any dissent was quickly repressed. When the economic crisis ultimately caused Soeharto to resign, the relaxation of authoritarian control saw the tensions simmering just below the surface exploded. The violence that followed the East Timorese vote for independence was devastating, as was violence in Sulawesi and other places, but in reality it is a substantial achievement that there was not more violence following the economic crisis and subsequent transition to democracy.

3 Recovery, growth, and Visi Indonesia 2030

Despite a slow initial recovery, Indonesia's economic performance has improved significantly in the years since the financial crisis. Since 2001 GDP growth has steadily increased, reaching 6.3 percent in 2007, and over the period 2001 to 2009 GDP growth averaged 5.0 percent.

Indonesia's export growth has also steadily increased since 2001, with exports increasing by 83 percent between 2001 and 2007. However, most of the expansion in exports has come from non-manufactured goods such as non-agricultural commodities and has been supported mainly by increased prices as opposed to increased volume (OECD 2008, p. 18). Details on select macroeconomic indicators for 2000, 2004, and 2007 are shown in Table 10.

Table 10 Select macroeconomic indicators for Indonesia: 2000, 2004, and 2007

	Unit	2001	2004	2007
Supply and demand				
GDP (in current USD billion)	($US b)	164.1	254.3	432.8
GDP growth rate (real, percent)	(%)	3.8	4.9	6.3
GDP growth rate (real, per capita, percent)	(%)	2.4	3.5	5.1
Supply (real growth rate in percent)				
Agriculture	(%)	4.1	2.1	3.5
Mining	(%)	0.3	-4.9	2.0
Manufacturing	(%)	3.3	6.4	4.7
Services[1]	(%)	5.0	7.2	8.9
Demand (real growth rate, in percent)				
Private consumption	(%)	3.5	5.0	5.0
Public consumption	(%)	7.5	4.0	3.9
Gross fixed investment	(%)	6.5	14.1	9.2
Exports	(%)	0.6	11.1	8.0
Imports	(%)	4.2	25.6	8.9
Inflation, external debt and trade				
CPI inflation (percent, end-of-period)	(%)	12.5	6.5	6.6
Current account balance as percent of GDP	(%)	4.2	0.6	2.4
Outstanding external debt as percent of GDP	(%)	80.7	53.4	31.2

Note: 1. Includes electricity, gas, water and construction.
Data source: World Bank (World Development Indicators), Ministry of Finance, BPS, Bloomberg and OECD calculations, cited in OECD (2008, p. 20)

3.1 The objectives of Visi 2030

In March 2007 the Yayasan Indonesia Forum (YIF) published the document *Visi Indonesia 2030* (Vision Indonesia 2030). The document outlined four key objectives for Indonesia. The objectives are ambitious and were as follows:

1. Indonesia to be among the world's five largest economies, with GDP per capita of approximately US$18,000 for a population of 285 million people
2. Indonesia as one of the top 30 countries in terms of human development, based on the United Nation's HDI index
3. At least 30 Indonesian companies in the world top 500 companies

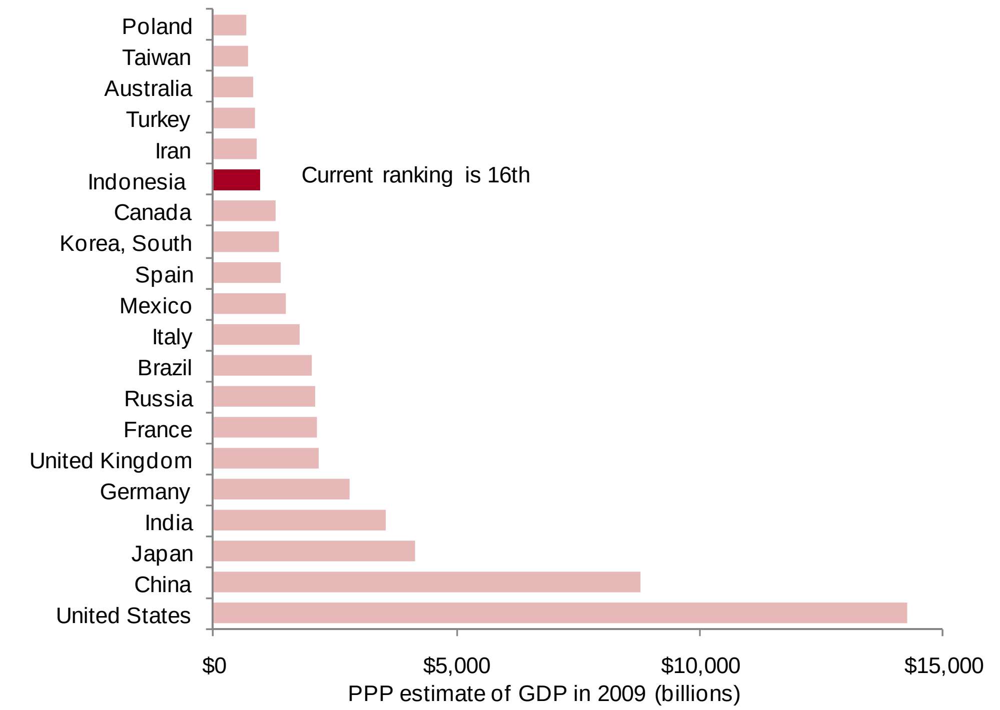
4. Development of natural resources such that Indonesia becomes independent in energy and is one of the world's top ten tourist destinations.

Understanding these objectives is helpful as it provides insight into areas of focus within Indonesia.

Indonesia among the world's five largest economies

Indonesia is a lower middle income country on a trajectory to becoming an upper middle income country by 2015. Vision Indonesia 2030's major objective for the Indonesian economy is GDP per capita reaching $USD18,000 for a population of 285 million people in 2030. In order to reach this goal, annual real economic growth between 2006 and 2030 will have to average around 8.5 percent with population growth averaging around one percent. In Vision Indonesia 2030 it is suggested that this could be achieved through industrialisation and capital accumulation, particularly in the services industry.

Figure 21 Country GDP rankings in PPP terms, 2009



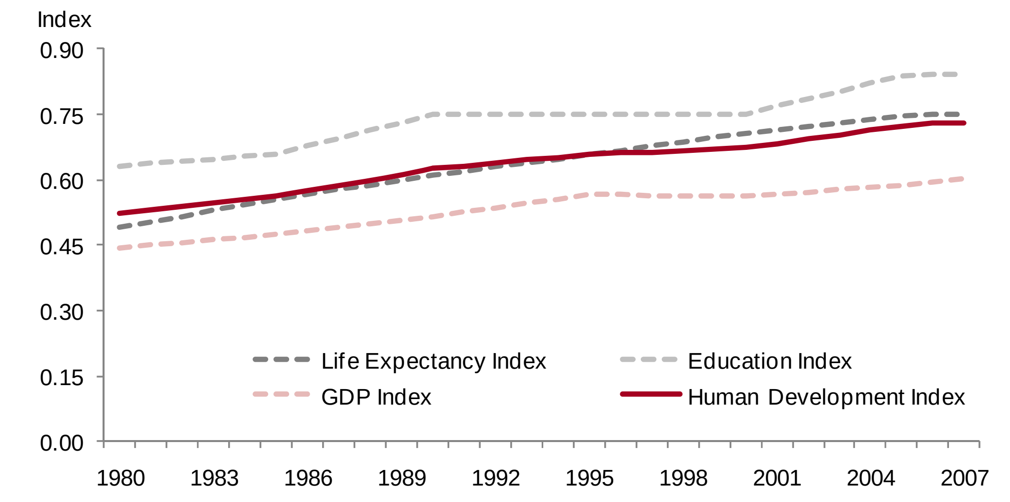
Data source: CIA World Factbook available: www.cia.gov/library/publications/the-world-factbook/index.html [accessed 10 January 2010]

The plan for growth includes three phases: preparation, acceleration, and sustainability. The preparation or restructuring stage will focus on learning and acquiring new foreign technologies. The acceleration stage will focus on industrialisation and implementing new technologies, especially in the industry and service sectors. The final phase in the growth path will be the sustainability stage, where industrialisation is expected to help achieve improved community welfare and economic development.

Indonesia as one of the top 30 countries in terms of human development

The Vision Indonesia 2030 target is that the benefits of growth should be enjoyed equally by all Indonesians in different regional areas. Of significant importance is the level of inequality in the distribution of income within Indonesia's population, as well as the dispersion of regional incomes as compared with national income. The specific target is that poverty should be reduced such that the proportion of people living below the poverty line is less than four percent of the population. In 2007 Indonesia was ranked 111th in the world in relation to the Human Development Index.

Figure 22 Human Development Index for Indonesia, 1980 to 2007



Note: Actual values available only for 1980, 1985, 1990, 1995, 2000, 2005, 2006, 2007. All other values found by linear interpolation.
Data source: Human Development Reports available: hdr.undp.org/en/statistics/data [accessed 10 January 2010]

The Human Development Index is calculated as the arithmetic mean of three sub indices that measure income, life expectancy and education. The life expectancy index is bounded by zero and one, where a value of one implies the highest level of life expectancy currently achievable. Formally the measure is calculated as follows. Let X_{it} denote the life expectancy index number country *i* at time *t*. If A_t and B_t are used to denote the reference period maximum and minimum life expectancy values at time *t*, and C_{it} is used to denote the actual life expectancy in country *i* at time *t*, then $X_{it} = \frac{(C_{it} - B_t)}{(A_t - B_t)}$. For *t* = 2007 and *i* = Indonesia we have $X_{it} = \frac{(70.5 - 25.0)}{(85.0) - 25.0} = .75$

The education index is bounded by one and zero and is found as the weighed sum of the adult literacy index and the gross enrolment index where the weights are two thirds to the adult literacy index and one third to the gross enrolment index. As with the life expectancy index higher numbers are better. Formally the measure is calculated as follows. Let Y_{it} denote the education index number country *i* at time *t*. If D_t and E_t are used to denote the reference period maximum values for the adult literacy rate and the combined gross enrolment ratio at time *t* expressed in percentage terms; F_{it} and G_{it} are used to denote the actual adult literacy rate and the actual combined gross enrolment ratio in country *i* at time *t* in percentage terms, and θ is used to denote the weight to the adult literacy index, then $Y_{it} = \theta\left(\frac{F_{it}}{D_t}\right) + (1 - \theta)\left(\frac{G_{it}}{E_t}\right)$. For *t* = 2007 and *i* = Indonesia we have $Y_{it} = \left(\frac{2}{3}\right)\left(\frac{92.0}{99.0}\right) + \left(\frac{1}{3}\right)\left(\frac{68.2}{100.0}\right) = .84$.

The GDP index is not bounded by zero and one, but where a country exceeds the upper bound the score is truncated at one. Additionally, to reflect that a comfortable life does not required a vast income level a natural logarithm scale is used for income. Formally the measure is calculated as follows. Let Z_{it} denote US dollar per capita GDP in Purchasing Power Parity terms for country *i* at time *t*. If H_t and I_t are used to denote the reference period maximum and minimum values for per capita income at time t, and J_{it} is used to denote actual per capita income for country *i* at time *t*, then $Z_{it} = \frac{\log(J_{it}) - \log(I_t)}{\log(H_t) - \log(I_t)}$. For *t* =

2007 and i = Indonesia we have $Z_{i}it = (\log(3{,}712) - \log(100)) / (\log(40{,}000) - \log(100)) = .60.$

The human development index score for country i at time t is then $HDI_{it} = (1/_3)(X_{it} + Y_{it} + Z_{it})$, and for t = 2007 and i = Indonesia we have $HDI_{it} = (1/_3)(.75 + .84 + .60) = .73.$

30 Indonesian companies in the Fortune 500 list

In Vision Indonesia 2030 it is clearly recognised that prosperity is created by individuals and not government. Consequently, the government should enact policies that encourage private enterprise. Actual policies should be directed at creating a macroeconomic, legal, political and social environment conducive to investment as well as improving support for business so that they are able to develop sophisticated strategies to operate successfully in a global economy. A natural consequence of such policies is likely to be an increase in the number of Indonesian companies in the Fortune 500 list of top companies.

Development of natural resources

With respect to natural resource development, three areas of importance are identified: geographical position, natural resources as a factor of production, and culture and natural beauty. The report suggests that Indonesia should take advantage of the benefits of its geographical location close to countries with high economic growth, including East Asia, South Asia, Australia, and New Zealand. The report notes that due to soil fertility, biodiversity, and low seasonal climatic fluctuations; natural resources in Indonesia have the potential to create significant wealth.

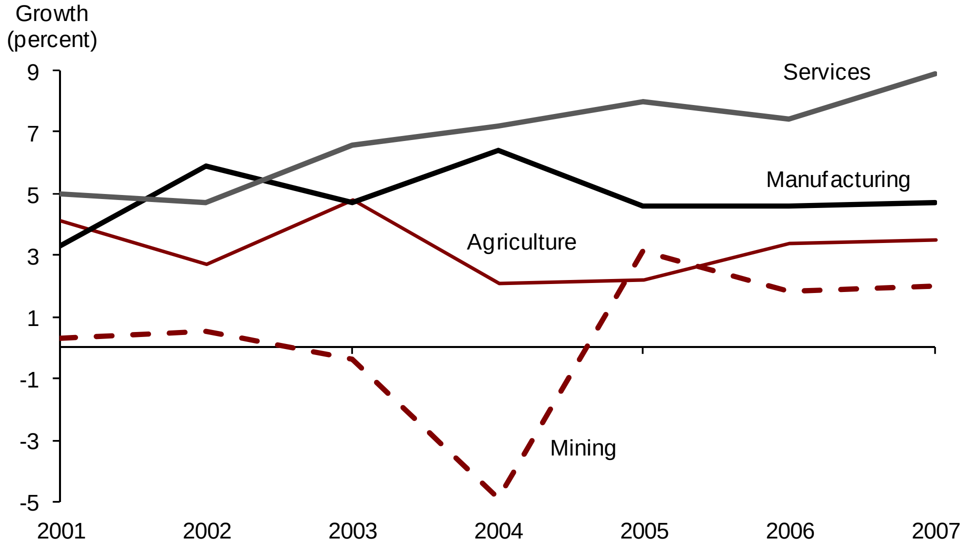
The utilisation of natural resources as a factor of production must also be conducted in a sustainable manner, particularly in relation to non-renewable reserves and the management and development of renewable resources.

The development of tourism is also identified as an important source of economic development for Indonesia, particularly as a source of foreign funds. The specific target is to grow the tourism market to the point where there are 40 million annual tourist visitations to Indonesia.

3.2 The sectors of the economy

Growth in the manufacturing, services, and agriculture sectors has been relatively steady since 2001, with growth in agriculture and manufacturing averaging 3.3 percent and 4.9 percent, respectively. The services industry has produced the highest average annual growth over the period of 6.8 percent. The mining industry has exhibited the most variation, with an average annual growth of 0.4 percent, and growth ranging from minus 4.9 percent in 2004 to 3.1 percent in 2005. The relative contribution to GDP growth for each sector has been relatively constant since 2001, and for manufacturing, services, and agriculture, the respective average contribution to GDP growth has been 28.5 percent, 39.5 percent and 14.5 percent, respectively.

Figure 23 Industry growth in Indonesia, 2001 to 2007 (percent)



Data source: OECD (2008, p. 20)

The Vision Indonesia 2030 document sees the service sector's contribution to GDP growth increasing, the agricultural sector's contribution falling, and the industry sector's contribution remaining broadly constant.

Table 11 Contributions to GDP by sector, 2001 to 2007 (percent)

	2001 (%)	2002 (%)	2003 (%)	2004 (%)	2005 (%)	2006 (%)	2007 (%)	Average (%)
Contribution to GDP Growth								
Agriculture	16.0	16.1	15.2	14.3	13.1	12.9	13.8	14.5
Industry	47.9	45.7	43.7	44.6	46.8	46.8	46.8	46.0
Manufacturing	30.8	30.4	28.3	28.1	27.7	27.5	27	28.5
Non-Manufacturing	17.1	15.3	15.5	16.6	19.1	19.4	19.7	17.5
Services	36.1	38.3	41.1	41.0	40.2	40.1	39.5	39.5

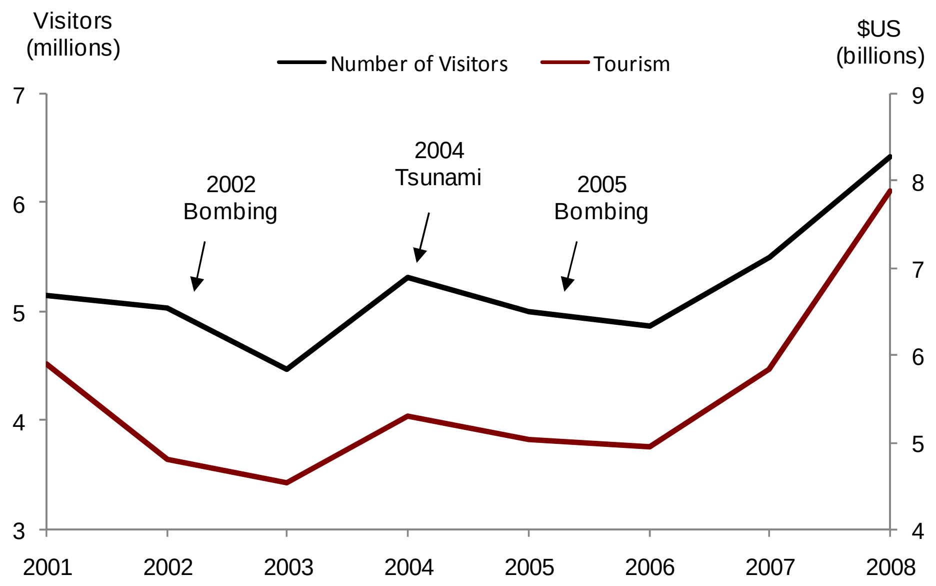
Data source: OECD calculations in OECD (2008, p. 19)

3.2.1 Services

Within the services sector tourism is an important activity that is worth considering in some detail. There were approximately 6.5 million visitors to Indonesia in 2008, and spending by these tourists generated approximately $7.4 billion for the tourism industry. On average, visitors stayed nine days, and spent $138 per day (Ministry of Culture and Tourism, 2009).

