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I N D O N E S I A



Editor Foreword

Welcome to the first edition of Global Business Guide Indonesia.

Global Business Guide was created to fill the gap in the availability of accurate and objective information on the partnership and business opportunities in key emerging markets. With teams based on the ground throughout the year carrying out interviews and research; Global Business Guide provides unrivalled insights into all industry sectors and the business climate.

Indonesia is entering a decisive phase in its development as it makes the transition from a low to middle income economy. Having weathered the world financial crisis well and continuing to offer sustained economic growth; Indonesia is now cementing its position as a global powerhouse. As the world's third largest democracy of some 240 million people and the largest Muslim majority nation, Indonesia has numerous unique attributes that set it apart as a business and investment destination. Its geographical position between China and India with abundant natural resources at its disposal, political stability and large domestic market provide the foundations for the country's future economic success.

The improvements in the country's business climate and recently introduced incentives for foreign investors come at a crucial time when Indonesia requires both investment and expertise to realise its full potential. Global Business Guide Indonesia offers the tools to understand the market and to connect directly with local businesses and organisations.

Regularly updated analysis is available at www.gbgindonesia.com as well as our database of interviews. Please visit the website for detailed coverage of your sector of interest and to access our directory of selected local companies that are positioned for international cooperation.

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke extending to the right.

Gaelle Bettus
Editor in Chief
& The GBG Indonesia team

Foreword

David Fletcher, President Director of Bank Permata



Indonesia is a very exciting place to be right now and is attracting interest from all over the world. As a G20 member, Indonesia has taken its correct position on the world's stage, and the signs for continued success and development are strong.

I have been fortunate to reside and work here for nearly two years, which have been exciting, dynamic and fulfilling. As a country, Indonesia is very much open for business, keen to attract foreign investment and to develop trade partnerships. It has a position that many countries would envy; abundant natural resources and close to major markets for these resources; and a young, large scale workforce, ideal for developing a manufacturing industry for both the local market and export. The strength and size of the local market meant that Indonesia only experienced a slowdown in growth during the recent global financial crisis, and has since gone from strength to strength. With consumer purchasing power growing, a government committed to attracting the necessary investment and further improving the business climate, Indonesia's future is worthy of all the attention it is getting.

Indonesia is very much open for business, keen to attract foreign investment and to develop trade partnerships

This attention is important as Indonesia is not as well understood by international businesses as it needs to be. Many are simply out of date, referring to a country that existed over 10 years ago, that does not take into account the impressive reforms and growth that have taken place. Often this is due to a lack of information and an inability to access the information that is available. That is why I am very pleased to endorse Global Business Guide's initiative in Indonesia. It will fill an important gap in terms of providing information on Indonesia and on doing business here, providing a real platform for accessing partnership, investment and trade opportunities across a multitude of business sectors.

I hope that Global Business Guide will correct many of the misperceptions about Indonesia and facilitate meaningful business and trade links in many sectors of the economy. Lack of knowledge should no longer be a valid excuse when it comes to Indonesia. The information is here, to be used and acted upon. I wish all potential business partners every success as they develop their business in and with Indonesia.

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Indonesia is unique among the world's emerging markets in having a large and youthful domestic market, political stability as well as abundant natural resources. This section looks at what really differentiates Indonesia as a market of the future.

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Why Indonesia



*Capital : Jakarta
Currency : Indonesian Rupiah
Population : 238 million (2010 Census)*

*GDP per Capita : \$4,200 at PPP (2010)
Ease of Doing Business : 121st (WB, 2010)
Corruption Index Score: 110th (TI, 2010)*

Indonesia's economy is on the rise and thus seeing the country take its rightful position as a major destination for foreign direct investment (FDI). Having previously been overlooked in favour of other countries in Asia such as India and China; Indonesia is now hard to ignore. The country is unique in many ways as the biggest archipelago in the world, the largest Muslim majority country, the world's third largest (albeit young) democracy and a leading exporter of numerous high value commodities such as palm oil and thermal coal. Its distinct characteristics are now coupled with political stability, self reliance and robust economic growth which saw the country largely shielded from the global economic crisis. Indonesia now finds itself at a key point in its transition from

that of a low income to middle income economy and from a primary producer to a value added exporter as well as knowledge based economy. Investment opportunities are ripe in all sectors; ranging from infrastructure to manufacturing and services. This represents a window of opportunity for investors to participate in a market in the world's fastest growing region that exhibits strong fundamentals and is poised to flourish.

The country faces many challenges ahead of itself in securing the business environment for investors and sustaining economic growth. Core issues of corruption and excessive bureaucracy are still hurdles for any investor while unqualified human resources and poor infrastructure are restraining GDP growth from reaching the levels being

seen in India and China. However, slow but steady steps are being taken to address the aforementioned obstacles. Undoubtedly, Indonesia possesses the fundamentals to be a leading global economy over the coming decades. This analysis aims to provide readers with a brief overview of some of those core fundamentals that differentiate the country to provide firm foundations for all business and investment ventures.

Having previously been overlooked in favour of other countries in Asia such as India and China; Indonesia is now hard to ignore

Natural Resources

Indonesia is endowed with diverse natural resources and is strategically positioned among markets from which there is high demand for them. The country was the only South East Asian member of OPEC until 2008 and continues to be a major liquid natural gas (LNG) exporter. In energy and mining, Indonesia is the world's leading thermal coal exporter, the largest tin exporter and home to vast deposits of precious metals such as gold, silver and copper. Its unique topography yields highly sought after attributes. For example, its coal offers low sulphur content and high calorific value while its deposits of both coal and other minerals are found close to the earth's

surface thus maintaining competitive extraction costs. Located on the Asia Pacific 'Ring of Fire' with over 40% of the world's proven geothermal energy reserves; Indonesia has access to huge renewable energy sources to meet its domestic needs. This places it in the enviable position of being able to reap the full benefits of exporting its other energy resources. Its climate and highly fertile soil due to volcanic activity make it suited to the cultivation of high value agricultural commodities such as palm oil, rubber, coffee and cocoa. The vast availability of land and the low levels of productivity in many of these key crops give the scope for increased output. Indonesia's geographical proximity to energy and resource hungry China and India provide natural markets for future exports alongside its own rapidly growing domestic market.

Such natural resources make the country unique among other emerging markets in providing long term energy and food security for its burgeoning population. The challenge that now exists is that of effective and sustainable management. Long an exporter of primary products, Indonesia has been riding the global commodity boom while failing to take advantage of value added processes to boost revenues. The country is tightening its grip over its natural resources by securing domestic needs over that of exports and in some cases banning the export of primary resources. While controversial, this is presenting opportunities for investors to bring technical knowledge and expertise as the country seeks to move up the value added chain. Prospects for

investment are to be found in areas such as petrochemical refinement, smelting plants for metal mining and other downstream processes in energy and agricultural commodities.

Large & Youthful Domestic Market

As a country of some 240 million people and growing, the size of the Indonesian domestic consumer market is an alluring attribute for any investor. The country's resilience over the course of the global financial crisis illustrated the merits of its immense population and economic self reliance. Bucking the trend of most other G20 economies, in 2009 the country recorded 4.5% GDP growth and achieved higher than expected growth of 6.1% in 2010. This can be attributed to strong private consumption which accounts for over 60% of total GDP. This placed the country in good stead as demand for exports from developed markets tailed off with the financial crisis leaving many other emerging economies in a state of flux.

Indonesia's lower middle income population continued to realise their consumer aspirations off the back of expanding consumer credit and rising incomes bringing GDP per capita to \$4,200 at PPP at the end of 2010. A growing middle class that is poised to reach 150 million people by 2014 (Nomura) is opening up the scale and scope of the consumer market. What lays ahead to take full advantage of the consumer boom is ensuring that Indonesia's manufacturing sector plays a greater role in the production of the goods being purchased. Imports are still largely responsible for meeting the



country's insatiable appetite for gadgets such as smart phones and other high tech goods that the country as yet does not produce.

In terms of future outlook, Indonesia is entering a 'sweet spot' as a convergence of its young, working population with that of relatively stable inflation and sustained economic growth is fuelling consumer spending. There is much to be said for Indonesia's demographics as a key component of its future growth potential. Over 50% of the population is below the age of 30, is highly adaptive to new technology and has low dependency ratio among its workforce giving rise to a so called 'transitional demographic dividend'. This is in marked contrast to countries such as China where an ageing population and a high dependency ratio due to the one child policy is taking its toll. For Indonesia, this optimal environment is projected to continue for another decade

to 2020, according to the World Bank, after which the population will begin to age faster and modern lifestyles reduce the birth rate. To fully reap the benefits of this transitional period, Indonesia must avoid the 'middle income trap' of failing to transcend its income level to become a fully developed nation. As witnessed in countries such as South Korea, investment in higher education, research and innovation to create a skilled workforce that produce high technology goods is the way to do this. On paper at least, this is the direction that Indonesia is headed according to the Economic Masterplan to 2030 that would see a transition to a knowledge base economy. However, realising this goal will be dependent on realisation of private sector and foreign direct investment. This represents a pivotal stage as investors have an opportunity to come into the market during exciting and unfettered growth to thus play a role in this transition.

Over 50% of the population is below the age of 30, is highly adaptive to new technology and has low dependency ratio among its workforce giving rise to a so called 'transitional demographic dividend'

Political Stability

Indonesia has undergone a political transformation since the upheaval of

1998 which saw the fall of General Suharto after 30 years of authoritarian rule and a collapse of the Rupiah. The country is now a vibrant democracy that is continuing to strengthen its political structures and deepen the enfranchisement of the population. Over past decade, varied experiments with democracy has seen the rise and fall of extreme religious parties and an equilibrium found in the direction of secular, reform minded nationalism. The 2009 election results signalled a maturity among the electorate through the re-election of the incumbent president, Susilo Bambang Yudhoyono who became the first Indonesian president to be democratically elected for two consecutive terms which hugely boosted global investor confidence. His firm stance on terrorism and national security is another welcome continuation of his tenure. Other political reforms such as decentralisation of political power to regional and provincial leaders, while still at an experimental stage, is serving to unleash the potential of Indonesia's less developed regions outside Java and fostering more even participation in the country's growth. The political situation is not without its risks; the speed of economic and political reform under President Yudhoyono's coalition has come under fierce criticism for its inertia and pandering to vested interests of coalition members. Political noises towards greater protectionism are regular occurrences that often result in overlapping regulations which creates investor uncertainty. In the run up to the 2014 elections, party interests are coming to prevail over that of political

progression with a stalemate over many proposed new bills. The gap between the rich and the poor is also widening while corruption continues to be a persistent issue.

However, despite the various push and pull forces to veer of course; the country remains on a stable track while fully acknowledging its political flaws. The deepening politicization of the electorate is seeing greater demands and expectations being placed upon their politicians. The relatively free media is providing the space for open debate and discussion as well as bringing into question accepted cultural and political norms. This is a healthy environment for the future development of democracy and the gradual stamping out of detrimental and corrupt practices. The political system therefore continues to be a work in progress but not without its concerns. Yet, the events of the Arab Spring and the political turmoil that has ensued show that seemingly stable authoritarian regimes all have an expiry date which is brought about by the inevitable peaks and troughs of economic cycles. The over centralisation of authority is also a major flashpoint, as witnessed in countries such as Thailand. The immediate impact of Indonesia's decentralisation has been excessive waste and bureaucracy. However, this is part of the process of political maturation that will eventually yield a series of coordinated regions that have adopted policies which compliment their particular attributes and commercial strengths. From this long term perspective, investors can have confidence in Indonesia's stability and its political system will continue to

strengthen in the decades to come.

Indonesia's advantages as a business and investment destination are defined by the current global and political environment that is highlighting several key parameters to be considered in emerging markets. The country's natural resources, potential in renewable energy and food security offer a sustainable buffer to the climbing prices being seen in oil and foodstuffs which is fuelling social discontent in other markets. Their potential as feedstock for value added manufacturing will also be vital in steering the country through its transition to a middle income and developed economy. The vast population that is set to grow to 288 million by 2050 will serve in both a highly skilled productive capacity as well as consumer market as the country reaches its predicted position of being the world's 6th largest economy (Pricewaterhouse Coopers).