Since the 1997 economic crisis, Indonesia has been affected by a range of events that have had a negative impact on the tourism industry. These events have included: the 11 September 2001 attack of the world trade centre that saw a worldwide drop in air travel; terrorist bombings on Bali in 2002 and 2005, and in Jakarta in 2003, 2005, and 2009; the regional outbreak of SARS in 2003; and a tsunami in 2004. Figure 24 charts tourism visitor numbers and tourism revenue since 2001, and in the figure the impact of some of these events can be seen.

Figure 24 Tourism in Indonesia, 2001 to 2008



Data source: Ministry of Cultural and Tourism, Republic of Indonesia, *Visitor Arrivals to Indonesia 2001-2008*

The impact of each event on the tourism industry has varied. For example, while terrorist attacks have had a large impact, natural disaster type events have tended to have a more muted effect (Hitchcock 2008).

One of major objectives of Vision Indonesia 2030 is the management of Indonesia's natural resources such that Indonesia becomes one of the top ten tourist destinations in the world by 2030. Specifically, the report targets a larger increase in the number of tourists visiting Indonesia relatively to other countries in South East Asia, including 40 million foreign tourists generating approximately $80 billion. This is compared with 2008, when approximately 6.5 million visitors arrived in Indonesia generating approximately $7.4 billion.

Tourism is a competitive industry, and other countries are also seeking to expand the relative importance of their tourism industries. For example, at the beginning of 2005 the Singapore Tourism Board set the following targets:

- Increase tourism arrivals from 8.3 million in 2004 to 17.0 million by 2015
- Increase tourism revenue from $S10 billion in 2004 to $S30 billion by 2015, and
- Increase the average length of a tourist stay to 4.5 days.

In order to achieve these goals Singapore is investing in a range of new tourist attractions. The first major new tourist attraction has been the Singapore formula one race and the development of the Changi Motorsport complex, but additional projects include:

- Marina Bay Sands integrated resort (due to open early 2010)
- Resort Worlds at Sentosa integrated resort (includes Universal Studios theme park) (due to open early 2010)
- New Orchard road buildings (Orchard Central, ION Orchard, and Somerset Central) for improved shopping (due to open in 2010)
- River Safari theme park (due to open in 2011)
- Tropical waterfront garden development around the Marina Chanel (due to open in 2011)
- New international cruise terminal (2012)
- New MRT station at the Marina Bay Sands (2012).

For Indonesia the comparative advantage in the tourism sector relates to things such as undisturbed landscapes, unique wildlife such as orang-utans and rhinoceros, and extensive protected areas (Hitchcock 2008, p. 259). The current strategy for Indonesian tourism is therefore directed towards eco-tourism, and culture and sustainable tourism. Targets for sustainable tourism development have been outlined in Ardiwidjaja (2008, p. 11) as increased tourist numbers, improved environmental quality, local community empowerment, and increased regional income. In order to achieve these objectives the government has identified the main areas of focus as infrastructure and amenities development, human resource and institutional improvement, and environmental management. Increasing the volume of tourist visitor days while maintaining the eco-feel of many of Indonesia's attractions will be a challenge.

3.2.2 Agriculture

Since 2001 growth in the agriculture sector has been relatively constant, ranging between two percent and five percent between 2001 and 2007. Vision Indonesia 2030 sees the agriculture sector decreasing in relative importance in future years until 2030, but still enjoying increased productivity and prosperity due to technological advances and increased labour productivity. In 2006 President Yudhoyono identified the revitalisation of Indonesia's agricultural sector as one of the key vehicles for the Government to reduce poverty and unemployment.

The Asian Development Bank and the Ministry of Agriculture released a strategy for Agriculture in Indonesia for the period 2005-09 called, *Indonesia: Strategic Vision for Agriculture and Rural Development*. In the strategy, the main vision for agriculture was identified as: "*Establishment of vigorous agriculture for strengthening food security, increasing the value added and competitiveness of agricultural products, as well as increasing farmers' welfare.*"

In order to achieve the vision, the Ministry of Agriculture is focusing on:

- actualizing a professional agricultural bureaucracy with high moral integrity
- pursuing vigorous, competitive, sustainable, and environmentally friendly agriculture
- achieving food security by increasing agricultural production, diversifying food consumption patterns, increasing purchasing power, and improving food safety
- promoting an increase of agriculture's contribution to the national economy through gains in gross domestic product, exports, employment, poverty reduction, and welfare
- providing agribusiness facilities through research and development, and growth of agro-input supply systems, agro finance, and market access
- advocating Indonesian farmers' and our nation's interests in international trade systems (ADB 2006).

The vision also identified goals to be achieved by 2020, including the doubling of real agricultural GDP in Indonesia. To achieve this goal it was estimated that total expenditure on agriculture related infrastructure would amount to $23 billion over approximately 20 years (ABD 2006 p. 48).

3.2.3 Industry and manufacturing

Since 2001 the manufacturing sector has maintained relatively steady growth, and between 2001 and 2007 the rate of growth in the sector ranged from 3.3 percent to 6.4 percent. Vision Indonesia 2030 suggests that growth in manufacturing and industry will be relatively stable until 2030, with a shift towards sectors within industry that have higher levels of labour intensity, such as textiles. Improvements in the industrial sector are expected to come from technological advances, increased input quality, as well as improved distribution and marketing systems.

The Indonesian Ministry of Industry's 2005 *National Industrial Development Policy* stated that the current (2004-09) focus of industrial development has been on strengthening and developing the non oil and gas industries. For the contribution of non oil industries to reach 35 percent by 2025, growth above 10 percent annually between 2010 and 2025 would be required. In order to achieve this, in the medium term restructuring and consolidation of industry is needed, and in the long term, there needs to be a strong emphasis on research and development and technological improvements.

The government policy document also examined which industry's had the most potential for future development and identified agribusiness, the telecommunications and information industry, and the transport industry as promising areas for future development.

3.2.4 Mining and logging

Since 2001 the mining sector has seen variable growth performance, and the OCED has noted that investment in mining and forestry has been relatively low. For example, prior to 1998 Indonesia was receiving more than five percent of the world's mining investment, but more recently this has fallen to less than one percent (OECD, 2008, p. 70).

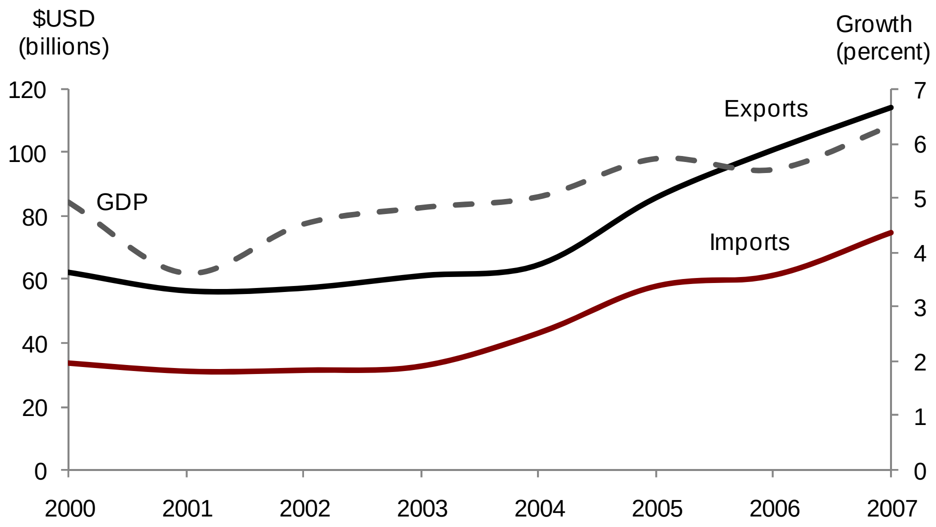
Forestry activity has been and will continue to be important. Over the past decade forestry products have represented between 20 percent and 24 percent of the industry sector, and three to four percent of total GDP (World Bank 2006, p. 8). In 2008, approximately 8.3 million cubic metres of logs were produced in Indonesia (Central Bureau of Statistics, 2008).

3.3 The external environment

3.3.1 International trade

Between 2001 and 2007 the value of imports into Indonesia and exports from Indonesia grew substantially. Specifically, merchandise exports grew from $56 billion to $114 billion, and merchandise imports grew from $31 billion to $74 billion (UNSD, 2009). Details on import volumes, export volumes, and GDP are shown in Figure 25.

Figure 25 Indonesian imports and exports, 2000 to 2007



Data source: United Nations Statistics Division, (2008), *Merchandise Trade Statistics*

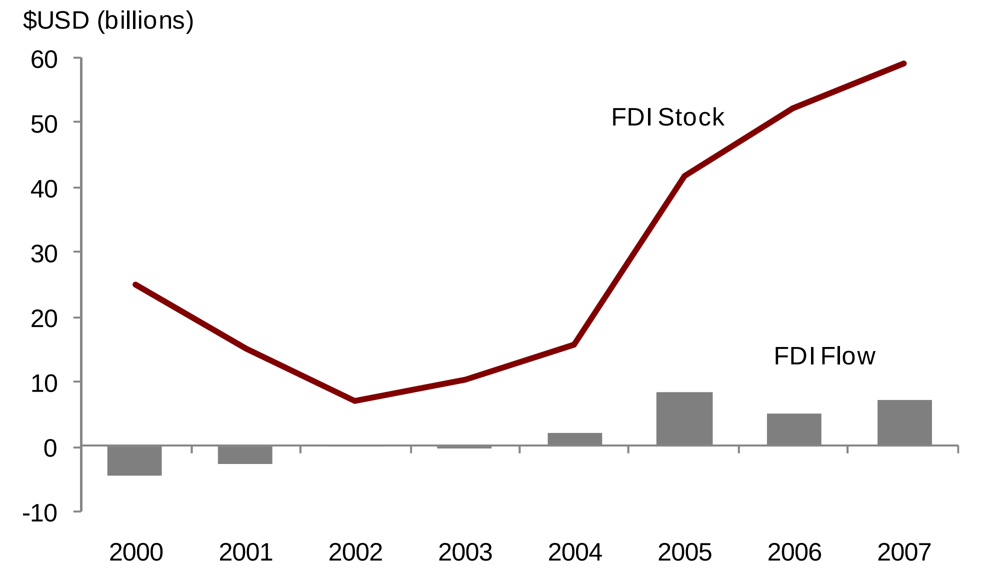
Since 2000, despite the increase in the dollar value of exports and imports to and from Indonesia, Indonesia's market share of world trade has remained at approximately one percent. During this same period the share of world trade attributable to other ASEAN countries has increased. At approximately 51 percent of GDP, the ratio of imports to exports in Indonesia is substantially less than other ASEAN countries (OECD 2008, p. 24).

Indonesia is a relatively open economy with tariffs declining steadily since the 1980s. The government is also committed to further lowering tariffs by 2010, where 87 percent of tariff lines (subject to some exceptions) will be ten percent or lower (OECD 2008, p. 24).

3.3.2 Foreign direct investment

In 2007 the flow of FDI into Indonesia was valued at $7 billion and the stock of FDI was valued at $59 billion. This is in sharp contrast to 2000, where the flow of FDI out of Indonesia was valued at $4 billion, and the stock of FDI was valued at $ 25 billion (UNCTD 2008). Information on both the stock and flow of FDI is shown in Figure 26.

Figure 26 FDI flows and stocks in Indonesia, 2000 to 2007 (billions $)

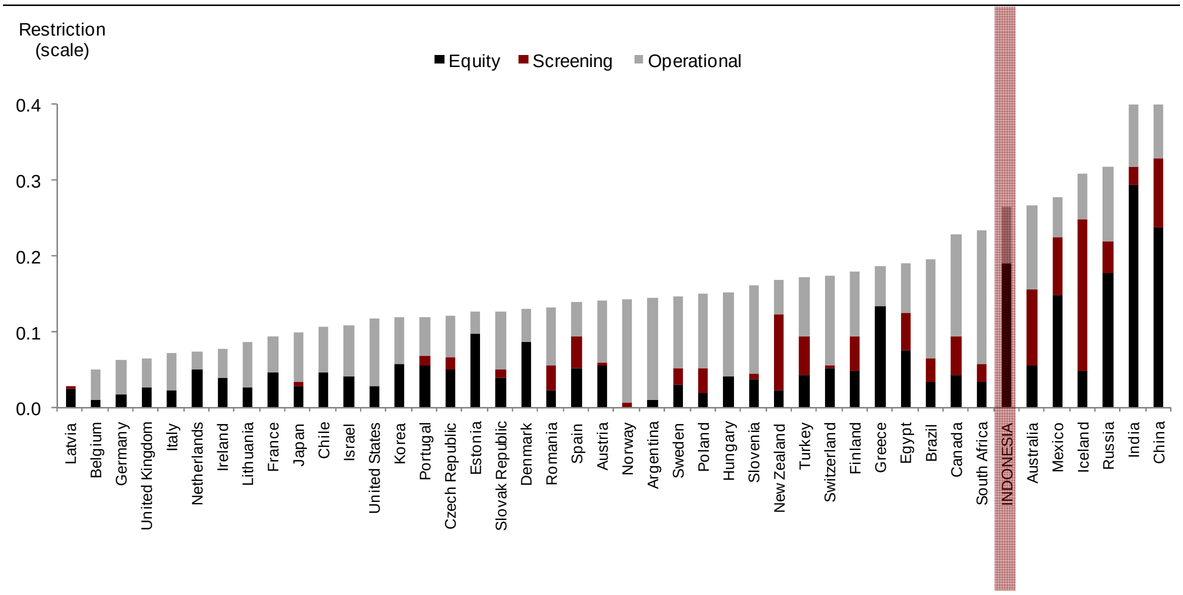


Data source: United Nations Conference on Trade and Development (2008) *World Investment Report 2008*

The United Nations allocates countries a FDI performance score, where a country's inward FDI index provides an indication of the relative success of that country in attracting FDI. The inward FDI index score captures several factors expected to affect a country's attractiveness to foreign investors, and on the UN's scale, zero is the lowest score and one is the maximum score. For 2005-07 Indonesia's inward FDI performance score was 0.67, and Indonesia's world ranking was 104th (UNCTD, 2008). This could be interpreted as indicating that Indonesia is not seen as an attractive country to invest in by foreigners.

This impression may be a reflection of Indonesia's stringent investment regulations. The OECD calculates a measure of FDI restrictiveness for most countries. The OECD measure uses a scale running from zero to one where zero represents full openness and one is outright prohibition of FDI. Rather than focusing on the actual numerical score, it is more helpful to consider the relative rank of different countries, and as can be seen from Figure 27, Indonesia is one of the more restrictive countries in terms of FDI legislation.

Figure 27 FDI Legislation: Cross country comparisons



Data source: OECD (2008, p. 67)

In 2007 Investment Law No. 25 was introduced to update the previous 1965 Foreign Investment Law to make Indonesia more attractive for foreign investors. A major adjustment in the new law is the equal treatment of domestic and foreign investors, who prior to the new law were governed by separate legislation.

3.4 Australia- Indonesia Free Trade Agreement

In July 2007 the Australian Department of Foreign Affairs and Trade and the Indonesian Ministry of Trade agreed to undertake a joint study into the potential benefits of Australia and Indonesia entering into a Free Trade Agreement that either extends the range of tariff reductions or increases the rate at which tariffs are removed relative to the agreement already reached as part of the ASEAN-Australia-New Zealand Free Trade Agreement (AANZFTA). The feasibility study identifies that from an Australian perspective the barriers to trade relate to tariffs in some areas such as sugar and motor vehicles, and non tariff barriers in services trade.

Some of the current tariffs that apply are detailed in Table 12 and although many of Western Australia's exports currently face a zero tariff, tariffs remain in some key areas such as meat, dairy, and wheat flour. As part of AANZTFA Indonesia will maintain very few tariffs after 2025, although the tariffs that will remain cover some areas of interest to WA, including live cattle (2.5 percent), frozen meat, some fresh and processed fruit, and some dairy (4.0 percent until 2015).

Table 12 Indonesian tariffs on Australian goods

Line Item	Tariff
Cane Sugar	Rp550/kg
Live bovine animals	0-5
Copper	0-5
Milk and Cream	5-10
Iron and Steel	5-15
Wheat flour	5
Zinc	0-5
Aluminum plates, sheets	5-15
Frozen bovine meat	5
Motor vehicle parts	15
Pumps for liquids, elevators	0-10
Machinery for sorting, grading etc	0-5
Whey, milk constituted products	5
Cheese and Curd	5
Waste paper and paperboard	0-15
Edible offal, fresh and frozen	5
Lead	5

Data Source. Australia-Indonesia FTA Joint Feasibility Study

Under AANZTFA Indonesia has also decided to follow a relatively slow timeline for the removal and reduction of tariffs going forward. For example, it is estimated that 58 percent of Indonesian tariff lines will be zero by 2010, 85 percent of tariff lines will be zero by 2013, and 93 percent of tariff lines will be zero by 2025 (DTAT and MTI 2009).

Non-tariff barriers are also discussed in DTAT and MTI (2009), and non-tariff barriers that are of some interest with respect to trade in goods relate to import licensing in sugar and rice.

Within the services sector there are a range of non-tariff barriers to investment by Australian firms. In the education sector Australian firms can only own 49 percent of an operation. In legal services Australian firms cannot establish offices in Indonesia, and there are limits on the number of international lawyers that can work at Indonesian firms. Australian accounting firms cannot operate independently, and citizenship is a requirement to become a licensed accountant. In the mining, energy and environmental services sector there are also restriction on foreign ownership. In other areas current practice already goes beyond the commitments of the FTA. For example, although under AANZTFA Indonesia has committed to only 51 percent foreign ownership in banking and 80 percent in insurance, current provisions are for foreign ownership of up to 99 percent of Indonesian banks.

From an Indonesian perspective it can be noted that under AANZTFA 96 percent of Australian tariff lines will have a rate of zero by 2010, and that 100 percent of tariff lines will have a rate of zero by 2025 (DTAT and MTI 2009). The main non-tariff barriers faced by Indonesian exporters to Australia relate to quarantine and food labelling regulations.

At the country level it has been estimated that a bilateral trade deal between Australia and Indonesia that saw all remaining trade barriers not covered by AANZTFA removed would result in Australia's real GDP in 2030 being $A3.2 billion higher compared to business as usual, and Indonesia's real GDP being $A33.1 billion higher (DTAT and MTI 2009). The gain to Indonesia from the removal of trade barriers is greater than the gain to Australia primarily because the extent of domestic protection in Indonesia is greater than in Australia.

In terms of the Australian sectors that would benefit from an FTA with Indonesia, CIE (2009, p. 67) gives the percentage deviation from baseline in the year 2020 across sectors following the implementation of a comprehensive FTA. The results suggest the main increases in exports would occur in telecommunications (1.45 percent), machinery (.87 percent), transport (.84 percent), sugar (.50 percent), cattle (.42 percent), and dairy (.35 percent).

3.4.1 General FTA processes

Although the benefits of a given Free Trade Agreement (FTA) may not always be significant, in general FTAs are part of the world trade development process, and neither Australia nor Western Australia can afford to not participate in the process of developing such agreements.

Objectively determining the gains from FTAs is difficult as there are lags between the introduction of an FTA, and the realisation of benefits. Additionally, the measurement of benefits has tended to focus on changes in merchandise trade flows, but there are also positive impacts on investment and services which are much harder to measure and so may not be recorded. From a Western Australian perspective the economic impact of FTAs entered into by the Commonwealth Government is thought to have been modest, but nevertheless positive. In part this is because with the exception of agricultural products, the main exports of Western Australia are goods that are largely not subject to substantial trade restrictions.

Negotiations on most FTA's are protracted, taking at a minimum two years; but generally much longer. In practical terms the Australian Government usually commences with an initial program of public consultations, and these consultations are usually ongoing throughout the FTA negotiation process. Historically, Western Australian senior bureaucrats and industry representatives have been involved in the consultation process, and in particular, departmental officers are often specifically consulted by senior officers of DFAT. There is also cooperation between key State government agencies in receiving updates from senior officers of DFAT on the FTA negotiations, and for facilitating opportunities for Western Australian businesses to convey their experiences about trading with, and investing in, the country specified in the FTA, to gauge their interests in a FTA.

In terms of formal State-Commonwealth relations, the usual process for progressing an FTA is for the Australian Government to seek State and Territory endorsement throughout the various stages of FTA negotiations. In the case of Western Australia, the practice has been that the Intergovernmental Relations Unit of the Department of the Premier and Cabinet has coordinated responses across key agencies to produce a Western Australian position and response. Depending on the issue, approaches are however made direct to the Department of State Development, or in some cases the Department of Agriculture and Food and the Department of Commerce.

Overall, the existing formal and informal processes for ensuring the interests of Western Australia are catered for with the FTA process appear to function well. As the FTA negotiations between Australia and Indonesia progress these process are expected to continue to perform well.

3.5 Limits and constraints to development

Vision Indonesia 2030 identified the existence of threats to successful development that included political instability, and regional, religious, and ethnic conflict. Other limiting factors may include corruption, environmental degradation, demographic change, and insufficient or poor quality infrastructure.

3.5.1 Corruption

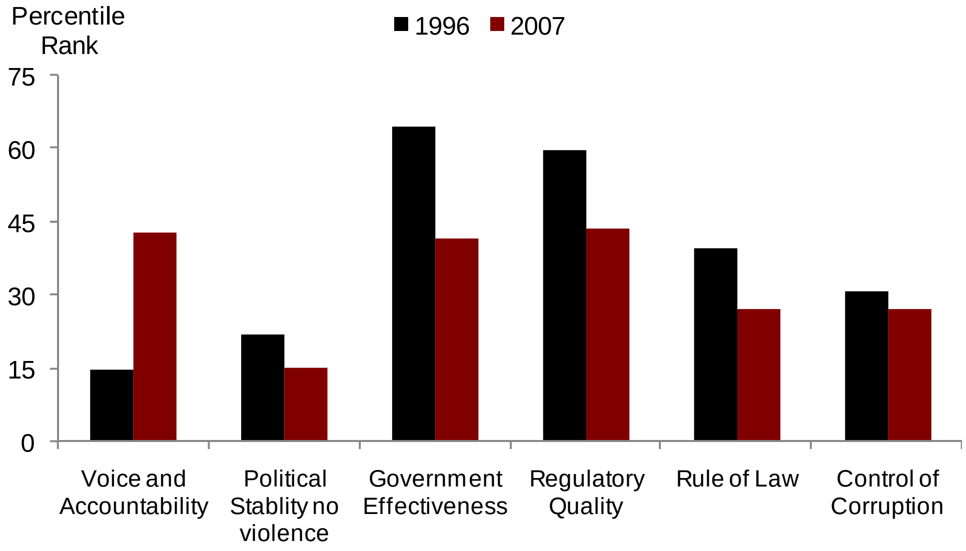
As the following quote from the 2003 World Bank report *Combating Corruption in Indonesia: Enhancing Accountability for Development* makes clear, Indonesia has long had a corruption problem.

> Indonesia suffers from a very poor international reputation regarding corruption, ranking near the bottom alongside the most corrupt countries in the world. It is also perceived as doing worse over time in controlling corruption. Indonesians agree. They liken corruption to a "disease to combat, denouncing every known case." While these perceptions may be overly influenced by the new openness of a democratic Indonesia, corruption is high and imposes severe social and economic costs. It also contributes to citizens' loss of trust in governments.

It is difficult to determine whether corruption has worsened in Indonesia since the fall of the Soeharto government in 1998. High level corruption may have decreased due to anti-corruption policies, but it is suggest by the World Bank that it is likely that petty corruption under weaker political management may have increased.

Governance indicator scores for Indonesia that are compiled by the World Bank are shown in Figure 28. If governance performance is an indicator of corruption, then between 1996 and 2007 Indonesia made mixed progress.

Figure 28 Key Governance Indicators for Indonesia, 1996 vs. 2007



Note: The percentile rank indicates the percentage of countries worldwide that rank below Indonesia
Data source: World Bank: Worldwide Governance Indicators (2008)

In 2008 Indonesia was placed 126th out of 180 countries in relation to "the degree to which corruption is perceived to exist among public officials and politicians". In recent years the corruption index value for Indonesia has actually risen. Specifically, in 2000 the Transparency International corruption score for Indonesia was 1.7, and in 2008 it was 2.6 (Transparency International 2008).

Given the long history of entrenched official corruption in Indonesia, progress taming corruption has been slow, but on balance things are improving. For example, in 2003, 62 percent of businesses surveyed reported local corruption as a constraint to business whereas in 2007 only 42 percent of businesses reported local corruption as a constraint to business (OECD 2008)

3.5.2 Environment

Rapid economic growth in Indonesia since the 1960s has improved the quality of life for many Indonesians. However, this growth has been coupled with a rapid and generally unsustainable rate of natural resource exploitation, particularly in fisheries and forestry, as well as worsening pollution of water and air in urban areas (World Bank 2009).

Indonesia faces challenges in forestry and fisheries as resources not only support economic growth, but also support poor rural communities. Approximately 75 percent of Indonesia's poor live in rural areas, of which half are affected by the degradation of forestlands as a result of poor governance and regulation of use and access.

Vision Indonesia 2030 has identified the sustainable management of natural resources as a fundamental element to long term economic growth in Indonesia (YIF 2007, p. 10). In particular, the utilisation of natural resources needs to be conducted in a sustainable manner to ensure the preservation of Indonesia's environment, culture, and history.

Urban environmental challenges are also of concern in Indonesia, with air quality deteriorating due to increased transport use and environmentally unfriendly industrial development. Water quality is also of concern, with 46 percent service in rural areas and 69 percent in urban areas, representing one of the lowest levels of sewerage service in Asia (World Bank 2009).

The World Bank identifies the challenges faced by Indonesia in relation to environmental resource exploitation as a lack of transparency in the processes controlling access to resources, weak natural resource governance, poor institutional coordination and limited monitoring of natural resources and environmental quality parameters. The implementation of improved environmental regulation in Indonesia is also constrained by a fragmented institutional structure, limited coordination among ministries and agencies at both a local and national level, as well as limited financial and technical resources.

3.5.3 Productivity

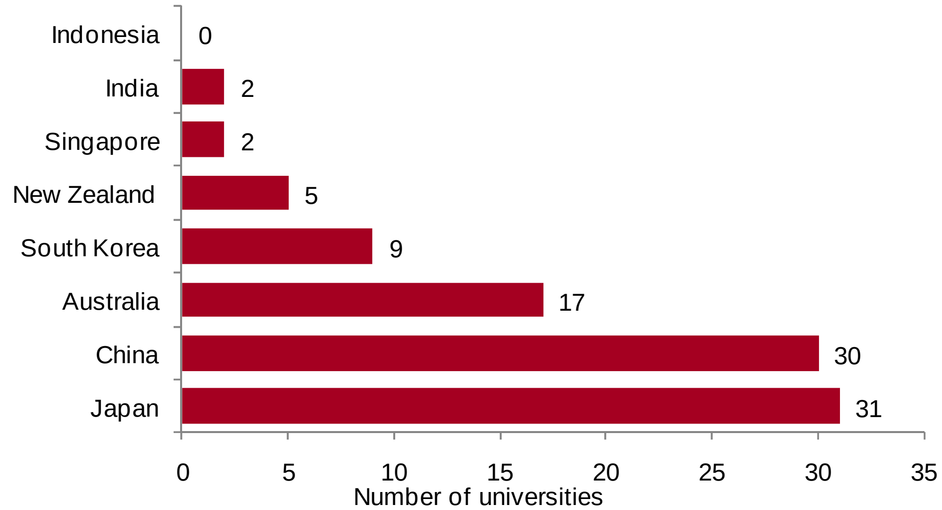
A labour force equipped with adequate skills and access to appropriate technologies has the potential to stimulate the economy and assist Indonesia in its development (YIF 2007, p. 15). Labour productivity is therefore a critical element of achieving growth over the longer term.

As labour productivity growth occurs due to increases in human capital, a focus on improved education and human capital development in Indonesia is required. Vision Indonesia 2030 states that from the outset, the development of the Indonesian education system needs to be directed towards the adoption of knowledge and technology from other countries.

With specific relation to the achievement of the economic growth objective, the report states that education needs to be directed away from the development of skills in the industry sector and towards the services sector, particularly in relation to the development of information technology and communication skills.

There should be a particular focus on the improvement of the higher education system, including the development of new knowledge and technologies, as well as expanding access to the system. By 2030, Indonesian universities should be comparable to international universities, having universities ranked in the top 50 world universities. Access to higher education should also be supported by financial mechanisms, such as scholarships for low income individuals. This will require not only investment in physical assets such as buildings, but also technologies which support modern methods of teaching.

Figure 29 Regional universities in the top 500 by country, 2009



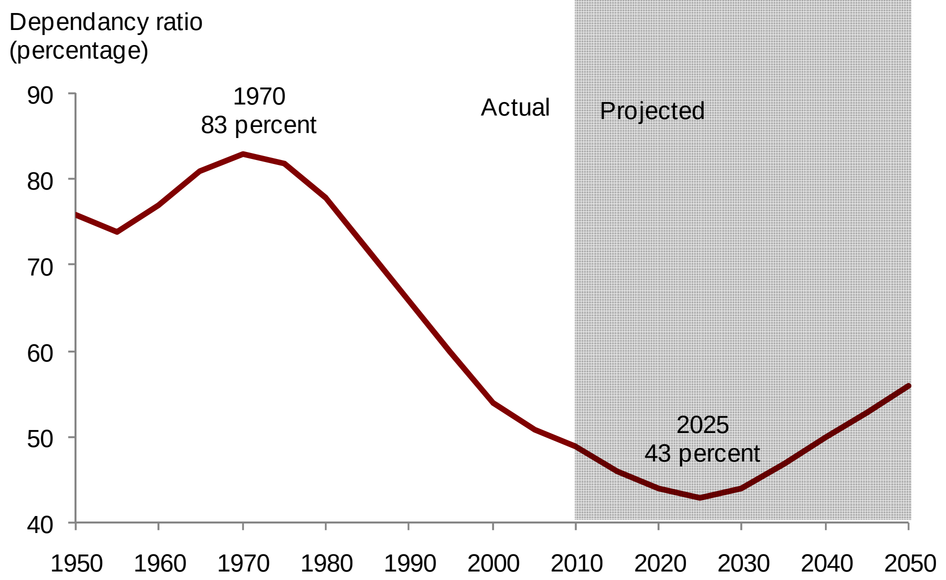
Data source: Jiao Tong Index rankings available: www.arwu.org/AsiaPacific2009.jsp [accessed 10 January 2010]

3.5.4 Demographic dividend

A so called demographic dividend occurs when there is a rise in economic growth due to an increase in the proportion of the population that is of working age. Since 1970 the ratio of the dependant population (aged under 15 or over 64) to the working population (between 15 and

64) in Indonesia has decreased substantially, and will continue to decrease for some time. The scale of the change can be seen from the detail in UN-DESA (2009) where it is noted that the ratio was 83 percent in 1970, 51 percent in 2005, and is predicted to reach 43 in 2025 before starting to gradually increase once more.

Figure 30 Indonesian dependency ratio, 1950 to 2050 (percent)



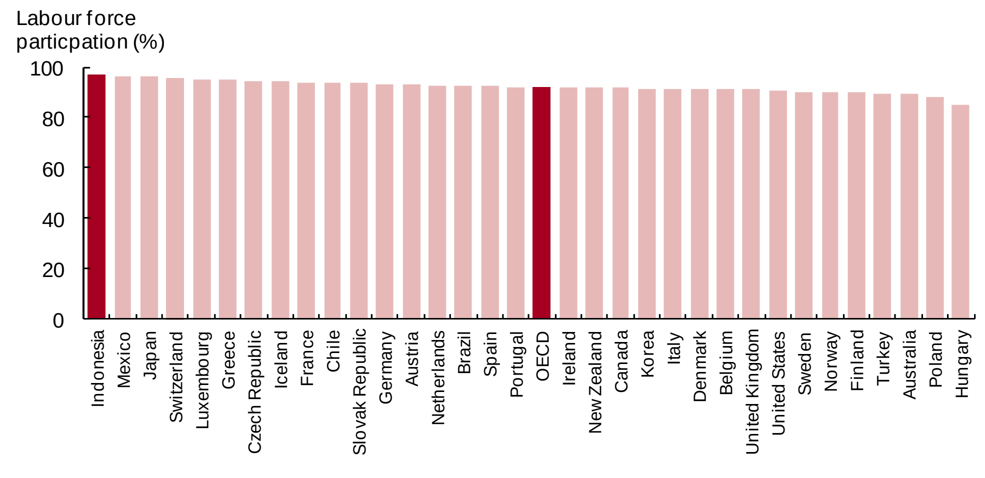
Note: The scenario plotted in the medium variant; The dependency ratio is the sum of the population aged 0-14 and 65+ to the population aged 15-64, it is given as number of dependants per 100 persons of working age (15-64)
Data source: Department of Economic and Social Affairs of the UN (2009) accessible at: http://esa.un.org/unpp/

It should be noted that just because a country enters a period where a demographic dividend is available, it does not mean that a positive dividend will in fact be realised. Unless the labour market is flexible enough to allow youth access to employment, this period of transition can in fact result in a period of high unemployment. The UN suggest that in order to benefit from the demographic dividend key policies in relation to greater access to basic education, improved education quality, and reduced employment protection laws are required.