Economic Overview



*Nominal GDP : \$695 billion USD
GDP Growth : 6.1%
External Debt % GDP : 26.4%*

*Stock Exchange : Bursa Efek Indonesia, IDX
Main Index : Jakarta Composite Index, JCI
Capitalisation : 3,384 trillion RP (April 2011)*

Indonesia's economy is going from strength to strength having weathered the global economic crisis and still managing to post 4.5% GDP growth in 2009 followed by 6.1% in 2010. In 2011, that trend is set to continue with GDP growth expected to remain steady at around 7% over the coming years according to investment bank Morgan Stanley. Investors are also taking notice with Indonesia being labelled as a key emerging market to watch within the so called 'BRICs' or 'CIVETS'. The core pillars of economic growth are political stability, a young population with a large domestic market of over 240 million people and vast natural resources. This is coupled with strong economic fundamentals as a result of prudent and consolidatory fiscal measures under the guidance of the

IMF over the past decade. Government policies privatising many state owned enterprises (SOEs), dismantling monopolies and liberalizing regulations regarding foreign direct investment have laid the foundations for not only future growth but for private investor collaboration on some of the key issues facing the economy.

The Asian crisis at the end of the 1990s saw Indonesia's economy and currency collapse as well as the weakness of the banking system exposed. For the sake of recovery and through close cooperation with the IMF, Indonesia set about reducing its debt burden which stood at 83% of GDP in 2001 down to 26% in 2010 (Ministry of Finance). In comparison with developed and other emerging markets this is a very modest figure and is targeted to reduce further to 25% in

in 2012 which places the country well below the OECD maximum debt ratio of 30%. Indeed, if anything this figure is actually too low considering the vast sums required for infrastructure development which is a rare position for economies to find themselves in today's global environment. The budget deficit also offers grounds for optimism standing at 0.6% of GDP at the end of 2010, even lower than the forecasted 2.1%. Spending of up to 1.8% is expected over 2011, having been approved by parliament to cover subsidies in light of higher oil and food prices. The government sales of *sukuk* bonds over the course of 2011 to potentially cover the deficit have also proved very popular among local and international buyers. This combined with the imminent move up to investment grade status by rating agencies and the growing optimism over the country's sovereign debt provides the scope for increased government borrowing and spending. Such fundamentals have proven hugely popular among investors as at a time when interest rates around the world remain at record lows.

Indonesia raised \$3 billion USD in global bonds in 2010 with \$2 billion USD of those in US dollar denominated bonds. Dollar denominated debt provided a return of 7.4% in 2010 (HSBC) for investors making it one of the top HSBC tracked indexes for returns in Asia behind India, China and the Philippines. Such investor popularity is not however without its challenges for the economy as sudden inflows of hot cash and the risk of capital flight

have generated stock market volatility and currency fluctuations. While this issue has plagued many other Asian and other emerging market economies, solid stewardship from Bank Indonesia has kept the issue in check. As opposed to adjusting interest rates, the bank intervened with liquidity management measures. As of June 2010, Bank Indonesia issued a regulation whereby investors must purchase and hold *Sertifikat Bank Indonesia* (SBIs) for a minimum of 28 days as opposed to trading on a daily basis, in an effort to curb sudden capital outflows. The central bank has stopped selling three month SBIs and also begun to reduce the amount of six month SBIs debt sold at auctions to direct investors towards longer term money instruments.

The core pillars of economic growth are political stability, a young population with a large domestic market of over 240 million people and vast natural resources.

Inflation as a result of high food and oil prices has been a key area of concern for investors and observers of Indonesia at the beginning of 2011. A gradual decline in the headline inflation rate from 7.02% in January to 6.65% in March 2011 and 5.54% in June 2011 (Statistics Indonesia) has been encouraging and reduced



pressure to raise interest rates. However, the core inflation rate which discounts volatile food and fuel prices but includes commodities such as gold has continued to rise from 4.18% in January 2011 to 4.62% in April 2011 (Statistics Indonesia). In spite of the speculation, Bank Indonesia has kept interest rates steady since the 25 point hike to 6.75% in February 2011, the first change since 2009. Rather, the central bank is utilising the flexibility in the rupiah exchange mechanism to allow the currency to appreciate and thus act as a vanguard against inflation by reducing the threat of imports. The Rupiah, which has been considered undervalued for some months, has been rising against a weak dollar and due to capital inflows. It reached 8,489 RP to the dollar at the end of July 2011 according to Bank Indonesia spot rates

from the Bank Indonesia mean rate of 9,250 RP. A strengthening currency is currently to Indonesia's advantage; however it is placing pressure on export orientated businesses and may not be a long term solution to controlling inflation. A hike in benchmark interest rates over the second half of 2011 may well be on the cards for Bank Indonesia.

Outlook

Headline figures for the country show a booming economy, yet it still remains to be seen whether the current growth is really sustainable. Indonesia has ridden commodity booms before but failed to channel the benefits reaped from it into areas of much needed development such as manufacturing, infrastructure and education. Indonesia still exports most of its natural resources and agricultural produce in primary form without taking advantage of the value added process which is being carried out in more developed countries and sold back to them. The government is keen to show that it has a clear direction on how to ensure that current growth does not tail off without a long term impact. In President Yudhoyono's second term, there has been a flurry of target setting and policy making with long term goals in mind. The Master Plan of Indonesia's Economy Development Acceleration and Expansion (MP3EI) for 2011 to 2025 aims to place the country as a top ten global economy by 2025 with GDP growth reaching 8-9% annually. Legislation to improve the investment climate as well as promote transfer of knowledge and reduce the amount of primary exports is also being

put in place such as the Law on Mining and Minerals of 2009 that will see an end to primary mining exports from 2014. Infrastructure is also a key focus of the government with the announcement of \$140 billion USD required for investment over the next five years and a streamlining of the Public Private Partnership process through BKPM. The various policies are brought under the overarching strategy of the National Economic Development Corridors which sets out the direction for the complimentary industrial development of six delineated 'highways' for balanced regional development. The country's five main islands would be divided into economic clusters that focus on that region's unique potential and natural resources while promoting connectivity between the various hubs. By way of example, South Sumatra would become a palm oil processing hub while the Bali-Nusa Tenggara corridor would focus on tourism and act as a base for connecting tourists to the rest of the country. The plan which requires an estimated \$4 trillion USD, with over 90% of that due from private sector input, is hugely ambitious. Yet, on paper at least is well thought out and is thus garnering international attention as



well as support from the likes of the World Bank. However, to date its progress has been rather limited due to the slow realisation of bedrock

The investment climate is improving as evidenced by the surge in foreign direct investment

infrastructure projects due to land acquisition issues. Coordination of local government authorities has also been lacking which has restrained investor confidence in the scheme. SOEs will most likely have to take the first steps in making the first projects a reality while state owned banks will need to be forthcoming on lending to investors to give the scheme a much needed boost and make it a reality.

The investment climate is improving as evidenced by the surge in foreign direct investment, up by over \$4 billion USD in Q4 2010 and Q1 2011. Having experienced a sharp dip in FDI in 2009 in which domestic investors filled the void, Indonesia is seeing many foreign investors return and expansion by those already present. This has been spurred by improvements in the investment climate with the creation of a 'one stop shop' mechanism through BKPM in 2009 which centralised the investment process. Revisions to the Negative Investment List, most recently in the form of Presidential Decree No 36/2010 are also luring investors through the relaxation of the laws on foreign ownership.

Further measures such as the liberalisation in port management which ended the state monopoly has opened up private sector involvement in a key area of the country's transportation sector. The scale and scope of foreign direct investment is widening with investors moving from purely natural resource based industries and manufacturing into transport and communication sectors as well.

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However, while the amounts of FDI may be on the rise, the ratio of FDI to GDP has remained relatively unchanged from 2008 at approximately 2% (DBS Research). Also, while the investment climate is improving and issues such as corruption and infrastructure are being addressed, they are not being tackled as quickly as Indonesia's regional neighbours. This is reflected in the country's falling back of 6 places to 121st in the World Bank's Ease of Doing Business rankings for 2011 as well as FDI figures compared to that of Vietnam for example.

Indonesia's continuing weakness continues to lay in infrastructure both in



terms of social infrastructure such as sewage and electricity transmission as well as transportation. It is the severe bottlenecks that can be witnessed in the country's congested ports and traffic jammed highways that raise the price of goods and have a knock on effect on core inflation. Such issues serve to undermine Indonesia's strong economic fundamentals, constrain growth as well as dampen investor interest. The various policies aimed at addressing the matter are well constructed and if enacted will see the country rise to reach its full economic potential. The improvements in the investment climate and opportunities to be found within infrastructure initiatives are also reasons for investor optimism, however to compete among its regional peers the country must go further to ensure private sector involvement. Success stories among SOEs need to be seen to build investor confidence while further state guarantees need to be in place for issues such as land acquisition to give momentum to infrastructure development. Once such foundations are in place, the outlook on Indonesia's economy is exceptionally promising.

Agriculture

12-15 Overview of Agriculture

Agriculture is a central pillar of the Indonesian economy by providing employment for millions and in terms of global exports. This section looks at some of the challenges being faced by the industry and how the government is addressing the need to establish self sufficiency for 'food security'.

16-18 Overview of Palm Oil in Indonesia

Crude Palm Oil is one of Indonesia's most strategically important sectors, being the leading CPO exporter worldwide. This section provides an overview of the development of the industry and the plans ahead to double production and increase productivity.

19-21 Opportunities in Palm Oil Derivatives

As the global leader in crude palm oil production, Indonesia has plenty of feedstock at its disposal to build upon its downstream industry. This section looks specifically at the oleo chemical industry where Indonesia can play an increasingly significant role.

22-24 Overview of Indonesia's Rubber Industry

With the largest rubber plantations in the world by area covered, Indonesia holds the potential to be the world's largest rubber exporter. This section looks at the changes taking place in Indonesia's rubber industry to improve competitiveness as world rubber prices steadily rebound.

25-28 Agriculture; Moving Downstream

While being a major agricultural commodity producer, Indonesia has not yet taken full advantage of the downstream and value added processes for its products. This section focuses on Rubber and Cocoa as examples of the vast opportunities to be found within this sector.

29-30 Opportunities in Indonesia's Sugar Industry

Once a major exporter of sugar, Indonesia now faces the challenge of being heavily reliant on imports for its domestic consumption and industrial needs. The government is targeting self sufficiency by 2014 and this section looks at the part that foreign investors can play in achieving this goal.

31-33 Indonesia's Budding Silk Industry

While being a relatively small producer of silk to date, Indonesia has the necessary attributes in terms of climate and land availability for a thriving silk industry. This section looks at how demand for the commodity is developing both in Indonesia and globally.

34 Interview

Mrs Margaret Tjhang, President Director of Cisadane Raya Chemicals.

35 Interview

Mrs Santi Mia Sipan, President Director of Jatya Arthamas.

Agriculture Overview of Indonesia



Contribution to GDP : 15.3% (2010)
Number Employed : 41 million (2010)
Main Products : Palm Oil, Cocoa, Rubber, Coffee,

Tea, Sugar, Tobacco.
Main Export Markets: China, USA, Japan,
Singapore, South Korea, EU.

Indonesia is the world's largest producer of palm oil as well as a leading global producer of other high value commodities such as cocoa, rubber and coffee. The country is rich in fertile land ideal for growing a diverse range of crops for both export and domestic consumption. However, it is export crops that have come to dominate land use and employment to take advantage of peaks in global commodity prices. The country is still heavily reliant on imports for staple goods such as wheat, soybeans and sugar which have raised the issue of food security on the national agenda as world food prices have continued to climb. Improving the productivity of government and privately owned plantations, in addition to small hold farmers through adoption of technology

and land consolidation is a further issue to contend with that requires striking a delicate balance in a sector that employs over 40% of the workforce.

The agricultural sector is highly fragmented in the country, made up of state owned estates called PT Perkebunan Nusantara (PTPN), large scale private plantations and small hold farmers. Palm oil is the dominant subsector as well as cocoa, rubber and coffee that are mainly exported. Staple crops such as corn, sugar and rice alongside vegetables for domestic consumption are mainly carried out by small holding farmers. Improving self sufficiency in the main foodstuffs is a priority for the sector as imports of key crops such as sugar and wheat are increasing. For wheat in particular, the country is almost entirely reliant on

2010 Agricultural Output of Main Crops	
Palm Oil	20 m MET
Rubber	2.85 m MET
Cocoa	988,000 MET
Coffee	709,000 MET
Tea	150,342 MET
Sugar	2.3 m MET

Source : Ministry of Agriculture, BPS

imports from markets such as Australia and is the largest importer of the crop in South East Asia.

The issue of national food security has been a major concern for the government since the 1960s with the formation of the national logistics agency BULOG. The issue has recently gathered pace on a domestic, regional and global scale. Crop yields have declined due to changing weather patterns coupled with high oil prices that have seen the United Nations Food and Agricultural Index hit an all time high of 238 points in February 2011 and averaging 234 points in June 2011. In 2009, a framework for regional food security within the ASEAN was formed and is set to run to 2014. The plan includes the allocation of funds for agricultural investment as well as to improve efficiency in production methods. President Yudhoyono has been particularly vocal on the subject, notably at the 18th ASEAN Summit held in Jakarta as well as urging members of the G20 to enhance global cooperation as part of his goal to feed

'Indonesia and the World'. The Food Estate Program was established in 2009 in the midst of the global economic crisis as food and energy prices shot up. In February 2010, the program was launched by provisioning 1.6 million hectares of land in Merauke, Papua for agricultural production of food and bio energy. The Merauke Integrated Food and Energy Estate, or MIFEE, is a Special Economic Zone that aims to attract \$8.6 billion USD in investment for commercial plantations for staple food items including soybean production, rice, and cattle rearing. The controversial

The issue of national food security has been a major concern for the government since the 1960s

program has already attracted investors from the Middle East such as Saudi Arabia's Bin Laden Group for basmati rice production. Other investors expressing interest include Wilmar International for the cultivation of cane sugar at the site. Yet, zoning problems regarding protected forest areas have been an obstacle in moving the project forward as well as regulations regarding land acquisition. Existing infrastructure surrounding the cultivation areas that is needed for delivery of produce as well as machinery and fertiliser has also restrained investors due to the resulting price increases. Other issues revolve around concerns

for the welfare of local Papuan tribes that lay claim to the land and has thus created further investor uncertainty. The government is trying to soothe the situation through greater involvement of local authorities in drawing up the zoning areas for the site in Papua as well as in other regions such as Kalimantan and Aceh where future estates are potentially planned. Local regents are also being given greater say in the issuing of land to protect Indonesian interests. As part of the Negative Investment List in 2010 investors can have up to 95% ownership for estates of more than 25 hectares but will also require permits from the local authority and a permission from the Ministry of Agriculture.

Productivity has been another key area to address in Indonesia's agriculture sector as comparative land yields remain low in most food crops. From 2007, the government embarked on a revitalisation program for small holding farmers under Ministry of Agriculture Decree No.33/2006 that focused on the palm oil, rubber and cocoa industry to address the low productivity per hectare and expand land capacity. The program allocated \$514.8 billion USD in subsidised loans provided by seven state owned banks and had limited results up until 2010 due to low take up of loans. The certification of land ownership that is required to obtain a loan has been the main hurdle for farmers as the price of registration is too high at 8-9 million RP for a 4 hectare plot, depending on the province. The Ministry of Agriculture decided to extend the program to 2014 that will see greater collaboration with private sector



companies on plasma farming and modern techniques.

Research and development into new methods and technology in plantations and agricultural production is making headway in the country after many years of lagging behind. Through institutions such as the Indonesian Biotechnology Information Centre, the Bogor Agricultural Institute and private sector companies, advances are being made in the development of hybrid and transgenic seeds as part of the effort to raise food production. Fertiliser, another key aspect of boosting output and keeping prices stable is another target area of the government. State owned fertiliser company PT Pupuk Kalimantan Timur announced at the beginning of 2010 that it will set up of a new \$865 million USD plant to be operational by 2014. Further projects in not only improving supply but also the infrastructure to deliver products to the farmers are underway as part of the



economic masterplan to 2025 that see such plants positioned closer to the food estate hubs.

Increasing productivity through the take up of modern technology and farming methods is a contentious issue for Indonesia's many subsistence farmers that work on small plots of land. While the number of people employed in agriculture has been

Financing for small scale agricultural businesses has been slow to come forward from the banking sector

slowly decreasing with the trend of urbanisation, the average of age of farmers has been rising and according to data from the Ministry of Agriculture 80% of the 140 million farmers are aged 45 years or above. This is a threat to the goal of food security as the reluctance of the younger generations to go into farming will directly impact production levels. The ageing of the industry's workers is also holding back the implementation of new methods through technology and thus obtaining

financing from banks and credit agencies. Consolidation of agricultural land is a necessity to improve efficiency and create commercially viable farms, but is a highly emotionally charged issue considering the displacement of farmers from their ancestral land and traditional way of life.

Financing for small scale agricultural businesses has been slow to come forward from the banking sector as the sector is considered high risk due to unpredictable weather. The demand for higher values of collateral has stood in the way of obtaining loans. In 2010, \$10.4 billion USD or 5.51% of the total loans for the year were provided for the agricultural sector and a survey by Bank Indonesia at the end of Q1 2011 revealed that only 4.9% of farmers had received loans from non-governmental sources. Conversely, large scale agricultural companies and conglomerates have found easy access to funding through the banks, foreign investors and the capital markets. Islamic banks are coming to play an increasing role in the sector with shariah compliant loans doubling in the past five years under *Mudarabah* financing arrangements. Bank Mandiri Shariah has distributed over 50% of its Peoples Business Credit to the sector since 2007 while Bank Muamalat announced a target to increase agricultural lending by 800% in 2011. This increased attention towards the sector is welcome, however it will take coordination on the part of small hold farmers and the government to make such loans effective by creating economies of scale through the difficult issue of land consolidation.

Overview of Palm Oil in Indonesia



Contribution to GDP : 4.5% (2010)
Export Value % Total : 7%
CPO Production : 20 million MET (2010)

Palm Oil Exports::>16.38 million MET (2010)
CPO Exports as % of total : 65%
Main Export Markets : India, EU, China, USA.

Fertile land, a favorable climate and low labour costs have made Indonesia the leading producer of crude palm oil (CPO) worldwide at a time when global demand for use in foodstuffs and bio energy is on the rise. The sector is a major contributor to GDP at 4.5% and nearly 7% of total export value for 2010. This figure is set to increase in 2011 considering high CPO prices in the global market, government targets of a 16% rise in exports for 2011 and more ambitious goals to 2020 which would double output. While demand for the commodity is continuing to grow, Indonesia faces the challenge of bringing its industry into line with global environmental standards in sustainability and repairing its image following international condemnation of irresponsible practices.

Indonesia overtook Malaysia as the largest palm oil exporter in 2008 and currently holds over 50% of global market share. The industry is broadly split among private enterprises accounting for an estimated 48% of production, small hold farmers at 40% and state owned plantations at 12%. Some of the largest companies in the sector are Sinar Mas, Wilmar Group, Astra Agro Lestari and Indofood Agri Resources. Sumatra is the main production base with 70% of cultivation taking place on the island while other plantations are found in East and West Kalimantan. CPO output has been rising steeply from 10 million MET in 2005 to 20 million MET in 2010 and is targeted to reach 23 million MET in 2011 according to the Ministry of Agriculture.

Exports have been growing in line with such figures with an average of over 70% of total production reaching international markets, the main destinations being India and China followed by the Netherlands and Singapore. In order to meet future production targets of 40 million MET by 2020, the government plans to double the land currently under cultivation over the next 10 years from around 8 million hectares at the end of 2010. The government also plans to promote the differentiation of purpose for new production areas to delineate between CPO for foodstuffs and that for industry and energy. The plan also aims to consolidate smaller landholdings to improve efficiency among producers thereby increasing the production rate of existing land which currently stands at 3.89 tons/hectare compared to 4.37 tons/hectare in Malaysia (Oil World).

Main CPO Export Destinations 2010

India	5.79 m MET
European Union	3.73 m MET
China	2.41 m MET
Bangladesh	629,529 MET
USA	172,167 MET
Pakistan	87,379 MET

Source: Oil Palm Business Association

CPO prices have been rising from \$422 USD per MET in 2005 to an average of \$690 USD per MET throughout 2010. At the end of Q1 2011, the price was up to \$1,303 per MET off the back of high

crude oil prices which pushes up demand for biofuel, as well as uncertainty over the weather in the futures market. The price has fluctuated since its peak in March 2011 to \$1,075 USD in June 2011 but began to rebound again the following month as speculation over the supply of soybean oil saw the price climb. Demand for exports is being driven by China and India's rapid growth for use as edible oils in foodstuffs and for biofuel production. In the European Union, the 2007 directive that makes it mandatory for EU members to use at least 10% of biofuel in transportation by 2020 is also contributing to the growing demand.

The high prices of CPO on the global market are actually making Indonesia's CPO less competitive. A progressive tax based on global prices was introduced by the government in February 2008 in the form of Government Regulation No. 223 /2008 on commodity export duties, in an effort to stabilise domestic cooking oil prices and stimulate downstream production. Finance Ministry Decree No.67 /2010 sets the CPO export tax at a maximum of 25%, up from 10% prior to the regulation. The rate is dependent on a reference price calculated from spot prices at Rotterdam from 30 days prior, as opposed to being set by the Ministry of Trade. The tax is hiked to 20% when the price reaches \$1,200 - \$1, 299 per MET and up to 25% when it reaches over \$1,300. Industry players and the Indonesian Palm Oil Producers Association, GAPKI, have voiced their discontent over the measures that raise the price of the CPO and make it uncompetitive in the export market.

Malaysian producers of CPO have been reaping the benefits with exports up as the export levy reached 25% in February 2011 although Indonesian exports were also still strong at 3.2 million MET in Q1. In response to protests from producers, particularly that of small hold farmers, the Ministry of Trade announced in June 2011 that it plans to make changes to the regulation to take into account a wider range of references for the pricing, however producers remain sceptical over the impact this will have.

Indonesia's palm oil industry has faced far reaching international criticism from environmental groups for its role in widespread deforestation, climate change and destruction of wildlife habitat. A boycott of Nestlé products following a campaign by Greenpeace in 2009 against Sinar Mas has seen the company shift suppliers in response. Other companies such as Unilever followed suit illustrating the strength of public sentiment on the issue. The European Union has also passed the EU Directive on Renewable Energy Resources and Fuel Quality which came into effect in December 2010. The regulations place a demand for environmentally friendly practices from sources of biofuel such as prohibition of plantations in areas of biodiversity and high carbon stock. The many small hold farmers that make up the sector will find such criteria difficult to meet and the certification process too costly to undertake. Within the voluntary Roundtable for Sustainable Palm Oil (RSPO), Indonesia has 79 members which accounts for only 21% of the total members of GAPKI. In response to the

growing demand from importers for greater transparency, the government formulated the Indonesian Sustainable Palm Oil certification under the Ministry of Agriculture Decree No. 19/2011. The certification would be mandatory and less expensive than that of the RSPO as well as have the power to apply sanctions and penalise violators of the rules with nationwide implementation scheduled by 2012.

In order to meet future production targets of 40 million MET by 2020, the government plans to double the land currently under cultivation over the next 10 years

The outlook for Indonesia's CPO industry is positive considering the unstoppable global demand for the product and the country's increasing capacity. Addressing issues regarding sustainability in production and the introduction of a certification is vital to the long term dominance of Indonesian exports over rival Malaysia as importing countries from around the world become more stringent in their regulations on producers. The challenge that lays ahead for the industry is a common theme for the country, that of moving up the value added chain through expansion of the downstream industry which will require significant investment as well as improving productivity.

Opportunities in Palm Oil Derivatives



CPO Production : 20 million MET (2010)
Palm Oil Exports: >16.38 million MET (2010)
CPO Exports as % of total : 65%

Oleochemical production : 700,000 MET (2010)
Oleochemical Global Market Share : 12% (2010)
Number of oleochemical varieties: <20

The government through the Ministry of Trade and Ministry of Agriculture is actively promoting the move up the value chain in palm oil by encouraging existing CPO producers to move downstream as well as incentivising new investors. Currently, approximately 65% of palm oil exports are in crude form which is planned to be decreased to 40% over the next decade. The progressive export tax placed on raw CPO exports (Government Regulation No. 223 /2008 and Ministry of Finance Decree No. 67/2010) that goes up to 25% according to the price on the global market is one such measure aimed at meeting the 40% target as it lowers the selling price for the domestic downstream industry. As part of the government's efforts to boost CPO output alongside value added products,

the economic corridors master plan to 2025 aims for optimal organisation in the industry. The plan will delineate plantations into industry clusters that will be integrated with downstream facilities be it for bio fuel, oleo chemicals, fertilisers or biodiesel. Such clusters are expected to start in 2014 in Riau province and will contribute to significantly improving output as well as attracting investment.

Oleo chemicals

As the world's largest producer of CPO, Indonesia has ready available feedstock thus holding huge potential in the oleo chemical sector. Oleo chemicals based on palm, kernel and coconut oil are used in a wide variety of sectors as edible oils for foodstuffs. Glycerine, another derivative is used in consumer

and industrial goods such as cosmetics and bio lubricants. South East Asian production mainly centres around fatty acids, fatty alcohols and refined glycerine.