3.5.5 Female worker participation

Possible reflecting the lack of a broad social safety net, the male labour force participation rate in Indonesia is relatively high. Although, in reality there is little variation in participation rates for males -- and prime aged males in particular -- across the OECD (Figure 31).

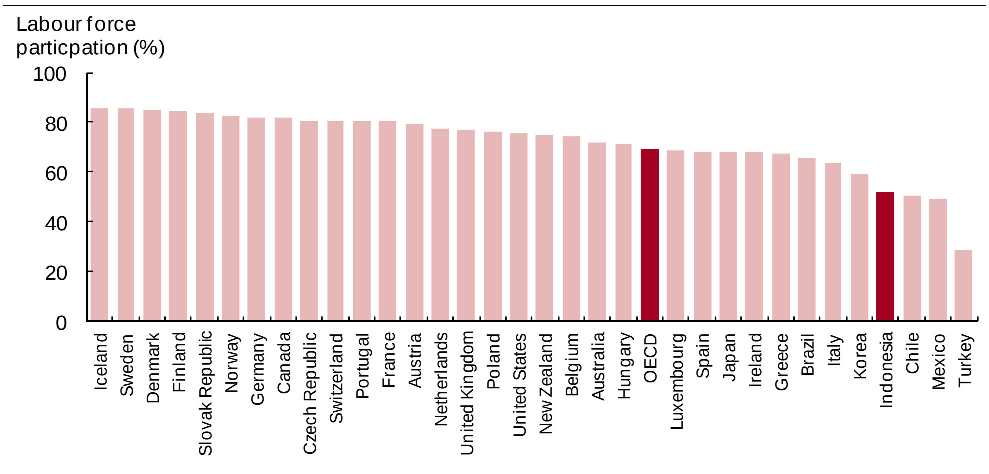
Figure 31 Prime age (25-54) male participation rate, 2007



Data source: OECD (2008)

The female participation rate story is however quite different, and as can be seen from Figure 32, a relatively small number of prime aged females (52 percent) are in the labour force. This is a result of both cultural factors and limited access to child support services. Over the longer term failure to attract a greater proportion of the female population into the workforce will be a constraint to achieving higher living standards in Indonesia.

Figure 32 Prime age (25-54) female participation rate, 2007



Data source: OECD (2008)

3.5.6 Infrastructure

Indonesia has some of the poorest infrastructure development indicators in Southeast Asia (OECD 2008, p. 68). In the World Economic Forum's 2008-2009 Global Competitiveness report Indonesia's overall quality of infrastructure was ranked 94th out of 134 countries. The inadequate supply of infrastructure in Indonesia was also identified as the second most problematic factor for doing business in Indonesia.

Transport infrastructure in Indonesia is particularly poor. Urban roads are congested, District roads are not maintained, and rural roads are often to accessible for part of the year. Out of 134 countries the Global Competitiveness report ranked Indonesia's road and port infrastructure as 105th and 104th respectively.

With a ranking of 92, Indonesia's quality of electricity supply is also poor. The OECD found that electricity access in Indonesia is low even by regional standards, and that efficiency in terms of energy losses is poor. As demand continues to grow faster than capacity can be added, energy shortages may be a long running and constraining feature of the economy for some time to come.

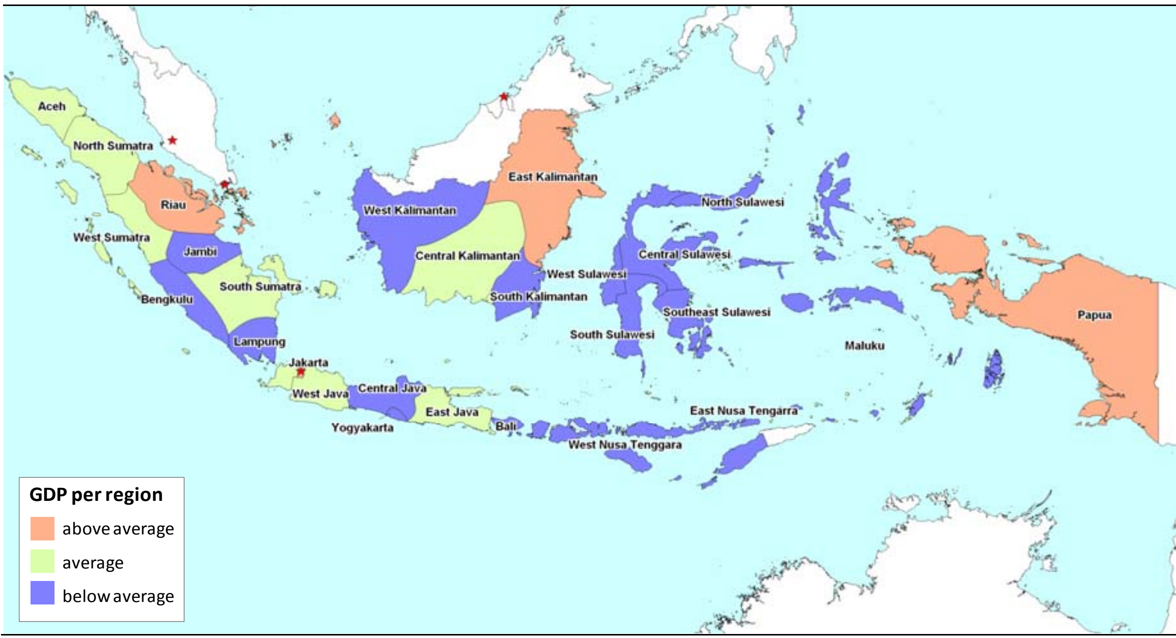
Indonesia's quality and access to water resources is also low, with around 30 percent of urban households having access to piped drinking water in 2005, the lowest level in the region. Access to waste water treatment is also poor, with less than two percent of the population in Jakarta connected to a sewerage system (OECD, 2008 p. 69).

The OECD suggests that capacity constraints at the local level have restricted infrastructure development to some extent, with local governments being unable to take on spending assignments by central government during the decentralisation process. Capacity shortages are most significant in the area of project design and development.

3.5.7 Regional inequality

After the fall of the Soeharto regime in 1998, as the political climate became freer, regional autonomy and religion became a topic of public contention, and regions began to openly demand increased autonomy. The sources of tension were multiple and bi-directional. For example inequality in the distribution of resource gave rise to inequality in regional incomes and led to corresponding inequalities in incomes. Naturally this led to resentment in regions that were poorly endowed with resources. Yet at the same time the equalisation policies of the Soeharto government that saw wealth transferred from wealthy regions to regional governments saw resentment in rich regions towards poor regions. Bertrand (2003) also found that under the Soeharto regime tensions between Christianity and Islam had been suppressed rather than resolved and the fall of the regime became a catalyst for an uprising in religious conflict.

Figure 33 Regional per capita GDP in Indonesia, 2007



Note: above average provinces have per capita GRP 50 percent higher or more than average, and below average provinces have per capita GRP 20 percent lower or less than average.
Data source: OECD (2008)

In 2001, in an attempt to reduce conflict between the regions, two decentralisation laws were introduced which gave increased power to regional governments over expenditure, increased shares of regional revenue, as well as allocated new equalization funds from taxes and the exploitation of natural resources in order to encourage equality among the regions.

There have been a number of problems associated with the implementation of these laws, mostly in relation to the speed of enactment and to the level of government to which power has been given (Wilson 2001). As there has been insufficient consensus regarding a framework for the implementation of the laws, there has also been a lack of coordination between different levels of government, and this lack of coordination has in turn led to further instability in the regions.

Since the fall of Soeharto it has been suggested that violence has been caused by underlying tensions rather than democratisation. For example, Jones (2000) suggests that violence in Indonesia has occurred as ethnic and religious groups have migrated, resulting in changes in the balance between different groups, with indigenous populations feeling they are “under siege”.

In general, and despite some alarmist views, MacIntyre and Ramage (2008) find that modern Indonesia is today a broadly pluralist and tolerant society. Although some analysts have found that Indonesia’s tolerant, secular and pluralist democracy is under threat, there does not seem to be widespread evidence to support this view, and specific cases of decreased tolerance are not representative of the overall standing of the country. The current Yodhoyono government generally protects minority rights and recognises Indonesia’s diverse religious, ethnic, political, and cultural groups. Given the evidence of MacIntyre and Ramage (2008, p. 32) that over 90 percent of the population believe that the pluralist-affirming Pancasila ideology should remain the basis of the republic, a dramatic shift towards a less tolerant society would seem unlikely.

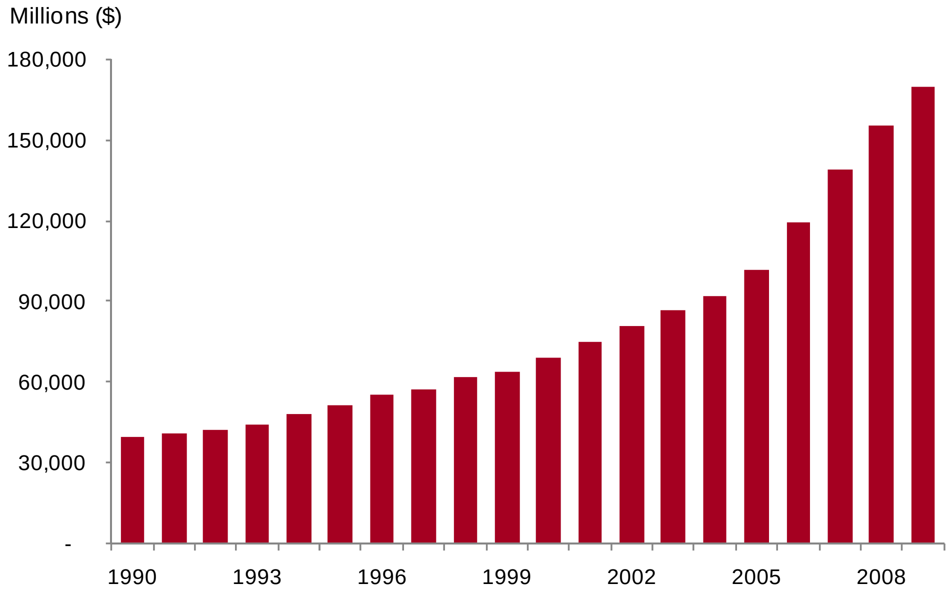
4 Current Western Australia and Indonesia links

The following chapter provides an overview of the Western Australian Economy and the current links to Indonesia.

4.1 Overview of the Western Australian economy

As shown in Figure 34, Western Australia's annual Gross State Product has been growing strongly for some time. Compared to most developed economies, both the Australian and Western Australian economies have performed well during the recent global economic downturn. For Western Australia, real GSP growth was 5.2 percent for the 2008 financial year and 0.7 percent for the 2009 financial year, which is only slightly below the five year average of 5.4 percent.

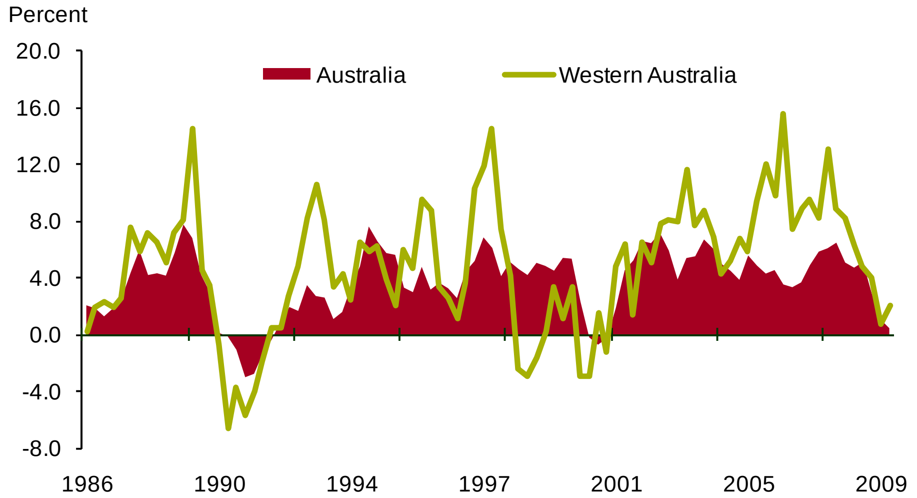
Figure 34 Gross State Product for Western Australia, 1990 to 2009 (nominal terms)



Note: Series ends June 2008
Data source: Australian Bureau of Statistics, 5220.0 Australian National Accounts: State Accounts, Table 6. Expenditure, Income and Industry Components of Gross State Product, Western Australia

Figure 35 presents seasonally adjusted data for the growth in real final demand, both for Western Australia and Australia. In the figure evidence of the recent economic downturn can be seen in the recent sharp declines in State final demand.

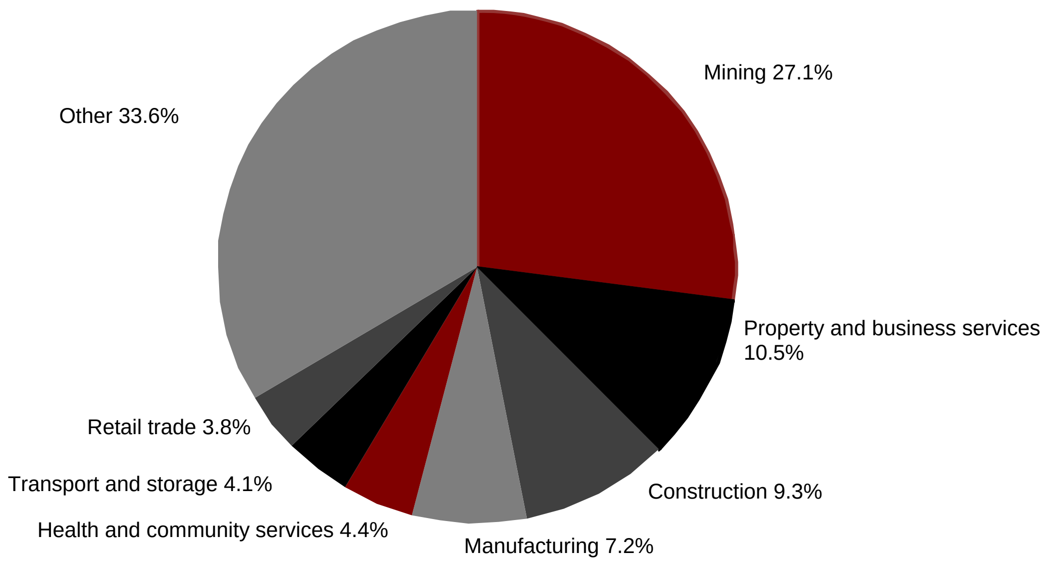
Figure 35 Annual real growth in domestic demand (seasonally adjusted)



Data source: Australian Bureau of Statistics, 5206.0 Australian National Accounts: National Income, Expenditure and Product Table 26. State Final Demand, Detailed Components: Western Australia

A relatively clear picture of the structure of the Western Australian economy can be obtained by considering the information in Figure 36. Although the detail is for the 2007-08 financial year, the five year average industry share information looks broadly similar. As can be seen from the figure, the Western Australian economy is dominated by the mining, property and business services, construction, and manufacturing sectors, which accounted for 27.1 percent, 10.5 percent, 9.3 percent, and 7.2 percent of Gross State Product (GSP) respectively.

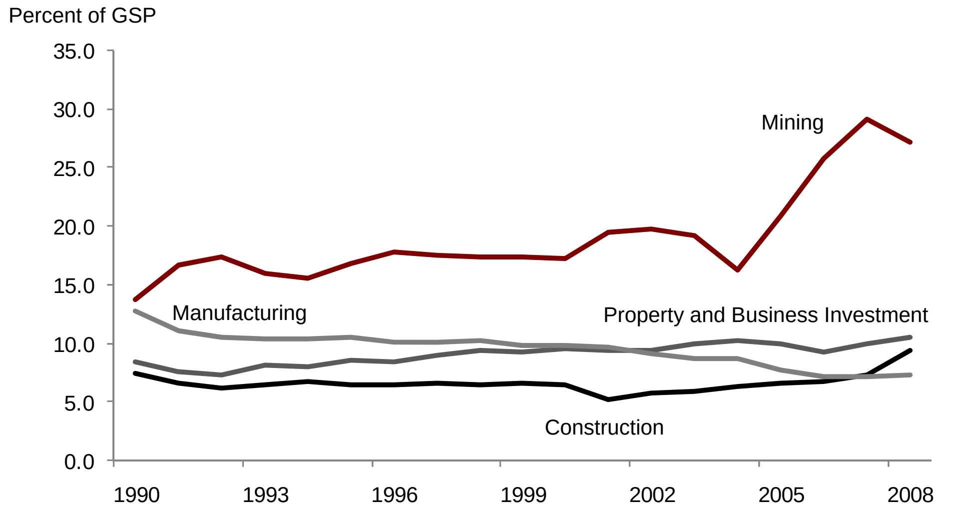
Figure 36 Industry components of Gross State Product, 2007-08



Data source: Australian Bureau of Statistics, 5220.0 Australian National Accounts: State Accounts Table 6. Expenditure, Income and Industry Components of Gross State Product, Western Australia

Figure 37 illustrates how the proportion of income in the mining sector relative to total GSP has grown significantly over time, particularly since the beginning of the 2006 financial year.

Figure 37 Industry components of Gross State Product, 1990 to 2008



Data source: Australian Bureau of Statistics, 5220.0 Australian National Accounts: State Accounts Table 6. Expenditure, Income and Industry Components of Gross State Product, Western Australia

Table 13 Industry GVA Contribution to GSP Growth, 2007-08 (percent)

Industry	Annualised Growth Rate	Contribution to GSP growth
Agriculture, forestry and fishing	18.9	0.4
Mining	2.8	0.8
Manufacturing	16.3	1.2
Electricity, gas and water supply	0.9	-
Construction	6.7	0.5
Wholesale trade	6.3	0.2
Retail trade	5.2	0.2
Accommodation, cafés and restaurants	-3.7	-
Transport and storage	6.4	0.3
Communication services	9.0	0.1
Finance and insurance	5.8	0.2
Property and business services	12.4	1.3
Government administration and defence	-1.0	-
Education	1.8	-
Health and community services	5.5	0.3
Cultural and recreational services	2.5	-
Personal and other services	9.4	0.1
Ownership of dwellings	3.3	0.2
Taxes less subsides on products	3.9	0.2
Statistical discrepancy		-0.9
Gross State Product	**5.2**	**5.2**

Source: ABS Catalogue 5220.0

Details on the drivers of growth in the Western Australian economy are shown in Table 13 and Table 14. As can be seen from Table 13, the property and business services, manufacturing, mining and construction industries were the largest contributors to Western Australia's GSP growth of 5.2 percent over the last financial year, contributing 1.3 percent, 1.2 percent, 0.8 percent and 0.5 percent, respectively. The agriculture, forestry and fishing industry reported the largest growth for the year at 18.9 percent. Significant growth was also seen in the manufacturing industry (16.3 percent), the property and business services industry (12.4 percent), and the communication services sector (9.0 percent).

Table 14 WA's Gross State Product - Growth and Contributions to Growth, 2007-08

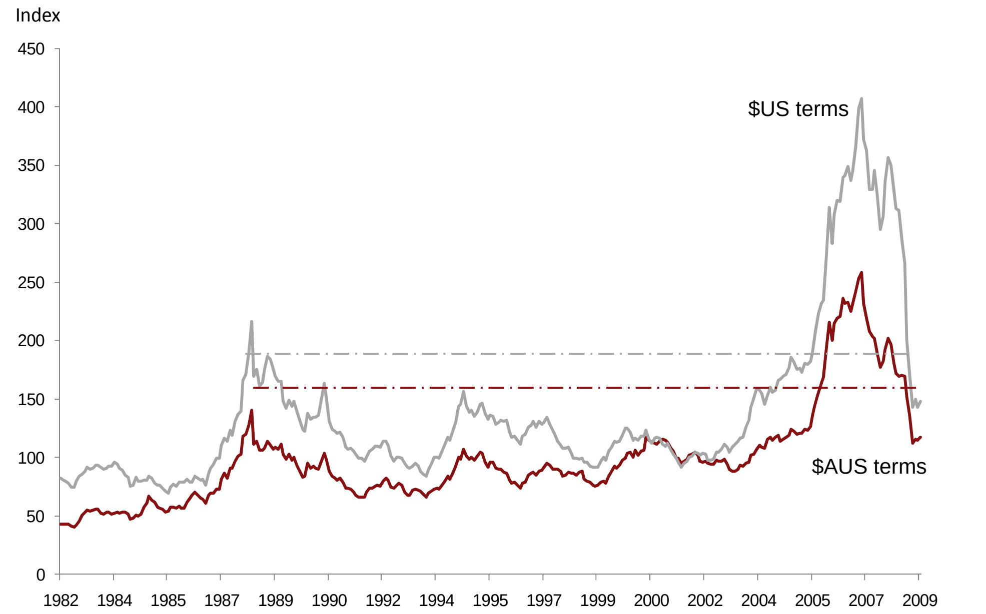
	Annualised Growth Rate (%)		**Contribution to Growth* (%)**	
	2007-08	5 Year to 2007-08	2007-08	5 Years to 2007-08
State final demand, total	**9.3**	**8.6**	**8.2**	**7.0**
Private final demand	**10.3**	**9.3**	**7.5**	**6.3**
Private consumption	5.0	5.7	2.0	2.5
Business investment	22.6	21.3	5.1	3.9
Dwelling investment	9.9	4.8	0.7	0.4
Private consumption	5.0	5.7	2.0	2.5
Public final demand	**4.6**	**4.9**	**0.7**	**0.8**
Government consumption	3.6	3.5	0.4	0.5
Government investment	8.1	10.4	0.3	0.4
Net trade, total	**-8.3**	**-2.4**	**-2.3**	**-0.8**
Goods exports	2.9	3.7	1.3	1.8
Goods imports	13.8	14.2	-2.2	-2.1
Services exports	11.8	6.3	0.4	0.2
Services imports	53.6	20.3	-1.8	-0.8
Total exports	3.5	3.9	1.7	2.0
Total imports	20.8	15.4	-4.0	-2.8
Balancing item	8.8	7.5	-1.4	-1.4
Gross State Product	**5.2**	**5.4**	**5.2**	**5.4**

*Note: *Contributions to Growth do not sum to GSP growth – total GSP includes other items that are not itemised such as real estate transfer costs.*
Source: WA Department of Treasury and Finance 2009; ABS Cat. 5206.0

Western Australia is a major commodity exporter – the State's exports totalled $68,866 million in 2007-08, and represented 38.1 percent of Australia's total exports. Western Australia's main export commodities are iron ore (29.1 percent of total exports), gold bullion (17.5 percent), and crude petroleum oils (13.3 percent).

Despite significant falls in price levels, current commodity prices remain relatively high compared to long run commodity prices (Figure 38).

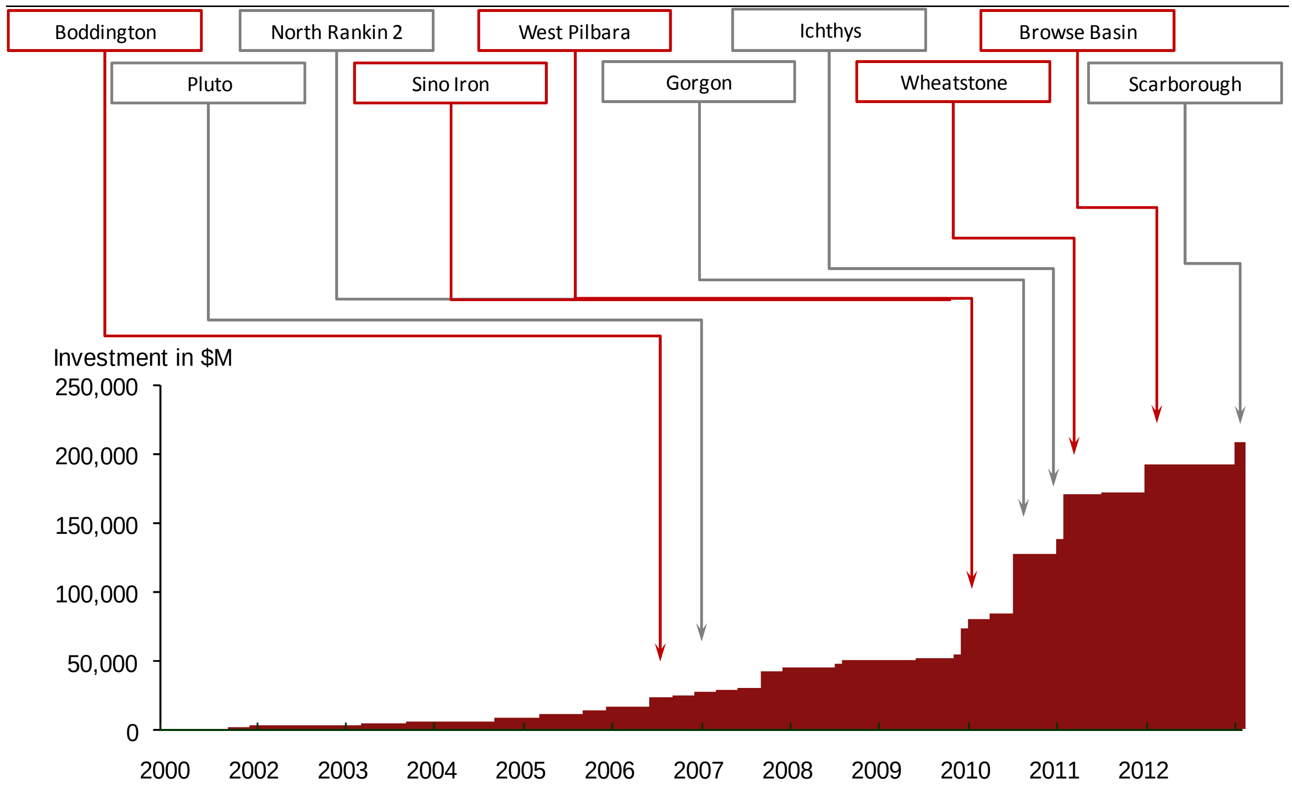
Figure 38 Reserve Bank of Australia base metals price index, 1982 to 2009



Data source: Reserve Bank of Australia; Australian Bureau of Statistics Cat. 5368.0 International Trade in Goods and Services, Australia Table 36e. Merchandise Exports, State of Origin Western Australia by Country

Given the extent of resource-based projects with good prospects planned for the future (Figure 39) it is unlikely that relative importance of mining in the Western Australian economy will fall substantially in the coming years.

Figure 39 Historical and planned investment in resources and infrastructure projects 2001-2013, with projects valued at more than $4 billion highlighted



Data source: *ACIL Tasman database, and ABARE, WA Government and company publications*

Despite the rise in importance of the resources sector, both nationally and within Western Australia, agricultural production is still an important economic activity. Details on

Australian and Western Australian agricultural exports are shown in Table 15. Nationally, beef is the most important agricultural export, although for Western Australia wheat is the most important agricultural crop. The agricultural commodities where the value of exports are large, and Western Australia's share of national exports is also significant, include wheat, barley, live cattle, rock lobster, canola, live sheep, pearls and cereal hay.

Table 15 Australian and Western Australian agricultural exports, 2007-08

Agricultural Commodity	Australia ($ '000)	Western Australia ($ '000)	WA Share (%)
Beef	4,439,576	127,361	3
Wheat	2,892,436	1,818,413	63
Wine	2,698,677	46,498	2
Greesy Wool	2,116,286	240,886	11
Barley	1,233,454	714,582	58
Lamb	822,251	94,833	12
Skins cattle	569,126	21,729	4
Live cattle	539,803	155,753	29
Cereals (other)	485,825	7,426	2
Mutton	460,449	106,814	23
Offal cattle	421,989	16,889	4
Rock lobster	403,265	227,951	57
Meat not for humans	385,592	16,067	4
Food preparations	368,038	4,338	1
Sheep skins	346,628	38,416	11
Malt	320,598	125,435	39
Canola	302,953	285,430	94
Live sheep	287,187	206,966	72
Pearls	264,026	87,607	33
Animal fat cattle	200,663	7,965	4
Degreased wool	197,636	38,798	20
Cereal hay	159,326	100,297	63

*Note: *Contributions to Growth do not sum to GSP growth – total GSP includes other items that are not itemised such as real estate transfer costs.*
Source: WA Department of Treasury and Finance 2009; ABS Cat. 5206.0

Western Australia has performed relatively well during the recent economic slowdown, however, official State Government estimates for the economy going forward, which are shown in Table 16, suggest rising unemployment, and falling output.

Table 16 Summary economic indicators for WA

Economic Indicators	2008 (%)	2009 (%)	2010 (%)	2011 (%)
Real Gross State Product	5.20	8.00	(1.25)	(0.50)
Real State Final Demand	9.30	8.25	(3.50)	(3.75)
Employment Growth	3.60	3.25	(2.00)	0.00
Unemployment Rate	3.30	3.25	5.75	6.75
Population Growth	40.2	40.1	39.5	39.5

Data source: DTF (2009) Years are financial years

4.2 Political and cultural links

Political and cultural links between Indonesia and Australia are influenced by geographical proximity and the priorities in trade and foreign policy of each government. Interaction between the two countries has risen in recent times with an increase in cross-border linkages including a variety of bilateral and regional agreements. The countries' bilateral relationship encompasses political, commercial, development, cultural, people-to-people, and security links.

Australia is Indonesia's largest bilateral donor. Following the Tsunami that hit Indonesia in 2004, Australia contributed AUD$1 billion in relief assistance to the newly formed *Australia-Indonesia Partnership for Reconstruction and Development (AIPRD)* where 50 percent of the funds represented direct aid, and 50 percent represented interest-free loans for infrastructure projects. The additional contribution brought Australia's total funding commitment under this partnership to AUD$1.8 billion, with distribution intended over a five year period. The funds were to be spent on reconstruction and infrastructure building projects in the poor, conflict-ridden provinces of Aceh and Nias; and on other 'emerging areas of support'. These include the re-establishment of social and economic infrastructure in priority areas; human resource development and rehabilitation; specific projects such as the Smallholder Agribusiness Development Initiative (SADI) targeted towards improving the livelihoods of small farmers in rural areas; and a large scholarship programme to provide education and training in areas such as health care, engineering, public administration and governance (Department of Parliamentary Services Australia, 2005).

In June 2008 the *Australia Indonesia Partnership Country Strategy 2008-2013* was announced, where Australia committed to a AUD$2.5 billion assistance package, to be spent between 2009 and 2013 to 'help tackle poverty and promote regional peace, stability and prosperity'. Aid under this partnership is primarily focused on the education, health, and infrastructure sectors. Targeted areas and initiatives under this partnership include:

- increased access to clean water and sanitation by supplying 10 million additional water connections
- high-quality road and bridge improvements (for over 500 km of road)
- emergency response capacity building
- school construction and rehabilitation
- education sector development aimed at providing primary education for all children
- a large number of student scholarships
- a maternal and neonatal health program aimed at reducing the number of women and infants born at childbirth
- work aimed towards reducing greenhouse gas emissions from deforestation to meet climate change challenges.

In addition, Australia is contributing AUD$100 million under *the Australia Indonesia Partnership for HIV (2008-2015)*, targeted at HIV support and prevention programs. Australia also provides development assistance to Indonesia in the form of policy advice, and justice sector and electoral program support.

As well as these partnerships, Australia has signed treaties and agreements with South East Asian partners including the Association of Southeast Asian Nations (ASEAN). The association goals encompass the liberalization of regional trade and the expansion of security links including defense, illegal immigration, transnational crime and piracy, refugees, counter-terrorism and environmental protection.

Approximately 400 Australian firms were operating in Indonesia in 2007-08 in sectors such as mining, construction, transport, food and beverages, and finance and banking. However, both the Australian and Indonesian governments agree that two-way trade and investment is below potential (DFAT 2009).

Cultural ties between the countries are largely initiated and supported by the Australia-Indonesia Institute (AII), which conducts programs such as youth exchanges, journalist fellowships, arts and culture schemes (for example artistic residences in Indonesia), sports, and interfaith programs.

4.3 Indonesia-Western Australia

A sister-state relationship between East Java and Western Australia was established in 1990, under which a number of cultural exchanges and successful development projects have taken place, such as renewable energy projects and solar energy-driven water for villages in East Java. The partnership has promoted trade and investment opportunities in East Java, where Western Australian companies have shown interest in exporting: live cattle for meat processing and dairy use, wheat and potatoes; as well as developing cattle feedlot operations and energy related ventures[3].

A key element of the Western Australia-Indonesia relationship is the existence of the Western Australian Trade office in Indonesia. Establishing a representative office in Surabaya in 1992, Western Australia was one of the first Australia States to establish a formal presence in Indonesia. The Western Australian presence was further enhanced in 2001 with the opening of a WA office in Jakarta. The role of the WA trade office in Indonesia is to:

- Promote trade and investment with Western Australia
- Advise on market entry strategies
- Provide statistical, trade, and market analysis
- Identify business opportunities in established and emerging markets, and
- Represent Western Australia's interests in trade agreements.