Following a slow down in 2008-2009, the demand for organic, vegetable based oils has been on the rise from 2010 as petrochemical derivative prices and other commodities have risen in line with spiking oil prices. Consumer demands for more environmentally friendly and natural ingredients in their products are also fuelling demand for companies to make the shift towards oleo chemicals and investors are taking notice.

Following a slow down in 2008-2009, the demand for organic, vegetable based oils has been on the rise from 2010 as petrochemical derivative prices and other commodities have risen in line with spiking oil prices

To date, sector development is still below that of Malaysia which holds a greater global market share of the 6 million MET a year industry accounting for 18.6% compared with 12% for Indonesia in 2010. Of total Malay CPO exports, only around 20% is in CPO form compared to some 65% for

Indonesia. Malaysia has advanced further in technology to offer innovations in new derivatives thus producing 120 varieties while Indonesia produces less than 20. Indonesia faces the need to catch up through extensive investment to further its oleo chemical industry which is resting on the private sector. New research into the uses of oleochemicals such as refined glycerine extracts that can be used for aromatic solvents and polymers needs to be taken up and put to use by private sector actors. The wheels are in motion for this to take place; demand from markets such as China and India is driving upstream players to enter into the sector such as Bakrie Sumatera Plantations that has acquired oleo chemical factories owned by Domba Mas Group. Sinar Mas has also earmarked 9 trillion RP for investment into oleo chemical production to 2015.

As further investment increases capacity, getting up to speed by effectively marketing and branding their downstream goods to the local and international markets will be the next challenge. In a market where over 60% of GDP is driven by domestic consumption, there is plenty of room for the growth in the range of consumer goods available. Local companies such as Cisadane Raya Chemicals, a supplier to some of the world's largest consumer goods companies, plans on expanding the range of oleo chemicals they offer. The company already has a brand of biodegradable soap powder sold in Taiwan and China with plans to diversify its offerings in environmentally friendly cleaning products.

This is a reflection of the future direction of the industry in Indonesia as it moves to secure its competitive edge against Malaysia and producers in Europe and America.

Under the economic corridor scheme to 2025, South Sumatra and Riau provinces are to be the sites for the oil palm processing industry with incentives planned for investors in those areas according to a statement from the Coordinating Minister of Economic Affairs, Hatta Rajasa. Industrial clusters are planned for the oleo chemical sector in Sei Mangke, North Sumatra, Kuala Enok and Dumai, Riau as well as Maloy, East Kalimantan. As part of the



Government Regulation No. 62/2008, fiscal incentives in the form of a 30 percent reduction of income tax are granted for six for new investments in the downstream palm oil industry. Lower customs tariffs on exports of finished goods are also expected to be announced as the incentive package is being finalised towards the end of 2011.

Indonesia holds huge potential in oleochemicals considering the availability of feedstock at its disposal

As a result, foreign investors have been eyeing the sector with interest such as Procter and Gamble that announced plans in May 2011 for a \$100 million USD oleo chemical plant in the country to meet long term supply of fatty alcohol. In addition, Singapore's Wilmar International entered into a joint venture with American firm, Elevance Renewable Sciences for a 180,000 MET a year bio refinery facility in Surabaya scheduled to begin operations in 2011. The outlook for the global oleochemical industry is looking positive with demand gradually firming since the beginning of 2010. Indonesia holds huge potential in oleochemicals considering the availability of feedstock at its disposal. Investment and partnership opportunities can be found within the sector in order to add further value and bring Indonesia on par with that of Malaysia in terms of technology and innovation that it can offer international export markets.

Overview of the Rubber Sector



Annual Rubber Production : 2.736 m MET (2010)
Targeted Production : 3 m MET (2011)
Exports as % Total Production : 90%

*Main Regions of Production : South Sumatra,
 North Sumatra, Jambi, Riau.*
Main Export Markets : China, India, USA.

Indonesia is the world's second largest natural rubber exporter after Thailand, while having the largest area of rubber plantations. The sector has been revitalised since the beginning of 2010 as global demand has picked up dramatically. For 2011, demand for natural rubber worldwide is expected to reach 11.2 million MET, an increase of 6.6% from 2010 as stated by the International Rubber Study Group. This trend is predicted to continue into the future with consumption of natural rubber reaching 16.2 million MET by 2020 placing Indonesia in an optimal position to reap the benefits from one of its abundant natural resources.

Indonesia's rubber plantations are mainly dominated by small hold farmers which make up for 86% of the 3.5 million hectares of land under

cultivation, with the remainder split more or less equally between private companies and state plantations. The main sites of plantations are found in North and South Sumatra as well as Riau, Lampung and Java. Total production in 2010 reached 2.736 million MET with production targeted for around 3 million MET for 2011 and 3.6 million MET by 2015 according to the Indonesian Rubber Industries Association. The majority of production at approximately 90% is exported with the remainder used in the domestic automotive sector and other manufacturing industries.

Following the low pricing of natural rubber at \$1.2 USD/kg at the end of 2008 due to weak global demand during the financial crisis, the industry has picked up with increased automobile

sales in Asia and thus demand for tires. At the beginning of Q1 2011, world rubber prices shot up to \$5.75 per kg for technically specified rubber and \$6.488 for ribbed smoked sheet rubber (Singapore Stock Exchange) due to adverse weather conditions that heavily impacted rubber supply from Thailand, Malaysia and to a lesser extent, Indonesia.

According to the Rubber Association of Indonesia, GAPKINDO, plantations in Indonesia produce an average of 880 kg-1,000 kg per hectare, compared with up to 1,500 kg for Malaysia and Thailand.

The Japanese earthquake that slashed car output for the year saw prices fall in the immediate aftermath only to be again buoyed by persistent rain in Thailand and high demand for the commodity from China and India. Under the China-ASEAN Free Trade Agreement (CAFTA), Indonesia has been well positioned to serve China's market of growing automobile owners which will soon make it the largest rubber consumer worldwide, overtaking America. China took the lion's share of Indonesian exports in 2010 at 600,000 MET and imports of 800,000 MET forecasted for 2011, followed by the United States, India, Japan and South

Korea. Domestic demand for rubber is also rising with an average increase of 23.2% a year since 2005 reaching 244,000 MET in 2010. With increasing car and motorcycle sales, Indonesia is expected to become a major consumer of rubber at an estimated 20% of total production over the next five years.

While having the largest area of rubber plantations in the world, low productivity has marred the sector and held it back from achieving the top spot as a global producer and exporter. According to the Rubber Association of Indonesia, GAPKINDO, plantations in Indonesia produce an average of 880 kg-1,000 kg per hectare, compared with up to 1,500 kg for Malaysia and Thailand. Productivity per hectare is closely related to the youth of the trees as well as the quality of the clone seedlings, both of which Indonesia is at a disadvantage. With most plantations being on family held, small hold plots that lack capacity for investment to replace older trees, the average age of the trees remains high and therefore less productive. Low quality seedlings are also in use at an estimated 40% of all small hold rubber plantations resulting in lower quality rubber that is sold at a lower price.

Rubber was one of the key crops to be concentrated on under the Ministry of Agriculture's revitalisation program introduced in 2007. The program aims to address the issues of the low quality plants and expand the number of hectares under cultivation by up to 1.3 million hectares. Farmers also gained access to loans of up to 40 million RP per hectare of land to encourage replanting.

By the end of 2010, this program had limited impact as only 6,000 new hectares had undergone rejuvenation according to GAPKINDO. Due to expire in 2010, the decision was taken to extend the project to 2014 which will see a replacement of up to 400,000 hectares of plantations with new trees as well as education of farmers in new technology and tapping techniques to boost output. Yet, to make the government's financing programs really effective greater collaboration is required. The private sector alongside rubber producers need to take advantage of the research being undertaken by institutions such as the Bogor Station for Rubber Technology to improve output and competitiveness. The changes to the 2010 Negative



Investment List that clarified foreign ownership restrictions in rubber plantations and the downstream crumb rubber industry will also see more

Indonesia therefore holds the potential to eventually become the world's largest rubber producer should the key issues of productivity and land fragmentation be addressed.

investors come to the fore and greater competition in the sector.

The outlook for the rubber industry is positive and the days of low priced natural rubber seem unlikely to return. Demand from China and India will continue to grow as the ranks of car owners continue to swell and existing cars require tyre replacements. Indonesia's own domestic consumption will also grow and places even more urgency on the need to revitalise existing plantations with younger trees that take 5-7 years to reach maturity for production. Indonesia therefore holds the potential to eventually become the world's largest rubber producer should the key issues of productivity and land fragmentation be addressed. Moving up to higher value rubber will increase returns and allow small hold farmers to reinvest in new technology to increase output for the future as global demand continues unabated.

Agriculture: Moving Downstream



CPO Production : 20 million MET (2010)
Rubber Production : 2.736 m MET (2010)
Cocoa Production : 470,000 MET (2010)

Relevant Law : Negative Investment List
Presidential Decree No. 36/2010 permits up to
49% foreign ownership in plantations over 25 ha.

The introduction of higher export tariffs on the export of raw materials such as CPO and cocoa since 2010 has signalled a shift in the Indonesian government strategy towards the agricultural sector. Long reliant on exports of raw materials that have placed the country as the world's largest CPO exporter as well as third largest cocoa and coffee exporter; now the priority is on developing the downstream sector to stimulate value added exports and avoid Indonesia losing out on the manufacturing process. Changes to the Negative Investment List for 2010 have opened up parts of the agricultural sector that were previously closed to foreign investment. For example, investors can now own up to 49% in staple crop plantations over 25 hectares such as soybeans, sweet potato,

rice and cassava which was previously closed to foreign investment.

Rubber plantations and the crumb rubber industry were previously off limits to foreign investors but the Negative Investment List for 2010 has changed this opening up the industry at a strategic time.

This section aims to highlight a selection of the downstream agricultural sector and is by no means exhaustive. The selected crops of rubber and cocoa were chosen to reflect the changes taking place in global supply and demand of their derivatives as well as shifts in Indonesian governmental policy. Further updates and analysis will be available in forthcoming editions of Global Business Guide Indonesia that cover other downstream sectors such as coffee, rice and agroforestry.

Rubber



A good example of this trend can be seen in the rubber industry. Natural rubber is experiencing a rebound on the global markets; having hit historic lows of \$1.2 USD per kg at the end of 2008. The weak pricing led to many small hold farmers shifting to palm oil, however this trend is reversing. Rubber gained 50% in value over 2010 and gains are expected to continue as demand is predicted to reach 16.2 million MET by 2020 up from 11.2 million MET for 2011 (International Rubber Study Group). The growing demand for rubber from Indonesia's domestic market is another attractive aspect in the future of the rubber industry, as consumption of national production is currently only at 15%.

Rubber has been a focus crop of the Ministry of Agriculture's revitalisation program that began in 2007 as despite having the largest area under cultivation, productivity remains low. Opening up the sector to foreign investment on the downstream side is a further effort on behalf of the government to lure investors that can bring in technology to raise productivity and output quality. As per the Negative

Investment List 2010, investors may own up to 95% of a 25 hectare or more plot of land for cultivation and integrated downstream facility; subject to a recommendation from the Ministry of Agriculture and the Director General for Plantations. This includes sheet rubber, thick latex and the crumb rubber industry, the latter previously being off limits to foreigners.

Ministry of Agriculture Regulation No 12/2007 provides technical assistance for investors in the plantation industry through the countries numerous rubber research centres such as that of Bogor, Medan and Palembang. The use of high quality clones in order to produce

Rubber has been a focus crop of the Ministry of Agriculture's revitalisation program that began in 2007 as productivity remains low

rubber of international standards and boosting productivity is the key competitive advantage in the country. Infrastructure for transport close to the plantations and facilities is also a vital consideration for any investor as the remote location of much of the suitable land can add significant costs to production. Under the economic corridor program, Sumatra has been designated as the main site for rubber plantations and downstream production, specifically in Medan, Pekanbaru, Jambi and Palembang.

Cocoa



Indonesia is the world's third largest cocoa exporter after the Ivory Coast and Ghana accounting for 18% of global market share with 470,000 MET produced in 2010. Production figures for 2011 are estimated at 500,000 MET according to the Indonesian Cocoa Industry Association, although severe rain could result in a drop to 450,000 MET. Global demand for the commodity rose to 3.7 million MET in 2010. Demand is arising out of increased confectionary and chocolate consumption from markets such as China and India as well as the European Union. This has caused a shortage of supply in the world markets that stood at 73,000 MET for 2009 and rose to 100,000 MET for 2010. Prices are rising rapidly in the confectionary market as a result and forcing cocoa buyers to look to under exploited markets in terms of productivity for future supply.