For companies registered in Western Australia and who are marketing goods or services from the State to Indonesia, these services are provided without charge.

The WA trade office also facilities a range of political, business, sporting, educational and cultural exchanges between Indonesia and Western Australia.

Western Australia, through the Department of Agriculture and Food WA (DAFWA) is also leading two substantial agricultural programs funded by the Australian Centre for Agricultural Research. The first of the these programs relates to "Optimising the Productivity of the Potato/Brassica Cropping System in Central and West Java and Potato/Brassica/Allium system in South Sulawesi and Nusa Tenggara Barat", and the second relates to "Management of Fruit Quality and Pest Infestation on Mango and Mangosteen to Meet Technical Market Access Requirements".

For the Potato/Brassica/Allium project the collaborating Indonesian institutions are:

- DINAS Pertanian & Tanaman Pangan Jawa Barat
- International Potato Center
- Institute for Rural Technology Development
- Indonesian Vegetable Research Institute

---

[3] Australian Embassy, Indonesia; available http://www.indonesia.embassy.gov.au/jakt/MR07_059.html

- DINAS Pertanian Jawa Tengah
- PT Indofood Sukses Makmur Tbk
- Assessment Institute for Agricultural Technology, South Sulawesi
- Assessment Institute for Agricultural Technology, NTB
- Department of Agriculture Service for Food and Horticultural Crops
- Provincial Agricultural Agency, NTB

and for the Mango and Mangosteen project the collaborating Indonesian institutions are:

- National Nuclear Energy Agency
- Directorate General of Horticulture
- Indonesian Agency for Agricultural Quarantine
- Bogor Agricultural University
- Indonesian Tropical Fruit Research Institute.

The existence of such links provides opportunities that allow Western Australian agricultural produce to be well placed within the Indonesia market.

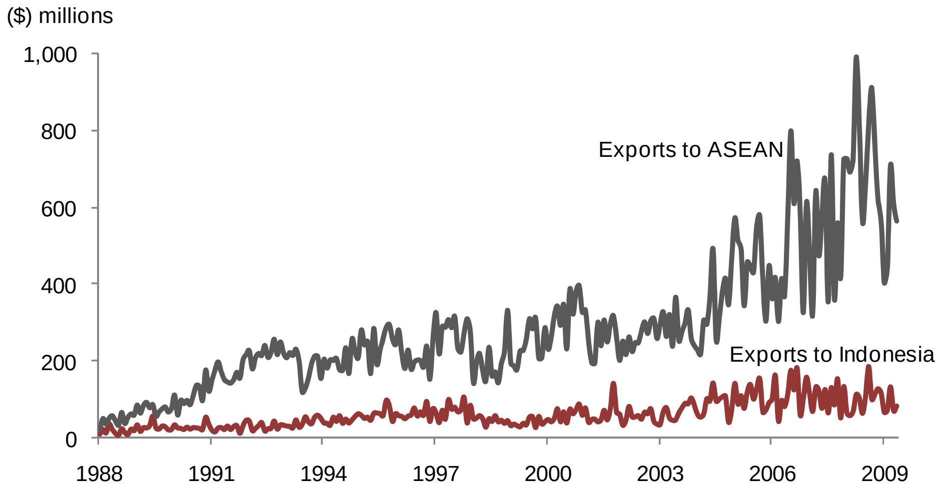
In addition to the strong links across a range of agricultural related institutions and industries, there are other government to government links. For example, Landgate has been involved in a substantial AusAID program assisting Indonesia with spatial data capture in relation to monitoring bushfires and a fire watch program. The Perth Zoo has also established links with Indonesia that have seen orang-utans returned to the wild.

Some government to government links are also commercial links. For example, the Australian Bureau of Meteorology (Perth) was successful in the tender for the provision of a cyclone early warning system to its Indonesian equivalent.

4.4 Western Australian exports to Indonesia

Official trade statistics are available at the State level for merchandise trade only, and so, in general the discussion relating to official trade flows at the State level will be in terms of merchandise trade only rather than total trade. As a first step in understanding the trade relationship between Western Australia and Indonesia it is worth placing the relationship in context. Figure 40 plots details of the growth path of Western Australian exports to ASEAN nations as a whole, and the growth path of Western Australian exports to Indonesia, and as can be seen, exports to the ASEAN region have grown faster than exports to Indonesia. In terms of the growth rate of exports, exports to the ASEAN region have grown at a rate 1.5 times faster than exports to Indonesia.

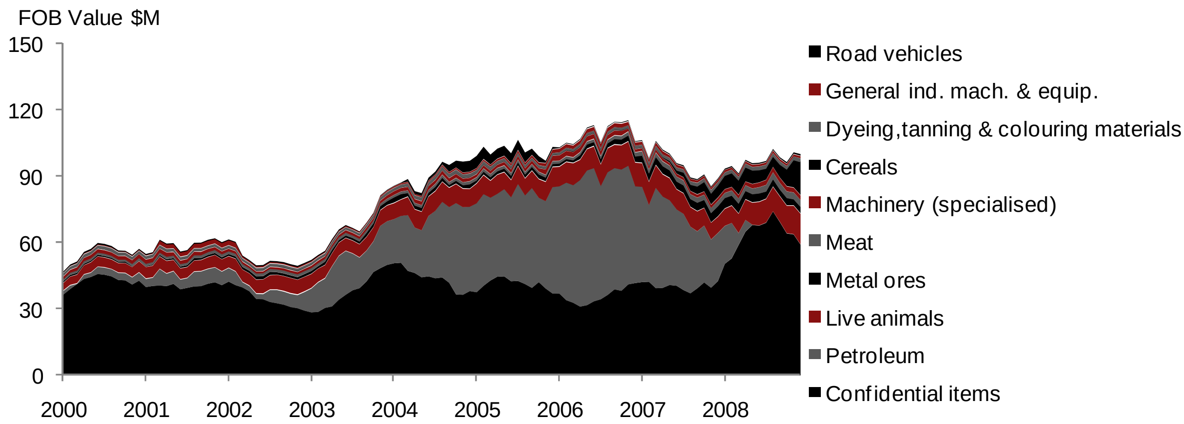
Figure 40 Exports to Indonesia and ASEAN countries, 1988 to 2009



Note: Rolling annual average
Data source: Australian Bureau of Statistics Cat. 5368.0 International Trade in Goods and Services, Australia Table 36e. Merchandise Exports, State of Origin Western Australia by Country

Overall export information for Western Australia to Indonesia is shown in Figure 41, where confidential items are thought to refer largely to LNG sales.

Figure 41 Export to Indonesia decomposition, 2000 to 2009



Note: Rolling annual average
Data source: Australian Bureau of Statistics unpublished data

Agri-food industries

Before looking in greater detail at Western Australia's actual export performance in the agri-food sector, it is worth establishing the range of potential agricultural exports likely to be welcomed in Indonesia. Table 17 provides details on the main Indonesian agri-food imports. Of the main import categories, Western Australia has notable strength in the areas of cereals, dairy products, and all aspects of meat production.

Table 17 Main Indonesian Agri-food imports, 2007

Product/ Commodity	Value ($AUD M)
Cereals	2,160
Food industry residues, waste; prepared animal feed	1,365
Sugars and sugar confectionary	1,334
Cotton, including yarn and woven fabric	1,142
Dairy products; bird eggs; honey	1,043
Oil seeds etc., grain, seed, fruit	678
Edible fruit and nuts; citrus fruit or melon peel	520
Milling products; malt; starch; insulin; wheat gluten	388
Miscellaneous edible preparations	305
Edible vegetables, roots and tubers	293
Live animals	272
Meat and edible meal offal	195

Source: Global Trade Information Service 2008 cited in Western Australian Agri-food and fibre Bulletin 4,759 January 2009

According to the information compiled by DAFWA, Indonesia is Western Australia's second most important agricultural export market, and in the 2008 financial year agricultural exports to Indonesia from Western Australia were worth approximately $557 million. The main export items and their value were cereals (wheat) $417 million, live cattle $90 million, and beef $23 million. Indonesia is Western Australia's most important wheat market, and over the past five years wheat exports from Western Australia to Indonesia have been approximately 1.5 million tonnes (DAFWA 2008).

It is difficult to accurately determine the extent of live cattle exports from Western Australia to Indonesia. This is because export data is collected at the point of export and a significant proportion of cattle from Western Australia are actually exported through Darwin. It has however been estimated that of the 700,000 head of cattle exported from Australia to Indonesia in the 2008 financial year, approximately 250,000 were Western Australian cattle.

Although the value of beef exports from Western Australia is still relatively low, over the past five years beef exports from Western Australia to Indonesia have more than doubled in value from $10 million to $23 million.

Education sector

Indonesia is an important market for Australian education exports. Details on the number on Indonesian students enrolled in: higher education, vocational and education training, ELICOS, schools, and non-award training are shown in Table 18.

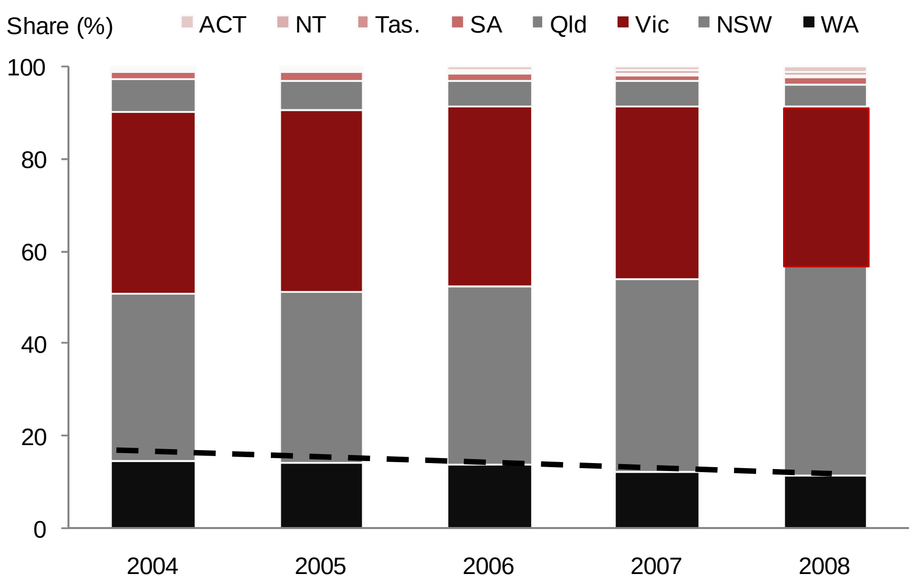
Table 18 Indonesian enrolments in Australian education sector, 2004 to 2008

State/Territory	2004 (No.)	2005 (No.)	2006 (No.)	2007 (No.)	2008 (No.)
New South Wales	6,559	5,910	5,741	6,128	7,342
Victoria	7,088	6,319	5,786	5,522	5,493
Queensland	1,270	1,041	857	791	784
South Australia	345	304	262	249	312
Western Australia	2,574	2,253	2,003	1,800	1,786
Tasmania	26	28	30	16	22
Northern Territory	82	83	75	97	118
Australian Capital Territory	108	104	121	142	206
Total	18,052	16,042	14,875	14,745	16,063

Data source: Australian Education International Complied by Perth Education City, July 2009

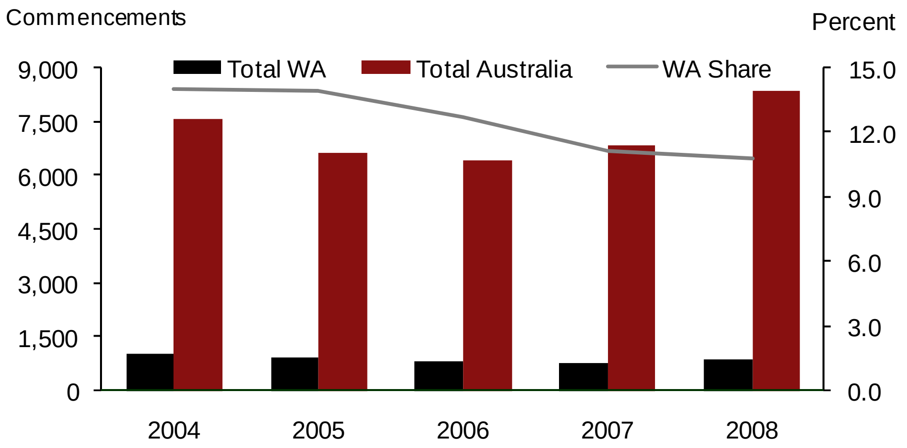
Although the Indonesian market remains an important market for Western Australia, whether considering student enrolment data (Figure 42) or commencement data (Figure 43) it appears the State has been underperforming in attracting students from Indonesia in recent years.

Figure 42 Indonesian enrolments in each Australian jurisdiction, 2004 to 2008



Data source: Australian Education International Complied by Perth Education City, July 2009

Figure 43 Education commencements in Australia and WA, 2004 to 2008



Data source: Australian Education International Complied by Perth Education City, July 2009

International tourism

In terms of contribution to the State's economic value, it is estimated that tourism directly contributed $3.7 billion, or 2.6 percent, of Western Australia's Gross State Product in 2006-07. In indirect terms, it is estimated that the industry contributed a further $3.4 billion to Western Australia's GSP so that the total industry's contribution was $7.1 billion (Ho et al. 2008).

Tourism also generates substantial employment in Western Australia. Estimates for 2006-07 indicated that the Western Australian tourism industry directly accounted for 45,660 jobs, or just over four percent of total State employment. Some idea of the relative importance of the sector in terms of employment can be seen by noting that total direct employment in the mining sector is around 62,500.

Table 19 provides details on international visitor spending across individual Australian States and Territories. The data is not directly comparable with GDP information but it does represent a consistent metric that can reveal emerging trends. Reading across the individual State\Territory rows in the table it can be seen that in almost every Australian jurisdiction international tourism spending increased each financial year between 2006 and 2009. The only exception to this was spending in Western Australia in 2009 which fell slightly relative to the 2008 level.

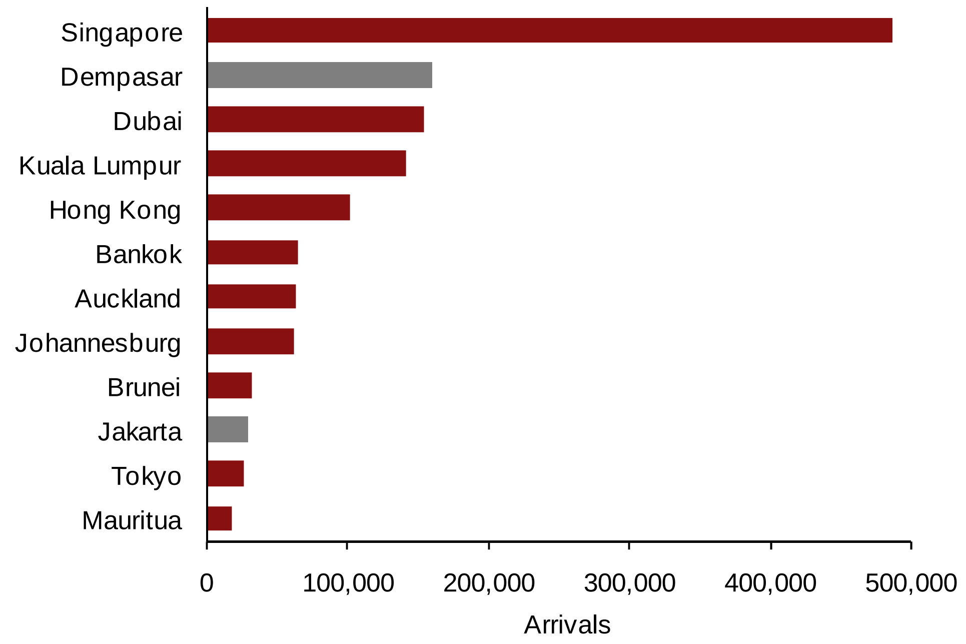
Table 19 Tourism spending in Australia by jurisdiction, 2006 to 2009

State/Territory	2006		2007		2008		2009	
	Spend ($M)	**Share** (%)	**Spend** (%)	**Share** ($M)	**Spend** **(%)**	**Share** ($M)	**Spend** ($M)	**Share** ($M)
New South Wales	4,959	37	5,586	37	6,015	37	6,150	36
Victoria	2,494	19	2,981	20	3,265	20	3,616	21
Queensland	3,388	25	3,667	24	3,918	24	3,997	23
South Australia	512	4	454	3	520	3	601	4
Western Australia	*1,305*	*10*	*1,543*	*10*	*1,759*	*11*	*1,758*	*10*
Tasmania	211	2	242	2	258	2	268	2
Northern Territory	384	3	423	3	370	2	463	3
Aust. Cap. Territory	149	1	203	1	211	1	224	1
New South Wales	4,959	37	5,586	37	6,015	37	6,150	36

Note Years are Financial years
Data source: International Visitors in Australia - June (various) Quarterly Results of the International Visitor Survey, Tourism Research Australia, Canberra

In 2008 there were an estimated 675,800 international visitors to Western Australia, representing growth of approximately three percent. Much of the growth in visitor numbers came from South Africa and short haul markets i.e. Malaysia, Indonesia, India, and New Zealand. Major long haul travel markets, ie U.K, U.S.A, Germany, Japan, Ireland and China, experienced declines over 2008, with the global financial crisis thought to be a major contributor (Tourism Western Australia 2009). Details on passenger arrivals at Perth airport are shown in Figure 44, and as can be seen, both Dempasar and Jakarta are important markets.