Indonesia's cocoa productivity per hectare has long lagged behind that of other producing countries at 700 kg/hectare compared to a potential yield of 1,000-15000 kg/hectare (BKPM). Production is concentrated in Sulawesi where 63% of the country's raw cocoa is produced. Despite land under cultivation

increasing over the past three years; productivity has been declining, particularly in South Sulawesi.

Rejuvenation of current trees has been taking place under the government program Gernas Pro Kakao which replaced 200,000 hectares of trees and will take several years before effects can be measured. The potential for cocoa production in the country is very positive but requires investment to keep on track to the 1 million MET annual output target by the International Cocoa Organisation by 2013-2014. The enhanced organisation of the sector under the economic corridor program will maintain Sulawesi as the cocoa hub while accelerating the development of much needed infrastructure for

Moving up the value added chain in cocoa is a priority area for the government with the target of \$6.25 billion USD in export value by 2025

transportation to access materials such as fertiliser.

Moving up the value added chain in cocoa is a priority area for the government with the target of \$6.25 billion USD in export value by 2025. These targets are in line with the increasing demand for cocoa that has risen by 5% annually from 2005-2010 and is forecast to continue to grow at 2-4% for the coming years according to the International Coffee and Cocoa Association.

Indonesia is in a prime position to take advantage of this trend but requires substantial investment to raise productivity, quality and gain added value. The International Cocoa Organisation's data shows that only 28% of cocoa was processed domestically with the remaining 72% exported in raw bean form. Processed cocoa such as in butter and powder forms hold a value of up to \$5,000 USD/MET compared to \$2,900 USD/MET for raw beans. The quality of cocoa has also been a factor holding back the potential gains from exports. The United States, the second largest cocoa importer after the EU, requires that cocoa beans undergo a fermentation process which the majority of Indonesian beans do not thus lowering the price significantly. The European Union imposes an import tariff on Indonesian cocoa products while those from West

In order to incentivise investment into the downstream cocoa industry, a progressive tax was introduced in April 2010 that increases in line with global prices for raw cocoa beans

Africa are subject to zero. The issue of both import and export tariffs imposed by both sides will be one of the central matters to be resolved in the formation of the upcoming Indonesia - EU FTA. Cocoa is a priority area for the



government as stated in Presidential Decree No. 28/2008. In order to incentivise investment into the downstream cocoa industry, a progressive tax was introduced in April 2010 that increases in line with global prices for raw cocoa beans under Ministry of Finance Decree No. 67/2010. The tax goes up to 15% when the world price exceeds \$3,500 USD /MET. This tax maintains ample domestic supply for processing, however it has been heavily criticized considering the low domestic uptake which results in an excess. Increasing the capacity of the downstream sector, which accounted for 158,075 MET and 103,055 in exports for 2010 (Ministry of Trade) is now the priority. Incentives for investors include expected revisions to Government Regulation Number 62/2008 on income tax facilities, which will soon cover cocoa. Other incentives include the exemption of import tax on machinery and capital goods needed for production as well as exemption of VAT on cocoa beans.

Opportunities in Indonesia's Sugar Industry



Sugar Production : 2.39 m MET (2010)
Imports : 2.62 m MET (2010)
Targeted Production : 5.7 m MET (2014)

Land Cultivation Targets : 350,000 - 500,000 ha
Main Production Areas : West Java, East Java,
Lampung, North Sumatra, West Kalimantan.

Despite being the world's second largest sugar producer and exporter in the 1930s, Indonesia's sugar industry has been in a state of decline. Production output decreased by 30% over the course of 1995-2000 due to the closing of several out of date mills on advice from the IMF. Production figures have improved again since 2004 to over 2 million MET and reaching 2.39 MET in 2010. Indonesia is South East Asia's largest consumer of sugar and the world's third largest importer, mainly for raw sugar. Total demand stood at 5.01 million MET for 2010 with imports making up the remainder mainly from Australia, Thailand and the Philippines. Production levels have failed to keep pace with the increased demand in domestic consumption and industrial use which is estimated to

reach 5.7 million MET by 2014.

Sugar production and refinery is mainly carried out in Java by private sector companies, state owned plantations and community plantations. Of the country's 63 sugar cane factories, 54 are operated and managed by SOEs (Ministry of Industry). The Indonesian Research Centre for Sugar Plantations estimates total optimal capacity of existing factories to be 3.54 million MET, which 2010's production figures fall far short of. In the private sector, the five main players including Angels Products and Jawamanis Rafinisi are operating at an estimated 70% of capacity due to feedstock capacity. Currently, the government does not offer incentives for sugar cane plantations and therefore farmers can pick and choose which crop to plant depending on market price,

leaving production levels open to fluctuation. Rising sugar prices at the end of 2010 as a result of revised output figures for Australia and India due to poor weather has made the sugar issue all the more pressing.

As of 2010, the government is aiming to make the country self sufficient in sugar production and processing by 2014. Self sufficiency will require an increase of at least 2 million MET annually to mainly make up for the shortage due to demand from the industrial sector and will be a very difficult task to achieve. Refined sugar is mainly used by the food and beverage industry for processed foodstuffs and soft drinks that are consumed domestically and for export. Future demand for high quality sugar cane for second generation biofuel is a potential area of increased demand that must also be prepared for. Yet, the issue is a politically sensitive one given the strength of licensed sugar importers who make substantial gains from import quotas issued by the government. Other challenges are found in the persistent issue of the need to build the necessary infrastructure to support the industry as well as acquiring more land for cultivation. To meet government targets an additional 300,000–500,000 hectares of new plantations would have to be acquired based on existing productivity levels. The Ministry of Forestry is currently delineating areas where such cultivation could take place with areas in Papua and Sulawesi already earmarked.

The government is actively collaborating with both state and private sector actors to accelerate the sugar industry. In 2009,

\$5 million USD was distributed to nine sugar companies for investment into new equipment. State owned plantations are investing \$858.4 million USD for land expansion and modernisation of existing factory facilities. Numerous investment opportunities are now being offered to private investors in order to achieve future goals of 11 new factories; at the Merauke Food Estate in Papua sugar is one of the key crops with up to 200,000 hectares being set aside for cultivation. Two large scale investors in the form of Wilmar International and Rajawali Group are already participating.

As of 2010, the government is aiming to make the country self sufficient in sugar production and processing by 2014

Other opportunities include a 35 thousand hectare sugar plant in Northern Aceh that requires up to 1 trillion RP in investment. The private sector has also been active with the announcement at the beginning of 2011 of a further 1 trillion RP sugar mill in Pukateja, Purbalingga in Central Java by PT Putra Giri Manis and another by PT Gendis Multi Manis. Incentives are also being offered to attract investors in the form of VAT exemption on import of capital goods and income tax break of 5% a year for the first 6 years for both the upstream and downstream sugar industry.

Indonesia's Budding Silk Industry



Silk Production :36.85 MET (2010)
Targeted Production : 81.2 MET (2011)
Silk Moth Varieties : 25

Imports : 900 MET (2010)
Main Production Areas : South Sulawesi, Central Java, East Timor, Bali.

The silk industry in Indonesia represents a key opportunity for further development in light of the global demand for the high value commodity and recent supply limitations from traditional producers due to natural disasters. Indonesia silk sector has been somewhat stagnant for the past decade, being mainly dominated by small producers using traditional methods of production. The quality of the raw silk produced has been overshadowed by that of China, Thailand and Japan where the silk industry is far more mature and technologically advanced. However, regional authorities are seizing the opportunity to take advantage of the domestic demand for silk, the majority of which is currently relying on imports. Indonesia possesses the natural

attributes and has the land available to create a competitive silk industry with the introduction of the right investment and technology.

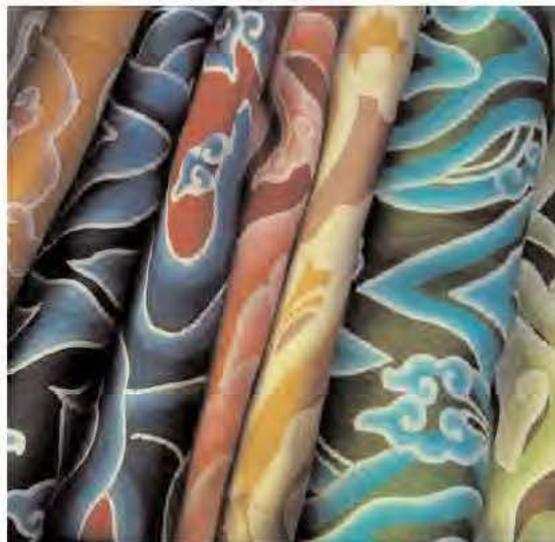
Indonesia's main silk producing regions are found in South Sulawesi, Yogyakarta, East Timor and some small scale production in Bali. The silk industry has a long standing history being used in traditional handicrafts, particularly in batik clothing and textiles. The country's environmental characteristics make it ideal for silk production because of the high sunlight intensity throughout the year, availability of land and having over 25 species of wild silk moth including the golden wild silk moth. This combination offers the potential to produce raw silk of quality on par with other silk producing nations such as China.

However, the sector has failed to develop a competitive edge and go beyond the scope of its cottage industries. Production for 2009 reached 62.5 MET but dropped to 36.85 MET in 2010 due to an infestation among the cocoons. For 2011, the production target from the Ministry of Agriculture is set at 81.2 MET. Such figures fall well short of the domestic demand which reached 900 MET in 2010 still leaving plenty of room for imports.

The government of South Sulawesi, the largest silk producing region in the country recently announced (May 2011) a shakeup of the industry to increase production through new technology with the aim of producing 600 MET of raw silk every year. The project involves extensive land acquisition of approximately 10,000 hectares for mulberry plant harvesting, 60,000 farmers and the supply of automatic reeling machines to replace traditional spinners.

Chinese investors have been quick to tap potential of silk as part of the government's pledge to invest \$20 million USD in Indonesia's forestry sector

Chinese investors have been quick to tap potential of silk as part of the government's pledge to invest \$20 million USD in Indonesia's forestry



sector. Chongqing Wintus Enterprises Group in partnership with the local government of South Sulawesi and PT Global ABC will cultivate 3,000 hectares for mulberry plantations and a silkworm farm. Indonesia represents an opportunity for Chinese investors to bring their knowhow and technology for the plantations and production technology to take advantage of the ready availability of land and low labour costs that Indonesia has to offer. Price of silk cocoons has seen a sharp rise recently, hitting a 15 year high in mid 2010 with a knock on effect for the raw silk material around the globe. The price reflects the growing demand for the commodity which had been lacking in the face of demand for artificial fibres such as polyester. Cotton and wool have also seen a steep price increase in line with this pattern. This trend serves to illustrate the squeeze on supply due to the decrease in land available for cultivation in China which is the largest silk producer accounting for 70% of world production. This is due to areas of land around Shanghai, which have been

traditionally used for mulberry plantations that are now becoming subject to the city's urban sprawl. The country's inventories of silk are also low due to floods in Southern China in June 2010 that affected the main silk cocoon harvesting areas of the country.

Another attractive aspect of the silk industry is the upcoming revisions to India's import duties on raw silk. India is the largest importer of silk worldwide, consuming 26,000 MET in 2010. The Federation of Indian Export Organisations is reviewing the current import duties on silk that are at 30% for raw silk and 10% for silk fabrics. Reducing the import duties will be a boon for raw silk producers in making their prices more competitive.

The opportunities in this sector lay in technology and investment; the cost of the technology has deterred investors in the past with one spinning mill at a capacity of 500 kg an hour requiring 3-4 billion Rupiah. The challenges lay in cooperating with the local authorities of the area in question for the land acquisition permits as well as establishing a suitable partnership. Under the Negative Investment List 2010, the silk cocoon industry can only be entered into by foreign investors in the form of partnerships with micro, small and medium enterprises whereby the larger company offers guidance and support for mutual benefit. Approaching the local authorities is therefore the most suitable way of entering the industry to form a cooperative using local labour, which brings with its own set of challenges. Yet, the potential for both domestic and international consumption

as demand continues to grow makes the sector highly attractive.

To learn more about the regulations governing foreign investment into different industries go to the business guide section of the online edition available at www.gbgingdonesia.com.



Global Business Guide meets with Margaret Tjhang, President Director of Cisadane Raya Chemicals.

Cisadane Raya Chemicals was a pioneer in the oleo chemical industry in Indonesia. Today what are the main strategies being employed by the company for further expansion?

The company was established 35 years ago by my father, being a pioneer in the oleo chemical industry in Indonesia, and it remains a family run business.