Figure 44 Point of origin for arrivals at Perth airport, 2009



Data source: Quarterly Tourism Snapshot –June 2009 Quarter

It is notable feature of the tourism market that on average casino visiting tourists spend more than other tourists. For example, in 2007-08 casino visiting tourists spent an average of $4,910 per visitor, compared to $2,630 for non-casino visiting tourists (ACG 2009, vii). Average expenditure by international VIP players is an order of magnitude higher than average casino visiting tourists.

Of particular importance to casinos are international VIP program players or “high rollers”. Nationally, VIP program players accounted for expenditure of $674 million in 2007-08, which was comprised of $553 million spent on casino gaming and $121 million non-casino spending by their entourages. Across the Australian casino sector, international VIP program players accounted for 17.5 percent of total casino gaming revenues, with tourists from Southeast Asia and China comprising the majority of international VIP program players (ACG 2009).

In Western Australia, VIP international players accounted for 19.5 percent, or $139.4 milion, of total casino revenue in the 2009 financial year.

International tourists attracted to Australia by casinos may also spend significant amounts on non-casino related activities outside of casino complexes on items such as retail shopping, restaurant dining, and sightseeing. As well as flow on effects to the local economy, visitors to gamling venues may spend their money on a variety of goods and services within the casino complex. For example, gambling products and services are often bundled together with food, beverage and accommodation services, music and other entertainment (Novak and Allsop

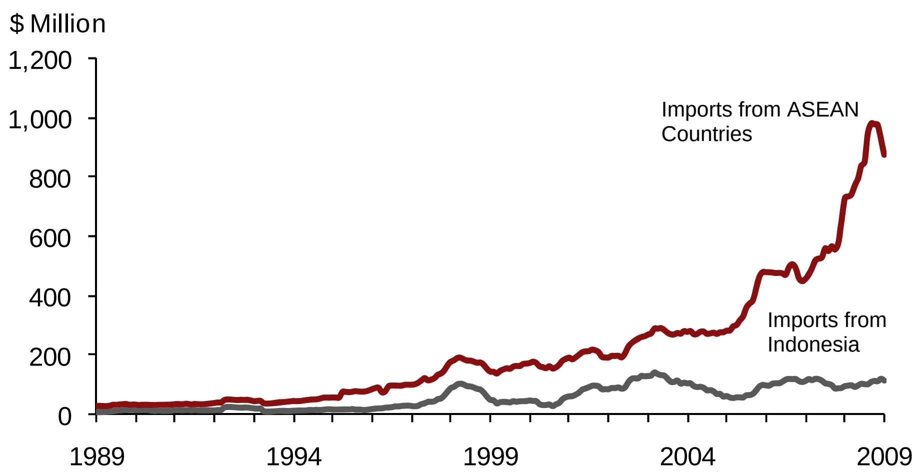
2009, p. 3). Together, these add ons to gambling products and services can help build the image of a tourism destination.

The Burswood Entertainment Complex has a reputation for VIP play within the Indonesian market, and has been successful over many years in attracting high rollers and other player to Western Australia. It is however notable that in 2010 two new casino-resort complexes -- Marina Bay Sands and Resorts World at Sentosa -- will be opening in Singapore.

4.5 Indonesian exports to Western Australia

As can be seen from Figure 45, similar to the situation regarding exports from Western Australia to Indonesia, the growth in Western Australian imports from the ASEAN region as a whole has been substantially greater than the flow from Indonesia.

Figure 45 Imports from Indonesia and ASEAN Countries, 1988 to 2009

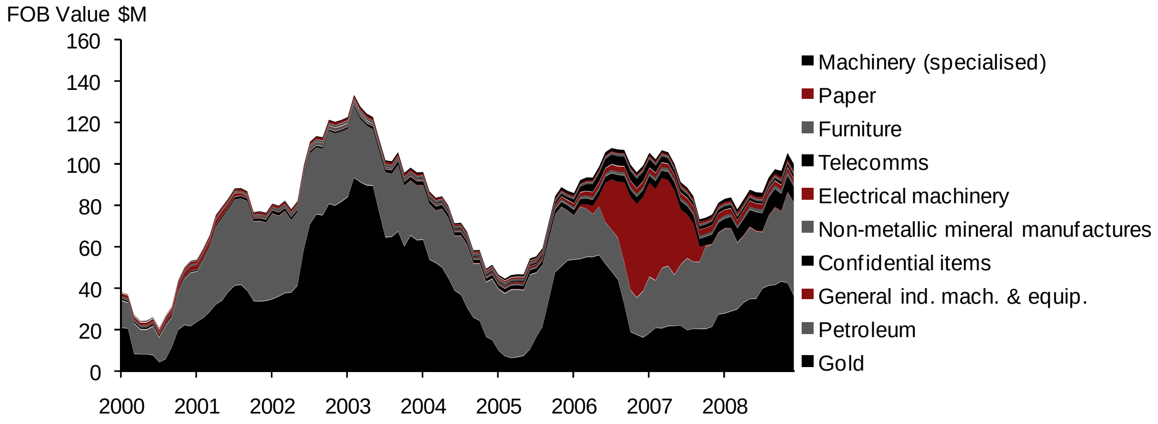


Data source: Australian Bureau of Statistics Cat. 5368.0 International Trade in Goods and Services, Australia Table 36e. Merchandise Exports, State of Origin Western Australia by Country

In the past year the top five import items for Western Australia from Indonesia were petroleum, gold (which is re-exported), confidential items, specialised machinery and non-metallic mineral manufactures.

Over the longer term, both gold and petroleum have dominated Western Australian imports from Indonesia. Although for a small period around 2006 to 2008, general industrial machinery and equipment was also a large import category.

Figure 46 Imports from Indonesia decomposition, 2000 to 2009



Note: Rolling annual average
Data source: Australian Bureau of Statistics unpublished data

5 Future Indonesian growth and opportunities for Western Australia

Trade flows between Western Australia and Indonesia are currently lower than what might be expected based on geographical location and the size of the two economies. The reasons for the relatively low flow of goods and services between Western Australia and Indonesia are numerous. In part the relatively low flow of goods and services is a reflection of the very high proportion of Western Australian exports represented by iron ore and the location of the steel mills this ore is shipped to; and in part it is a reflection of the general difficulty in doing business in Indonesia as evidenced in the low ranking of Indonesia in the various FDI and corruption index measures. Yet it is also possibly due to Indonesia receiving less attention as a potential market for Western Australian exports compared to the three regional giants: Japan, China, and India.

Western Australian companies and institutions have core competencies in mining, agri-business, education services, and research and development activity. Looking forward the Indonesian economy looks set to continue on a solid growth trajectory with rising incomes, and increased urbanisation. Key areas of focus for Indonesia will include human resource development, sustainable resource development, and improvements in agricultural productivity and quality control.

In identifying areas for future focus the approach taken as been to select areas in which Western Australia has an existing comparative advantage. Additionally, within these areas of comparative advantage, attention has been paid to those areas where it is thought a relatively modest investment in additional resource would generate substantial additional benefit for the State.

5.1 Education sector

For Indonesia to continue to develop and prosper it will be critical for Indonesia to invest in human skill development. For Indonesians seeking education in Australia, Western Australia should be seen as one of the most attractive destinations. Since 2004 Indonesian enrolments in Australian education institutions have fallen; and enrolments in Western Australia have fallen proportionally faster. In 2004 there were 2,574 Indonesians studying in Western Australia and this represented 14 percent of total Indonesian enrolments in education within Australia. In 2008 there were 1,786 Indonesians studying in Western Australia and this represented less than 11 percent of total Indonesian enrolments in education within Australia.

Given the proximity of Western Australia to key Indonesian population centres, Western Australian education service providers have a comparative advantage in the supply of education services to the Indonesian market. This applies not only to the higher education sector but also to management training service providers and short course professional education training.

Additionally, it should be recognised that over the longer term Indonesia aims to increase the quality of all levels of education delivered within the country. This means that within the education market a focus for Western Australia should include higher degree type training. Across the world, for the vast majority of post-graduate courses, students receive financial assistance of some kind. The main exception to this is MBA program study. Australia provides a significant amount of funding support for international postgraduate students, and this is an area where it is also possible to distinguish benefits for Western Australia as opposed to national benefits.

Details on Commonwealth government funded scholarships are shown in Table 15. As can be seen, the largest numbers of scholarships go to students from Indonesia, with 30 percent of the total number of awards in 2007 being to Indonesians, and all of the scholarships awarded to Indonesians were for postgraduate study.

Table 20 Estimated commencing Australian development scholarship students, 2007

Country	TAFE (No.)	Undergraduate ($ '000)	Postgraduate (%)	Total (No.)	Total (%)
Indonesia	0	0	285	285	29.2
Vietnam	0	0	132	132	13.5
Papua New Guinea	36	20	74	130	13.3
Philippines	0	0	79	79	8.1
Bangladesh	0	13	38	51	5.2
Laos	15	15	19	49	5.0
China	0	0	23	23	2.4
Cambodia	0	0	21	21	2.1
Mozambique	0	0	16	16	1.6
Mongolia	0	0	14	14	1.4
Bhutan	0	0	14	14	1.4
East Timor	0	9	4	13	1.3
Maldives	0	4	9	13	1.3
Kenya	0	0	12	12	1.2
Solomon Islands	0	9	2	11	1.1
Samoa	2	7	1	10	1.0
Tanzania	0	0	10	10	1.0
Fiji	0	3	6	9	0.9
Vanuatu	0	0	9	9	0.9
Uganda	0	0	9	9	0.9
Zambia	0	0	9	9	0.9
South Africa	0	0	8	8	0.8
Malawi	0	0	7	7	0.7
Pakistan	0	0	6	6	0.6
Sri Lanka	0	0	6	6	0.6
Lesotho	0	0	6	6	0.6
Tuvalu	2	1	2	5	0.5
Swaziland	0	0	4	4	0.4
French Polynesia	1	2	0	3	0.3
New Caledonia	1	2	0	3	0.3
Tonga	0	0	3	3	0.3
Wallis and Futuna	3	0	0	3	0.3
Kiribati	0	2	0	2	0.2
Namibia	0	0	2	2	0.2
Total	60	87	830	977	100

*Note: *Contributions to Growth do not sum to GSP growth – total GSP includes other items that are not itemised such as real estate transfer costs.*

There is an AusAID representative office in Jakarta, and all Western Australian universities are AusAID participating universities, and so are eligible to enrol students.

Although all Western Australian universities are participating universities for the AusAID program this is not the case for some other significant scholarship programs. For example, the Asian Development Bank - Japan Scholarship program for post-graduate study in economics, management, science and technology is a significant program and currently there are no participating Western Australian universities. Although not all Western Australian universities are likely to have a research profile consistent with the other participating Australian institutions, the research output at the University of Western Australia would seem to be consistent with that of other participating institutions.

Western Australian education institutions are successful in attracting Indonesian students to the State. Relative performance has however slipped in recent years and this sector would appear to be a sector in which meaningful growth could be achieved with a relatively modest additional investment in resources and focus.

5.2 Mining sector

Western Australia's strength in all aspects of mining operation is well documented. The challenge for the export of mining services from Western Australian firms going forward relates to the ability of these firms to negotiate the recently introduced Indonesian mining legislation. In reality, until there is greater certainty regarding the regulations that will be used to bring the new mining law into effect a cautious approach is required with respect to mining related investment in Indonesia.

5.3 Tourism sector

Western Australia has underperformed in terms of tourism in recent years. Although average income in Indonesia is relatively low, there is substantial income inequality such that the average income of the top ten percent of the population is substantially above the average; the average income of the top five percent is substantial above the average income of the top ten percent; and the average income of the top one percent is substantially above the average income of the top five percent. The top ten percent of the population could reasonably be described as representing a substantial market for Western Australian Tourism, while the top one percent represent a market for VIP play at Western Australian gaming complexes.

5.4 Agriculture

Across Asia food consumption patterns are changing. In broad terms the stylised facts relating to food consumption in Asia, as reported in Pingali (2007) are:

- Reduced per capita consumption of rice
- Increased per capita consumption of wheat and wheat based products
- More diversity in the food groups consumed
- Increased consumption of high protein and energy rich foods
- Greater consumption of temperate zone type food products, and
- Increased consumption of convenience type food and beverages,

and these stylised facts apply to Indonesia.

Many of the trends in food consumption are intertwined. For example, the reduction in per capita rice consumption and the increase in the consumption of wheat based products in part reflects the desire of governments to diversify food consumption and so ensure greater stability in the food supply. The increase in consumption of high protein foods and convenience type foods are a natural consequence of urbanisation, which in turn is driven by economic development. Other developments such as an increase in the consumption of potatoes, which generally have an income elasticity of below one in developed countries, in part reflect the role potatoes have in the menu at numerous fast food chains.

With respect to Western Australia, DAFWA has identified Indonesia as a potential market for seed potato exports. While Western Australia currently has a market share of almost half in seed potato imports, the absolute size of the market should continue to expand in coming years.

With urbanisation also comes an increase in the role of supermarket chain stores at the expense of local retailing. Within the Indonesian market, although retailing remains relatively unconcentrated, Carrefour has been investing heavily in new hypermarket type stores across Indonesia, as have other domestic retailing operations such as the Hero chain and the Alfa chain. With modern retailing comes integrated supply chain management, and point to point refrigerated transport networks. For Western Australia this suggests that export of meat, as opposed to live cattle, may develop in importance. The need for the animal slaughter process to be consistent with Islamic practice does however suggest that the emphasis on live cattle exports is likely to remain strong.

The increased consumption of wheat based products provides an opportunity for Western Australian agriculture to continue to build on an existing strength.

The trend toward increased dairy consumption in Indonesia represents an emerging opportunity for the State's dairy industry. Estimates for milk sales reported in DFAWA (2009) suggest milk sales in Indonesia will increase substantially in coming years.

Table 21 Forecast milk sales, 2008 to 2012

Milk product	Units	2008	2009	2010	2011	2012
Fresh/pasteurised milk	(M litres)	72.3	76.6	81.5	87.1	93.5
Long-life/UHT milk	(M litres)	115.7	121.9	128.2	134.9	141.9
Flavoured milk	(M litres)	103.5	114.9	126.9	139.6	152.9
Powdered milk	('000 T)	105.2	113.6	122.1	130.6	139.1
Flavoured powdered milk	('000 T)	55.9	58.7	61.6	64.3	67.3

Data source: Euromonitor International 2008 cited in DAFWA (2009)

While there is uncertainty is any such projections, by taking a cross section sample of diary consumption in Asian countries it is possible to obtain some idea of the likely trend in dairy consumption in Asian markets such as Indonesia. Dong (2006, p. 261) reports that in the decade previous to the study, average per capita dairy consumption in milk equivalent kilograms was 10.2 kg in China, 71.8 kg in India, 7.8 kg in Indonesia, 97.6 kg in Japan, 67.8 kg in Malaysia, 24 kg in the Philippines, 80 kg in South Korea, 28.7 kg in Thailand, and 8.6 kg in Vietnam. On balance, it would therefore seem likely that the dairy consumption in Indonesia is set to increase substantially over the coming decades. Given recent technological innovation in the transportation of fresh milk products, the Western Australian dairy industry is well placed to service this growing market.

It can also be noted that the Western Australian dairy industry currently exports fresh milk to Singapore and Malaysia and that physical constraints mean that other Australian and New Zealand producers are not in a position to supply these markets with fresh milk.