We are focused on oleo chemicals and are not seeking to expand into other areas, but will start specialising and doing more varieties in this field. If you talk about competition, we are not worried about it as long as we are in Indonesia. All raw materials that are used are from Indonesia, we have our own plantations for raw material supply, our own mill and an organic plantation.

Organic plantations are very difficult, the sale price for organic CPO is four times higher than in the past, but it is difficult to develop as you need a minimum of 20,000 hectares. For short term profit it is not that interesting, but if you are concerned with the environment then organic is very important and that is more how we see our future.

What can you tell us about your target markets for international export?

We are already international and well known particularly in China where we have been for over 30 years. Most of our customers are long term from 20 or 30 years ago as we are always thinking about the mutual benefit.



If you are concerned with the environment then organic is very important and that is more how we see our future.

We have to focus on markets where we have competitive pricing. Shipping can add significant costs and therefore countries such as the USA that have Brazil next to them are not strategic for us; therefore we focus on Asia and China in particular.

Our real edge comes from the service that you can give to the customer over other factors when supplying raw materials or downstream products. Our capacity is about 25,000 MET per month with around 90% exported and this is why we are in an advantageous position considering the government taxation on raw material but not on the finished product which is what we deliver.

Global Business Guide meets with Santi Mia Sipan, President Director of Jaty Arthamas and Ernst & Young Woman Entrepreneur of the Year 2010.

What is the background to the founding of Jaty Arthamas?

Jaty Arthamas started by only selling teak trees. Throughout the years we realised that many people want to plant but they do not have a place to do it. From 1998 we started very serious research on what is the best type of teak to be planted. Before

Indonesia needs people with expertise to develop the land here, we want to make those partnerships in an equal way



that people knew that cultivation of teak trees takes 20-30 years before it can be cut down. Now people want things instantly, business has become much faster and more instant. In 1998, Professor Sudiarto who is a pioneer of teak tree cultivation in Indonesia, he travelled around Asia to find the best teak seeds for cultivation, and we found a type that can grow without a lot of branches. The trunk without branches has a higher price, so we have patented this type called Jaty Arthamas and it can grow to 8 metres. This is very good for global warming as teak trees can produce oxygen for 5 people. Also for investment, the price will increase within 5 years by 2000% - 2500%.

What are your objectives in terms of international cooperation for investment and technology?

I would like to make cooperation with a European or American company as I have good knowledge here of plantations in Indonesia. I have the connections, legal knowledge and the permits for cultivation of hundreds of hectares of land. I have a good relationship with the government and local authorities.

Indonesia needs people with expertise to develop the land here, we want to make those partnerships in an equal way. Also we really need funding; we have thousands of idle hectares that are not being used in a useful way.

From the technology side, we are always finding new technology for plantations every year, but we also have to imitate what is being done in more sophisticated countries. We should therefore do it together.

Education

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Education in Indonesia: Overview



Literacy Rate : 92%

Spending on Education % GDP : 3.5% (2010)

Spending on Education % Total Spending : 17.5%

Years of Compulsory Education : 9 years

Number of Teachers : 3% total workforce

Pupil Teacher Ratio : 13.0 Primary & Secondary

Since the 1980s, Indonesia's education system has been seen as in decline in comparison to neighbouring countries such as Malaysia and Singapore that have seen rapid improvements, even obtaining global recognition. Indonesia's education system has taken a very different course in development to that of its neighbors due to the unique conditions that it faces in terms of size of the population and the regional disparities of its 33 provinces. Today, the challenges and opportunities posed by the education system reflect the uneven nature of the country's development. The government, through the National Education Ministry, must balance its goals of guaranteeing the right to free primary and junior secondary education to all citizens, as well as raising the quality of

its universities to compete on the international stage.

The passing of the 2007 law by the House of Representatives guarantees 20% of the state budget towards education, in 2010 this equated to approximately \$26 billion USD. However, in practice this funding becomes thinly spread to cover the costs of basic education, teachers salaries as well as research funding. How such funding is distributed is also difficult to monitor under the decentralised system as it is controlled by the local authority. At a basic level, international aid programs have been responsible for the construction and running of thousands of primary schools throughout the country such as the Basic Education Program with the Australian Government providing \$500 million USD in aid and

the creation of 2000 schools (as of 2010). Education has undoubtedly seen vast improvements in the past decade with the literacy rate at 92% and school enrolment levels rising steadily. Ensuring accessibility to schooling remains an ongoing challenge and one that cannot be solved by education spending alone. Improving the country's infrastructure through roads and public transport in the most remote regions will ensure that the schools that have been built will serve all those that they are intended for.

To improve access to further education and ensure equal opportunities, the leading state universities reserve over half of all places for academically gifted high school students from across the country. Teachers in some of the most remote regions are asked to identify students that have a promising academic

Indonesia's higher education system is therefore at a critical stage in the lead up to 2015 that will see it's workforce competing on a regional scale

record for advanced admission to university. Scholarship programs have also been implemented by the government to give the most promising students from low income families the opportunity to make the most of their talents by providing funding for higher education. The program called 'Bidik

Misi' under the National Education Ministry, provided 200 billion RP in scholarship funding for 20,000 students in 2010. Another program gives the opportunity for winners of an international olympiad held every year to study at the world's leading universities fully funded by the state. The effectiveness of these programs has come under scrutiny as put into perspective, these scholarships impact a very small part of the nation's youth considering that 27% of the total 250 million population are under 15 years of age. In addition, the country's most disadvantaged children are often unable to make it to the stage of education where the scholarships are awarded, due to financial pressures.

Vocational schools were set up from the 1970s by the Indonesian government as part of its efforts to reduce unemployment and to build up the capacity of its future human resources. These schools have risen in quality since the 'Vocational Education Strengthening Project' by the World Bank and the Asian Development Bank, initiated in 2006. Today there are 8,399 vocational schools across the country catering to 3.9 million students that will go on to take up jobs in key areas where skilled labour is needed such as automotive manufacture. These schools have become increasingly popular with enrolment up by 11% in 2011 from the previous year, as they meet the needs of families who lack the finances to put their children through higher education but provide reliable employment opportunities.

Despite the ring fenced 20% of state

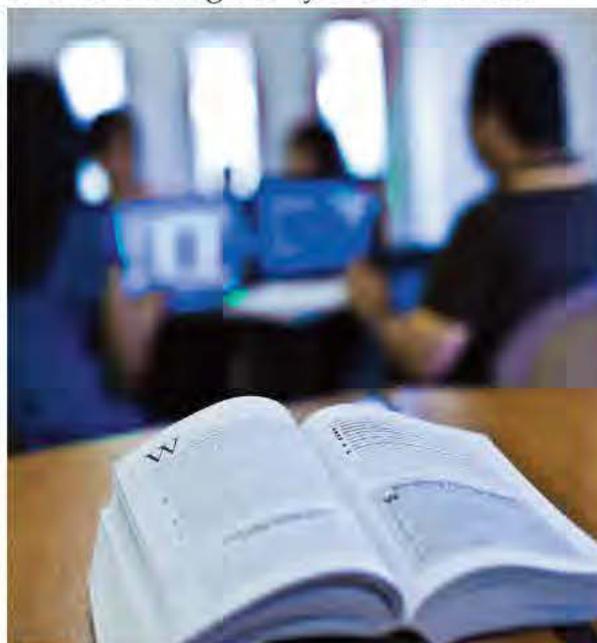
spending on education, only 1.2% of total GDP is actually spent on tertiary education compared to 2.1% in Malaysia (2007). Out of this 1.2%, only 25% is provided by the state with private sector spending making up the remainder. This illustrates that tertiary education coverage still remains

To ensure the country's successful development, universities must be in tune with the needs of the private sector

low in Indonesia. Improving access and quality in higher education is where the country faces some of its greatest challenges to not only compete in light of the ASEAN one market, but also in the future of its workforce and goal to create a knowledge based economy. Indonesia's higher education system is therefore at a critical stage in the lead up to 2015 that will see it's workforce competing on a regional scale. The National Education Ministry is determined to raise the standards of education through its medium and long terms goals to rid the country of substandard universities and ensure that teachers have at least a 3 year Bachelors qualification or equivalent by 2015. To ensure the country's successful development, universities must be in tune with the needs of the private sector and foreign education providers should not miss out on the huge domestic demand for high quality education from the primary to the tertiary level. With education and lack of qualified human resources often

cited as one of the greatest obstacles to doing business in the country, failure to raise the bar on a country wide level will have far reaching effects on the nation as a whole.

There are immense benefits to be found on both sides of a relationship between Indonesian universities and an international institution. Indonesia needs to absorb the best practices of the world's leading institutions but has plenty to offer in terms of its unique cultural diversity and promising economic position. The announcement by President Obama in November 2010 of \$165 million in investment over the next 5 years to strengthen Indonesia's education system and promote exchanges is just one example of what will be many more international relationships of mutual benefit. Indonesia has found natural partners in neighboring Australia as well as its historical relationship with the Netherlands but considering the sheer size and scale of the country, the opportunities to extend ties globally are boundless.



Business Education in Indonesia



Spending on Tertiary Education % GDP : 1.2%
Spending on Education % Total Spending : 17.5%
Business & Management Students : 80,000 (2009)

Business Graduates Annually : 12,500 (2009)
Entrepreneurs % Population : < 1%
Ease of Starting a Business : 155th (WB, 2011)

Indonesia's future economic growth is reliant on the country's businesses being able to innovate and create jobs to absorb its huge population. The past dominance of state owned companies in all industry sectors was reflected in how education was conducted therefore business and entrepreneurial skills were neglected. This has changed rapidly in the past two decades with the opening of business faculties within state universities as well as private business schools to cater to the growing demand for qualified professionals and to nurture future entrepreneurs.

The development of business schools and the need for dedicated business education has relatively recent beginnings in Indonesia. Business education was previously seen as going hand in hand

with pure economics therefore the government and the state run institutions did not see a need for specialised schools. As Professor Kristamuljana of Prasetiya Mulya Business School explains 'universities were not thinking of offering MBA programs as they felt their economics faculties were enough for a country such as Indonesia'. The booming economy in commodities, property and other areas throughout the 1980s contributed to keeping business leaders within companies as opposed to dedicating time to higher education. The impetus to create specialised business schools came from members of the private sector; Prasetiya Mulya Business School was founded by a group of businessmen and intellectuals as one of the first to set up and start offering MBA and Masters in Management courses in

1982. Subsequent private schools continued to open such as IPMI in 1984 being the first to offer the MBA course in English. Business education institutions were eventually brought under the National Education System as the government introduced formal business education within state universities following successful pilot projects and a gradual shift in attitude towards the discipline.

The sector progressed throughout the 1990s and saw the country's business schools begin to assert themselves on the global stage in terms of partnerships and academic standards. However, the 1998 Asian financial crisis hit the country hard seeing a collapse in funding and a general retraction of Indonesia's international reach. Business schools continued according to local standards with classes being carried in Bahasa Indonesia as opposed to English thus making exchange and sandwich courses with other universities difficult. The cost of sending students to study abroad through exchange programs in Europe and North America became unviable given the collapse of the Rupiah.

The number of students enrolled in business and finance management courses was just over 80,000 in 2009 (Ministry of Education of Indonesia) producing approximately 12,500 graduates every year. Indonesia has around 14 accredited business schools made up of private institutions and faculties within state universities such as Universitas Indonesia and Gadjah Mada University. The quality between schools is varied and can be checked using the accreditation directory that

grades from A to C. A selection of the leading business schools are looking to benchmark themselves among international schools by beginning the process for the AACSB accreditation. Quality business education can be found within the leading business schools, however this is often overlooked due to misconceptions. As Professor Kisworo of Perbanas Institute points out 'outside of Indonesia people may only know about the biggest universities such as the Bandung Institute of Technology but there are some other very good universities that are simply not known about due to lack

Entrepreneurs make up less than 1% of the population, far lower than countries such as Singapore with 7.2% and Thailand with 4.1% as per 2010

of communication, especially in English'. The lack of Indonesian business leaders outside of the country also helps contribute to this perception, in contrast to the Chinese and Filipinos that can be found at all levels of management in international companies.

The recognition for the need for entrepreneurial education to develop graduates that will not just fill jobs but be job creators themselves has been recognised from a macro economic perspective as well as an academic one. President Yudhoyono and Vice President Boediono have both been very

vocal on the subject as real entrepreneurs make up less than 1% of the population, far lower than countries such as Singapore with 7.2% and Thailand with 4.1% as per 2010. In January 2010, a pilot project was initiated in conjunction with Bank Mandiri, the largest bank in the country by assets, to teach entrepreneurial education modules in 6 universities with the aim to progress to 200 in the future. The Coordinating Ministry of Economic Affairs creative entrepreneurship promotional arm aims to increase the number of entrepreneurs by 500,000 annually to 2% of the population by 2025.

The entrepreneurial flair and drive of the country's current generation is becoming increasingly apparent

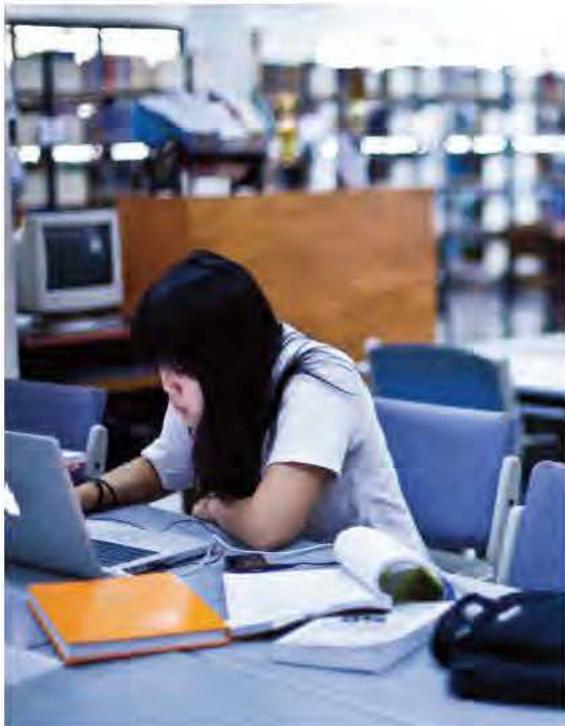
The entrepreneurial flair and drive of the country's current generation is becoming increasingly apparent. Dr Kim of Universitas Pelita Harapan Business School has seen a marked trend in how students are approaching business education noting 'around 50% of students choose entrepreneurship courses over other concentrations... around 60% come from a background of family businesses'. Ciputra University, set up by the real estate magnate Ciputra for training entrepreneurs produced 145 graduates in 2010, each with a fully functioning business on graduation that created 900 jobs for the country. Professor Haryanto, rector of



IBII, sees a similar trend in his students 'many of our students already have their own businesses and have to take time off from studying to manage them, sometimes they have to stop classes all together'. On the international stage, Prasetiya Mulya Business School has entered international competitions such as the Global Social Venture Competition at Haas Business School, Berkeley California, and notably came first ahead of MIT and Columbia in 2010.

In the aftermath of the global financial crisis, Indonesia's rectors have acknowledged the responsibility they face in producing the next generation of business leaders. Producing business savvy graduates with strong ethical foundations has become a core theme throughout the curriculum with the introduction of new modules focusing on leadership and social responsibility. Dr Parapak of Universitas Pelita Harapan explains 'we want to create students not only of excellent academic abilities, but of the highest ethics and moral character'. Paramadina University's Dr Baswedan puts these ideas into practice through the Indonesia Mengajar Foundation that trains selected university graduates to teach at schools in some of

the country's most remote regions for 1 year. This gruelling process promotes leadership and management skills that are highly sought after, according to Dr Baswedan 'participants in the program are approached by multinationals for employment for the valuable skills they develop over the course of the program'. Professor Kristamuljana of Prasetya Mulya Business School acknowledges the need for not only social but also environmental responsibility to be instilled in students; 'as a school, we very much recognise the global issues of today, the idea of the triple bottom line of 'People, Planet and Profit' is very real in a country like Indonesia.' Prasetya Mulya's graduate students must incorporate these ideas into their final year business plans which have yielded projects with wide ranging social applications such as converting sea water into drinking water using solar power.



As the largest economy in the ASEAN, Indonesia is securing its position as the regional hub for banking and finance education. The ASEAN Community in 2015 will further open up the ten members' banking sectors and capital markets. To date, for financial professionals to operate in other ASEAN countries they are required to sit an exam set by the governing body of that country such as that of Bank Indonesia. In the lead up to the single market, this is set to change following a decision made at the 18th ASEAN Banking Conference in November 2010. A banking and finance 'Body of Knowledge' that defines the criteria and qualifications necessary for a professional to work in any of the ASEAN member countries will yield a standardised certification. Perbanas Institute of Indonesia, as a dedicated banking and finance school will spearhead this initiative that promises to open up immense possibilities within the region's financial sectors.

Now represents a key time for the country's business schools as universities based around the world seek a partner in Asia to give their graduates an edge over the competition. Asia was previously one of the largest sources of international students to universities around the world, but as regional business schools continue to gain more recognition, this trend is somewhat reversing. Indian and Chinese business schools such as the China Europe International Business School are very much leading the way in forging ties, but Indonesia very much has a role to play in the new global educational landscape. As a leading member of the

ASEAN facing very real environmental and social challenges; this presents the chance to capitalise on the country's unique business climate and global relevance. Business schools in the country are eager to assert their position and establish institutional ties in order to build a more international curriculum, promote student and faculty member exchange.

Business schools in the country are eager to assert their position and establish institutional ties in order to build a more international curriculum

A challenge exists in securing such partnerships, as Professor Kristamuljana explains 'our position as the leading business school in Indonesia makes it difficult to find a partner of our level'. The cultural gap can also present difficulties when finding a suitable partner according to Professor Prabowo of Binus University 'we are more focused on China for partnerships as culturally and socially they are more aligned with us for business and entrepreneurship'. In terms of partnerships with Western universities, Indonesian schools have also been continuously overlooked in favour of China when universities seek a partner; however the business and investment opportunities make for an attractive and innovative learning environment.

Corporate partnerships are a further

promising area for cooperation with universities. Indonesia holds undoubted economic potential for corporations establishing a presence in Asia. As an existing member of the G20 and the fourth most populous country in the world, Price Waterhouse Coopers has predicted that Indonesia's will be the world's 6th largest economy by 2050. Vice Rector of President University Mr Widjaja espouses Indonesia's clear commercial advantages 'the business climate here is improving, and Indonesia offers less competition compared to China'. Understanding the intricacies of the local market and ensuring qualified human resources are the greatest challenges posed to corporations wishing to enter the country. University partnerships and internship programs provide a mutually beneficial route for foreign corporations looking to enter the market. Such partnerships have already been undertaken by companies such as Microsoft, IBM and ABN Ambro to name a few.



Cooperating with Industry on Education & Research



Number of Universities : > 3000
Number of Tertiary Students : 4.8 million (2011)
Spending on Tertiary Education % GDP : 1.2%

Number of Teachers : 3% total workforce
Graduate Unemployment Rate : > 10%
R&D Spending % GDP : < 1%

A distinguishing feature of Indonesia's universities and business schools are their close relationships with industries. Private universities are often founded by the country's tycoons as part of their efforts to give back to the country and play a role in the education of the future generation. These intimate ties translate into curriculums being effectively molded to meet the needs of the country's economy, being reviewed by industry players themselves as well as providing the advantage of giving students real work experience through internship programs which lead to employment on graduation.

The surge in the number of universities over the past two decades, from around 900 in 1990 to over 3000 to date, has come from the opening of private

establishments with leading figures from the public and private sector as patrons. Business schools such as Prasetiya Mulya and IBII were founded by businessmen wanting to address the lack of qualified, 'ready to work' graduates. Universitas Pelita Harapan is part of Lippo Group, the largest real estate company in Indonesia by assets. This link is put to use when designing the curriculum to impart practical knowledge to students in concentrations such as retail and real estate management where the group holds expertise.

President University is a further example; being founded in 2001 by SD Darmono, the President Director of Jababeka the first publicly listed real estate developer in Indonesia, and Professor Juwono Sudarsono who is a former Minister of

Defense. The university is found within the grounds of the Jababeka Industrial Estate which is home to 1500 local and international companies. The rector, Professor Ermaya Suradinata is focused on ensuring graduates have practical skills for business, 'our curriculum is customised to company needs... all students undertake a two semester internship and we have a high rate of those students being taken on for full time employment.'

Such mandatory internships are becoming common place in universities around the world. Yet, in Indonesia they are part of the everyday discourse in higher education. This is to ensure that graduates have employment on finishing their studies and that industries have the right human resources with the skills they need to grow. The lack of connection between education and industry in the past has led to high rates of youth unemployment; the World Bank noted that the country's youth unemployment is five times higher than the global average. In January 2010 the official figure stood at 68,000 unemployed graduates out of the 350,000 graduates created every year. This challenge is being taken up by leading universities as they seek to take full advantage of their industry links to produce high rates in graduate employment.

Despite listening to the needs of industries when it comes to educating future graduates, developing a similar relationship in the needs for research has failed to materialise. Research in universities across all disciplines is still at an embryonic stage in Indonesia, but the demand for research from industry

itself has been slow to come forward. Research has failed to be taken into account as part of company's long term investment and development strategy. Dr Kim of Universitas Pelita Harapan Business School explains 'there has been a misunderstanding on both sides, from the industry side there is a disbelief in the quality of research from universities'. In order to overcome the challenge in promoting the potential of research, Universitas Indonesia set up PT Makara Mas as a vehicle to develop commercially viable research projects. Obtaining funding from the private sector is a persistent obstacle to realising projects and so the company has to appeal to the corporate social responsibility obligations of SOEs. Director of the organisation, Tjahjanto Budisatrio echoes the feeling of skepticism among the private sector 'the private sector does not trust us, even if our software is cheaper, they prefer to use foreign technology as they are familiar with it. They do not want to invest in our projects as they see them as high risk but without financing for the pilot project we cannot produce the facts'. Through eventually spinning off commercially successful projects, Makara Mas continues to fund itself and is planning a number of interesting projects such as renewable energy from algae and further software programs. Developing the research capabilities of their universities is a sentiment echoed by rectors throughout the education system. As they develop to build up the capacity for research centres, it opens up the possibilities for foreign universities looking to broaden their business research with a partner in a key emerging market.

Addressing the Brain Drain in Indonesia



Spending on Education % GDP : 3.5% (2010)
Spending on Education % Total Spending : 17.5%
Teachers holding a PhD % Total : < 1%

Publication of Scientific Papers : 850 (1992 -2008)
R&D Spending as % GDP : < 1%
Researchers in R&D : < 300 per million people

Current methods of measuring and ranking universities worldwide attempt to take into account a number of factors with scientific research and collaboration being a central element. The amount of publications and frequency of citations has been used as the yardstick for scientific contributions. Indonesia has fallen behind on both the regional and international level as a productive environment; a favourable climate for scientific research has failed to take root and seen scientific talent go abroad to secure funding and support.

Recent studies into the contribution of each country to the world of academia and science has seen Indonesia at the bottom of the pile. The SCImago Journal and Country Ranking (April 2011) placed Indonesia at 64th among 243

countries surveyed for scientific publications and frequency of citations of those documents. From 1996 to 2009, 10,826 scientific documents were published; compared to 39,690 from Malaysia, 199,676 from Turkey, 30,774 from Saudi Arabia and 11,434 from Bangladesh (Source: SCImago. SJR – SCImago Journal & Country Rank. April 10, 2011 from <http://www.scimagojr.com>). Other studies show a similar picture; a study by Scientometrics compared Indonesian science in 14 disciplines to other Asia-Pacific countries. In terms of the total number of scientific publications between 1992 and 2008, Indonesia produced 850 papers; a significantly low number. Put into perspective that is one scientific paper, per million people of the population, per year (Harvard Country Study).

Such studies and their methods of calibration are very much open to scrutiny as arguably the quantity of publications is not a measure of quality of research being produced. In addition, the parameter of number of citations by peers is flawed in being highly influenced by the paper being available in English thereby giving certain countries an unfair advantage. Indonesia's history under Dutch rule saw the Dutch language used in schools and universities in the country as well as many Indonesians going abroad to the Netherlands to study. English has started to be taught from elementary level relatively recently and the number of universities teaching in English is still very limited. One could argue that taking the necessary measures for English translation is indicative of the willingness of that country to engage and contribute to the international academic community; yet this is again subjective.

Focusing only on rankings and ratings as the defining measurement of Indonesian scientific rigour is to see but part of the picture. Indonesia has a number of highly reputable universities producing graduates that go on to lead and contribute to the country. The Bandung Institute of Technology (ITB) and Universitas Indonesia may not appear within the list of top universities of the region but are certainly making an impact on the academic landscape of the country.

Indonesians outside of the country are contributing to scientific research around the world with approximately 2,000 scientists at various prestigious international institutions from Singapore

to Japan to the USA. Notable names among these include Professor Ken Soetanto of Waseda University, Japan and Andrivo Rusyidi of the National University of Singapore. The number of PhDs remaining in the country to teach or conduct research is a serious challenge to the long term development of education in the country. The number of lecturers in Indonesian universities holding a PhD. was 2,386 in 2008 (Ministry of Education Statistics, 2008-2009) or approximately 1% of all lecturers.