5.5 The role of the Western Australian Global Network

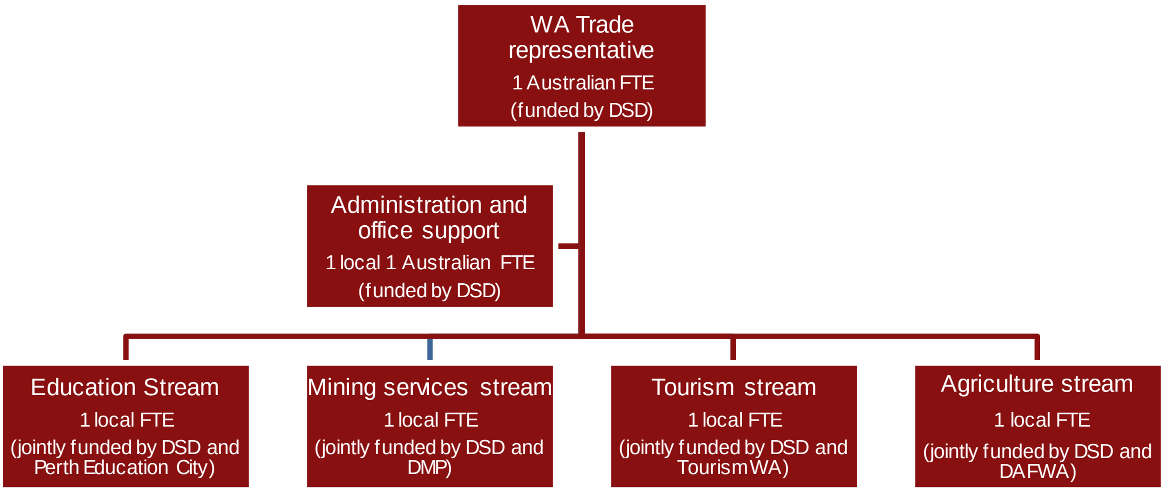
The current level of human resource devoted directly to servicing Western Australian interests in Indonesia as part of WAGN is as follows. In country there is one FTE Department of State

Development (DSD) employee, plus two local staff (an administration assistant and a driver). Within Perth, directly allocated human resources to the Indonesian WAGN office are 0.6 FTE. Additionally, there is a further position funded by DAFWA for a local Indonesian to work on matters related to agriculture.

While many Western Australian firms do export to Indonesia, trade is less than the volume predicted by standard trade models. There are a range of emerging areas, such as dairy products, seed potatoes, and temperate fruits, along with other established areas such as wheat and live cattle exports that can be expected to grow strongly into the future. The decision by DAFWA to fund an in country position to assist with the promotion of Western Australian agriculture to Indonesia may be thought of as representing a model that could be expanded to other areas.

For each potential focus area it is relatively easy to identify a target funding provider, for example, in relation to the mining sector funding could be sought from the Department of Mines and Petroleum. For the education sector, funding could be sought from Perth Education City etc., where to drive the process additional matching funding could be provided by the Department of State Development. The provision of funding for positions by other agencies is not unprecedented, and in addition to the DAFWA funded position in Indonesia, Tourism WA fund a local person position in the Shanghai WAGN office. A possible office structure for the Indonesian Trade office is shown below in Figure 47.

Figure 47 Possible structure for WA trade office in Indonesia



The structure would represent a substantial change, but represents a relatively cost effective means of substantially leveraging the capacity of the office to facilitate Western Australian export flows to Indonesia. At the same time as allowing a much greater targeted focus on promoting Western Australian exports, it would also free up the time of the WA Trade representative to focus on ensuring Western Australian firms benefit from the ongoing FTA negotiations.

In terms of implementation, an essential aspect will be to establish a clear performance evaluation system for the office prior to making any changes. For example, it is not clear that the current reporting metrics used by the Department of State Development for WAGN would remain appropriate under a revised structure for the office.

Bibliography

ABARE (2007) *Agriculture in Indonesia: a review of consumption, production, imports and import regulations,* Australian Bureau of Agricultural and Resource Economics Conference Paper 07.6

ADB Institute (2009) *Overview of forestry in Indonesia*, accessible at: http://www.adbi.org/discussion-paper/2005/02/21/893.forestry.sector.indonesia/overview.of.forestry.in.indonesia/ accessed 20 July 2009.

ADB (2008) Food Prices and Inflation in Developing Asia: Is Poverty Reduction Coming to an End?" Special Report Asian Development Bank Economics and Research Department.

ADB (2006) *Strategic Vision for Agriculture and Rural Development,* Ministry of National Education, *System of National Education,* accessible at http://www.depdiknas.go.id/, accessed 25 June 2009.

ADB (2005) *From Poverty to Poverty: A Country Poverty Analysis for Indonesia,* Asian Development Bank.

Alamsyah et al. (2001) 'Towards implementation of inflation targeting in Indonesia', *Bulletin of Indonesian Economic Studies,* Vol. 37, No. 3, pp. 309-24.

Ananta, Arifin, Suryadinata (2005) *Emerging Democracy in Indonesia,* Institute of South East Asian Studies, Singapore.

Ardiwidjaja (2008), *Strategic Sustainable Tourism Development in Indonesia,* Ministry of Culture and Tourism of the Republic of Indonesia.

Bas van Leeuwen (2007) Human Capital and Economic Growth in India, Indonesia and Japan a quantitative analysis, 1890-2000, PhD thesis Universiteit Utrecht, Netherlands.

Benetech Human Rights Data Analysis Group (2006) *The Profile of Human Rights Violations in Timor-Leste, 1974-1999: A Report by the Benetech Human Rights Data Analysis Group to the Commission on Reception, Truth and Reconciliation of Timor-Leste*, Human Rights Data Analysis Group (HRDAG).

Bertrand (2003) *Nationalism and Ethnic Conflict in Indonesia*, Cambridge University Press.

Booth (2005) 'The Evolving Role of the Central Government in Economic Planning and Policy Making in Indonesia', *Bulletin of Indonesian Economic Studies*, Vol. 41, No. 2, pp. 197-219.

Bank Indonesia (2006) *Overview of Indonesia's Medium Term Development Plan 2004-2009* accessible at http://www.bi.go.id/NR/rdonlyres/F36656EB-D5B6-4175-A831-5C5866FB36AD/9521/UpdateRPJM.pdf, accessed 25 June 2009.

Central Bureau of Statistics (2008) *Trends of the Selected Socio-Economic Indicators of Indonesia.*

Choi (1999) *A Fragile Nation: The Indonesian Crisis,* World Scientific Publishing Company.

Cribb and Kahin (2004) *Historical Dictionary of Indonesia*, 2nd Edition, Scarecrow Press.

Encyclopaedia of the Nations, (2009), *Indonesia – Foreign Investment*, accessible at: http://www.nationsencyclopedia.com/Asia-and-Oceania/Indonesia-FOREIGN-INVESTMENT.html, accessed 25 June 2009.

Ernst and Young (2009) *Mining and Minerals: Indonesia's new mining law,* accessible at: http://www.docstoc.com/docs/8110088/Indonesias-new-mining-law, accessed 20 July 2009.

Fane (1996) *The Trade Policy Review of Indonesia,* Blackwell publishing.

Fane (2005) 'Postcrisis Monetary and Exchange Rate Policy in Indonesia, Malaysia and Thailand', *Bulletin of Indonesian Economic Studies,* Vol. 41, No. 2, pp. 175-195.

FWI/GFW (2002) *The State of the Forest: Indonesia,* Bogar, Indonesia.

Frankema and Lindblad (2006) 'Technological Development and Economic Growth in Indonesia and Thailand Since 1950', *ASEAN Economic Bulletin* Vol. 23, No. 3, pp. 303-324

Fuglie (2004) 'Productivity Growth In Indonesian Agriculture, 1961-2000' *Bulletin of Indonesian Economic Studies,* Vol. 40, No 2. p. 209-225

Hamiton-Hart (2001) 'Anti-corruption Strategies in Indonesia', *Bulletin of Indonesian Economic Studies,* Vol 37, No. 1, pp. 65-82

Hardiyanto (2007) Time Series Studies on Indonesian Rupiah/USD Rate 1995 – 2005, PhD thesis Erasmus University, Netherlands.

Hartono et al. (2007) *Regional Economic Integration and its Impacts on Growth, Poverty, and Income Distribution: The case of Indonesia,* Blackwell.

Hill and Hal (2000) *The Indonesian Economy,* 2nd edition, Cambridge University Press.

Hitchcock et al. (2008) *Tourism in South East Asia: Challenges and New Directions,* 2nd edition, Routledge.

Hofman (2004) *Indonesia: Rapid Growth, Weak Institutions,* World Bank.

Hofman, et al. (2007) 'Asian Development Strategies: China and Indonesia Compared', *Bulletin of Indonesian Economic Studies*, Vol. 43, No. 2, p. 171-99.

Holland (1995) *Economic Policy and Investment Law in Indonesia,* Swinburne University, Business Working Paper No. 112.

Hossain (2006) 'Sources of Economic Growth in Indonesia, 1966-2003', *Applied Econometrics and International Development,* Vol. 6, No. 2.

Jones, (2000) '*Causes of Conflict in Indonesia',* Asia society panel, accessible at http://www.asiasource.org/asip/sidneyjones.cfm

Kishor and Oksanen (2006) 'Combating Illegal Logging and Corruption in the Forestry Sector: Strengthening Forest Law Enforcement and Governance', pp. 12-15, in *Environment Matters at the World Bank: 2006 Annual Review*, World Bank.

Kuo (2007) 'The Mineral Industry of Indonesia', *2007 U.S. Geological Survey Minerals Yearbook*, Virginia.

Kuppuswamy (2002) *'Indonesia: Armed Forces and their diminishing political role'*, Paper no. 528, accessible at: http://www.southasiaanalysis.org/%5Cpapers6%5Cpaper528.html

Lankester (2004) 'Asian Drama: the pursuit of modernization in India and Indonesia', *Asian Affairs,* Vol. 35, No. 3. P. 291-304

Liddle (1999) "Regime the New Order" in Emmerson (editor) *Indonesia Beyond Suharto: Polity, Economy, Society, Transition,* East Gate Book.

Liew (1998) 'A Political-Economy Analysis of the Asian Financial Crisis', *Journal of the Asia Pacific Economy,* Vol. 3, No. 3, pp. 301-330.

Lindsay (2008) *Indonesia Law and Society,* 2nd edition, Federation Press.

MBendi (2009) '*Mining in Indonesia an Overview'*, accessible at: http://www.mbendi.com/indy/ming/as/id/p0005.htm, accessed 20 July 2009.

Marks (2004) 'Fiscal Sustainability and Solvency: Theory and recent experience in Indonesia', *Bulletin of Indonesian Economic Studies,* Vol. 40, No. 2. pp. 227-242.

Marks (2005) '*The Service Sector in Indonesia's National Accounts: 1951 – 2000'*, International Institute of Social History.

McLeod (2003) 'Toward Improved Monetary Policy in Indonesia', *Bulletin of Indonesian Economic Studies,* Vol. 39, No. 3, pp. 303-324.

McLeod (2005) 'The Struggle to Regain Effective Government Under Democracy in Indonesia', *Bulletin of Indonesian Economic Studies,* Vol. 41, No. 3, pp. 367-386.

Ministry of Culture and Tourism (2009) *Visitor Arrivals to Indonesia 2001-2008,* accessible at: http://www.budpar.go.id/page.php?ic=621&id=180, accessed 20 July 2009.

Murphy and Welsh (2007) *Legacy of Engagement in Southeast Asia*, Institute of Southeast Asian Studies.

National Bureau of Economic Research (2004) *Corruption in Indonesia,* Working Paper 10674, accessible at: http://www.nber.org/papers/w10674, accessed 25 June 2009.

Oktaviani (2000) *The Impact of APEC Trade Liberalisation on the Indonesian Economy,* PhD Thesis, Department of Agricultural Economics, University of Sydney, Australia.

Oktaviani et al. (2004) *Bank Restructuring and its Implication on Indonesian Macro Economy and Agricultural Sector*, accessible at http://en.scientificcommons.org/rina_oktaviani, accessed 25 June 2009.

Pallone (2009) 'Indonesia's Oil Crisis: How Indonesia Became a Net Oil Importer', *Journal of International Policy Solutions*, Vol. 10, Article 3, available, http://irps.ucsd.edu/faculty/journals/journal-of-international-policy-solutions/volume-10-spring-2009.htm.

Pingali (2007) 'Westernization of Asian diets and the Transformation of Food Systems: Implications for research and policy', *Food Policy*, Vol. 32, No. 3, pp. 281-298.

Pohan (2002) Decentralization and the Impact on the Planning and Implementation of Social Development Policy: The case of Indonesia, paper presented at the ASEAN World Bank Conference on Social Development Agenda, Jakarta 16-18 January 2002.

Radelet (1998) 'Indonesia's Implosion', *Harvard Asia Pacific Review*, Vol. 3, No. 1, pp. 62-66.

Soesastro (2005) *Pemikiran dan Permasalahan ekonomi di Indonesia dalam Setengah Abad terakhir 4*, Kanisius.

Soesastro and Basri (2005) *The Political Economy of Trade Policy in Indonesia,* CSIS Working Paper WPE 092.

Suryahadi, Sumarto and Pritchett (2003) *'The Evolution of Poverty during the Crisis in Indonesia',* Working Paper, SMERU Research Institute, London.

Tadjoeddin, Suharyo, Mishra (2001) 'Regional Disparity and Vertical Conflict in Indonesia', *Journal of the Asia Pacific Economy,* Vol. 6, No. 3, pp. 283-304.

Thomas and Orden (2004) *'Agricultural Policies in Indonesia: Producer Support Estimates 1985:2003'*, International Food Policy Research Institute, Discussion Paper no. 78, Washington.

Transparency International (2007) *Country Reports: Asia and the Pacific.*

United Nations (2007) *Report of the achievement of millennium development goals in Indonesia.*

United Nations (2007) *Economic Social Survey of Asia and the Pacific,* accessible at: http://www.unescap.org/survey2007/backgrounders/demographic_dividend.asp, accessed 11 June 2009.

United Nations Conference on Trade and Development (2008) *World Investment Report 2008,* accessible at: http://stats.unctad.org/FDI/TableViewer/tableView.aspx?ReportId=1254, accessed 25 June 2009.

United Nations Economic and Social Committee for Asia and the Pacific (2003) *Telecommunications in Indonesia and its commitment in WTO,* accessible at: http://www.unescap.org/tid/mtg/ituwtoesc_indo.pdf last accessed 14 July 2009.

United Nations Statistics Division (2008) *UNSD International Merchandise Trade Statistics,* accessible at: http://unstats.un.org/unsd/trade/imts/anntotpubs.htm, accessed 25 June 2009.

U.S.Library of Congress (1993) *Indonesia: A Case Study,* accessible at http://countrystudies.us/indonesia/, accessed 25 June 2009.

Usman (2001) *Indonesia's Decentralisation Policy: Initial Experiences and Emerging Problems,* Working Paper, SMERU Research Institute, London.

Van der Eng (2008) *Capital Formation and Capital Stock in Indonesia, 1950-2007,* Working Papers in Trade and Development No. 2008/24, Australian National University.

Van der Eng (2008) *The Sources of Long-term Economic Growth in Indonesia, 1880-2007*, Working Papers in Economics and Econometrics No. 499, Australian National University.

Van Klinken (2007) *Communal Conflict and Decentralisation in Indonesia,* Occasional Paper No. 7, The Australian Centre for Peace and Conflict Studies, University of Queensland.

Wie (2003) 'The Indonesian Economic Crisis and the Long Road to Recovery', *Australian Economic History Review,* Vol. 43, No. 2, p. 183-196.

Wilson (2001) *Internal Conflict in Indonesia: Causes, Symptoms and Sustainable Resolution,* Research Paper 1 2001-02, Foreign Affairs, Defence and Trade Group, accessible at: http://www.aph.gov.au/library/pubs/rp/2001-02/02RP01.htm#summary, accessed 25 July.

World Bank (2003) *Combating Corruption in Indonesia: Enhancing Accountability for Development.*

World Bank (2004) *The Role of State Owned Banks in Indonesia.*

World Bank (2005) *Governance Matters IV: 1996 to 2004.*

World Bank (2007) *Investing in Indonesia's Education: Allocation, Equity and Efficiency of Public Expenditures*, 38778 v. 2

World Bank (2007) *Ten Years after the Crisis, East Asian Economies are Going Strong,* accessible at: http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTGENDER/0,,contentMDK:21284048~menuPK:336905~pagePK:64020865~piPK:149114~theSitePK:336868,00.html, accessed 26 June 2006.

World Bank (2009) *Indonesia Environment,* accessible at http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/EASTASIAPACIFICEXT/EXTEAPREGTOPENVIRONMENT/0,,contentMDK:20266323~menuPK:537827~pagePK:34004173~piPK:34003707~theSitePK:502886,00.html accessed 10 June 2009.

World Bank (2008) *World Development Indicators 2008*, accessible at: http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/0,,pagePK:50004410~piPK:36602~theSitePK:29708,00.html, accessed 26 June 2009

World Economic Forum (2008) *The Global Competitiveness Report 2008-09*, accessible at http://www.weforum.org/documents/GCR0809/index.html, accessed 25 June 2009.

WTO (1994) *General Agreement on Trade Services: Indonesia Schedule of Specific Commitments*, GATS/SC/43 accessible at: http://www.esf.be/pdfs/GATS%20UR%20Commitments/Indonesia%20SoC.pdf, last accessed 25 June 2009.

Yayasan Indonesian Forum (2007) *Visi Indonesia 2030*, accessible at: http://indforum.org/indonesia/index.php?view=article&id=60&Itemid=67&option=com_content, last accessed 25 June 2009.