The number of PhDs remaining in the country to teach or conduct research is a serious challenge to the long term development of education in the country.

The exodus of some of the brightest minds in the country is understandable when one considers the national attitude towards research as well as the amount of funds allocated to it. In theory, 20% of the country's budget is allocated to education but once teachers' salaries and setting up of primary education in some of the most remote regions are accounted for; this leaves very little for research. In 2008, a leading scientific institution the ITB received only \$3.8 million USD in scientific research funding, although such amounts have increased with contributions from



the private sector and foundations such as the Tanoto Foundation. This is an issue that has not gone unnoticed by the academic community, but funding for such research continues to take second place to the wider population's more pressing needs.

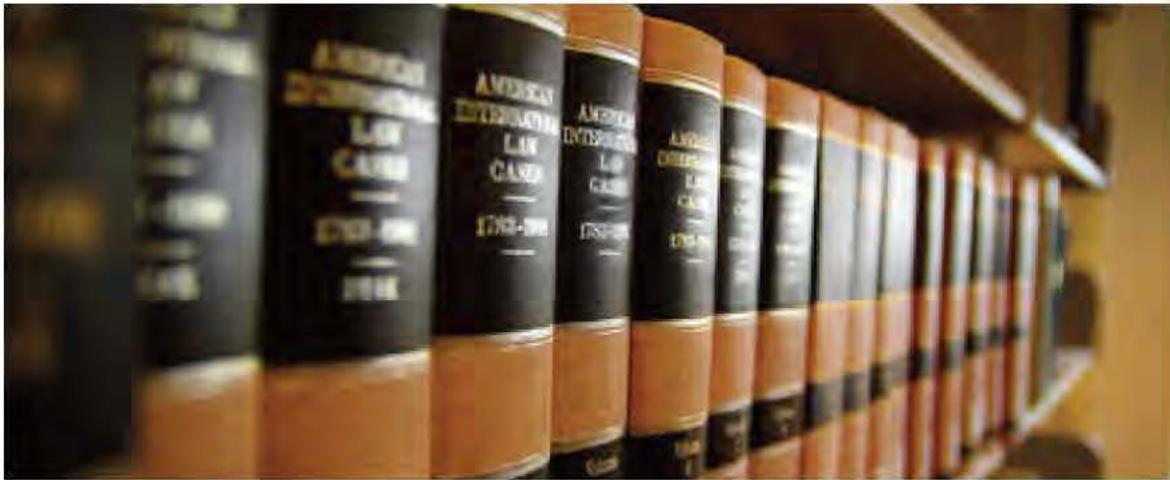
The lack of funding can be partly explained by the state budget but also by the attitude towards research. In all areas of the country's education, most notably science, a gap exists between the private sector needs and the government. The lack of demand and direction from industry on what is needed feeds low productivity in research. Making research and development part of corporate strategy has been slow to take hold as the largest conglomerates with the capital to do so are mainly involved in natural resources.

Indonesia has plenty to contribute to the world of science and academia, particularly in niche fields. For example, Its unique topographic make up,

position on the Asia Pacific 'ring of fire' making it home to some 40% of the world's proven geothermal energy reserves. Indonesia possesses the world's largest coast line at 81,000 km being home to diverse marine life and presenting unparalleled scope into the study of marine diversity and science. Further opportunities exist in fields such as climate change considering its national political stance on the issue and cross disciplinary subjects like herbal medicine. Agro forestry and plantation technology considering Indonesia's position as the largest CPO exporter in the world are further areas of potential collaboration. To date there are a lack of courses available in the field and a lack of human resources to teach them with experts often being snapped up by the government in an advisory role. In the field of marine taxonomy for example, there are only 20 researchers (Indonesian institute of Sciences LIPI) as the job opportunities and commercial value are not highly regarded or even communicated on to students.

The challenge that lays ahead is to make Indonesia a conducive and beneficial environment for research. Funding must be prioritised to allow the country's researchers to carry out their activities without restraint rather than to go abroad, keeping the brightest minds within the nation's universities will encourage the next generation as well as raise the standards of teaching. Imminent development of software and access to the internet will also allow research that is being published to find an audience and increase Indonesia's visibility in the international community.

Islamic Finance & Business Education



Muslim % Population : >85%
Number of Commercial Islamic Banks : 11
Number of Islamic Units : 23

Total Shariah Banking Assets : < 5%
Total Assets : 100.8 trillion RP (2010)
Deposit Accounts : 6,053,658 RP (2010)

Despite being the largest Muslim majority country in the world with numerous Islamic universities across the country, Indonesia has been slow to take advantage of the increasing need for formalised education in Islamic banking and Shariah law. Having relatively recent beginnings, the first Islamic bank being only set up in 1991, the future progress of the sector is dependent on the education system generating qualified human resources. Islamic finance in Indonesia is still at an infantile stage with less than 5% of total banking assets under Islamic banks in comparison to Malaysia with approximately 21% as per 2010. The major challenge faced by Shariah banks, not just in Indonesia, is the lack of qualified professionals to be able to expand. Bank Muamalat was the first

Islamic bank in the country and remains today the only stand alone shariah bank. The President Director, Arviyan Arifin recognises the challenge in human resources 'as a new industry we lack the quality in our human resources as they mostly come from a conventional banking background and then have to learn about Shariah banking'. To meet this challenge, Islamic banks are forced to provide their own in house training to fresh graduates and new staff.

Responding to this need, Indonesia's central bank has asked universities to begin courses that cater to the growing demand for qualified graduates. Universitas Indonesia offers a Masters in Islamic Banking and business schools have begun to offer electorates in the subject as part of their MBA program. More universities are expected to follow

suit in offering degrees specifically focused on the subject from Bachelor level and upwards as the sector is poised to grow by 45% in 2011 according to Bank Indonesia. In light of this, the schools themselves may face the challenge of finding qualified lecturers to teach the courses presenting the opportunity for faculty exchanges and joint research programs.

Professor Kisworo of Perbanas Institute notes that Shariah banking has continuously been taught as a religious discipline or a specialised concentration as opposed to a science: 'a science should be free from any religious context but as long as Shariah banking uses Arabic terminology it will not be recognised as a science'. The growing importance of formalised training in this sector is being taken up by universities with the opening of new faculties focused on creating fully fledged graduates in the subject. The Perbanas Institute is pioneering the secularisation of education in Shariah banking arguing that it is an alternative method of banking utilising moral values that all religions share.

Training in shariah compliant business law and insurance is another area where the industry sorely lack qualified professionals. This can be attributed to the lack of coordination with the private sector, but also due to the lack of clarity on the laws governing Shariah practices in Indonesia itself. The country's Islamic universities are stepping in to take advantage of the increased interest. Al Azhar University's Rector, Professor Zuhail is keen to capitalise on Indonesia's potential for research in Islamic corporate law 'we want to focus

on areas of research that other universities do not. Through our partnership with the University of South Carolina we provide expertise of shariah corporate law and based on that we do joint research that has been used by Citibank'. This illustrates the moderate approach that the country's universities want to take towards furthering education in the sector.

As recognised by President Obama during his speech at Universitas Indonesia in November 2010, Indonesia provides a model of how Islam, democracy, science and technology can go together hand in hand

As recognised by President Obama during his speech at Universitas Indonesia in November 2010, Indonesia provides a model of how Islam, democracy, science and technology can go together hand in hand. Being the largest Muslim majority country in the world and having a moderate approach to Islam provide fertile ground for advancing education into shariah compliant business with universal access and appeal. As the saturation of Islamic financial products remains low in comparison to neighbouring Malaysia and the Middle East, the sector provides scope for forging international ties in both academic and corporate spheres.

Ensuring Quality Over Quantity in Higher Education



*Number of State Universities : 130
Number of Private Universities : +3000
Number of Students: : 4.8 million*

*Qualified Teachers % Total :±60% (2010)
Tertiary Enrollment Ratio : 18.4% (2011)
Targeted Enrollment Rate : 30 % 2014*

The number of universities, particularly private institutions, in Indonesia has grown dramatically in the past decade. The total figure now stands at over 3,000 private and 130 state universities. The main centres for education continue to be in Java, namely Jakarta and Yogyakarta as well as Bandung. State universities are still regarded as the most prestigious so the number of applicants far outstrips places available with less than 20% of those applying being accepted.

As the growing middle class has seen a rise in their purchasing power, competition in the education sector has heated up with parents seeking out the best options for their offspring's education. Despite the opening of new universities all over the country to cater to the increasing number of students,

quantity does not mean quality. It is the issue of measuring quality and a non-standardised accreditation system that has held back the education sector. Professor Kisworo of Perbanas Institute explains 'Now we have approximately 3,300 universities in the country and an average of 600,000 candidate students every year so if divided equally this amounts to around 200 new students every year by university so this competition is not healthy. In my opinion the amount of universities is too big, ideally it should be around 1000 universities'. This observation is further enforced considering that China which caters to 20 million students has less than 2000 universities.

The government and the National Education Ministry are taking measures to consolidate the education sector to

reduce the amount of under performing universities and thus the amount of ill equipped graduates being produced by them. The Indonesian National

The government and the National Education Ministry are taking measures to consolidate the education sector to reduce the amount of under performing universities

Accreditation Agency for Higher Education (Badan Akreditasi Nasional Perguruan Tinggi) was established in 1994 and began its program of disseminating its new accreditation system in 2008 and 2009 for undergraduate programs. The 7 point quality assurance system is modelled on the European Foundation of Quality Management and Malcolm Balridge's Model. Accreditation criteria includes the amount of research work undertaken by lecturers, the quality of publications and the length of time taken for graduates to obtain employment and is measured over 5 year intervals. The aim is to rid the education system of unaccredited courses by 2012 as well as the universities concentrated on profit rather than quality of teaching. It is a very big undertaking by the 1,000 assessors involved to cover the breadth of the country including far flung regions, and to accurately measure the

varying levels of maturity of such institutions.

Such a standardised system will also take time to enforce as well as let the market take its effect on sub standard institutions. However the direction of the National Ministry of Education to take the sector to world class standards is clear. The measures are critical in raising the standards of higher education in Indonesia in lieu of the ASEAN Community by 2015. This will remove the borders of not only trade but also movement of people, therefore Indonesian academic facilities will have to measure up to compete with their regional counterparts.

Creating World Class Universities



While having a number of excellent universities, Indonesia's institutions still face the challenge of being recognised regionally and globally. Last year, the country failed to count a single university in the top 200 of the world's top institutions. In 2009 Universitas Indonesia in Jakarta reached 201st place but has since fallen back to 236th in 2010. From a regional perspective, the

QS University Rankings of the top 200 universities in Asia count some Indonesian schools such as Gadjah Mada in Yogyakarta in 85th place and ITB of Bandung in 113th place. However the few that made the ranking is considerably lower than the numbers from Singapore, China or Malaysia. As the country's economic growth and political stability gain global awareness, the country's centres of higher learning want to enter the ranks of the world class.

Links with foreign universities are often cited as the way to move up the global rankings by absorbing best practices and enhancing the student experience through sandwich programs and joint research. Indonesian universities have been active in signing agreements for international cooperation and partnerships in the forms of MoUs, in fact the majority of the larger universities all have some kind of agreement with an institution abroad. Universitas Indonesia and ITB both



have partnerships with around 80 foreign universities with the majority of those being based in Asia such as Japan, Malaysia and South Korea. Australia and the Netherlands are also the source of numerous partnerships and also host the thousands of Indonesian students that choose to study abroad.

The charge against Indonesian universities is the lack of cooperation with those Western universities that are found within the ranks of the top global institutions, and therefore the failure to absorb the best practices of this part of the world. The Asia-centric approach is understandable when one considers the geographical and cultural proximity of such countries to Indonesia. However, the benefits of such partnerships in advancing the academic practices are questionable when the ranking of the institution is not taken into account. Yet, Indonesia's universities face the challenge of finding suitable partners that are compatible with their stage of development and areas of speciality.

In order to raise the profile of Indonesian universities abroad, universities must be global in their outlook and curriculum. The desire to be international has become a fashionable term in Indonesia with numerous universities citing it as part of their vision and some even changing their name to include the term, but being international means more than just partnerships to send students abroad and teaching in English. Universities in Indonesia realise the benefits of foreign partnerships to raise the bar in teaching and research but the immediate focus must be concentrated on the learning environment on campus at home.

Partnership & Investment Opportunities



Number of State Universities : 130
 Number of Private Universities : > 3000
 Students going abroad : 40,000 (2010)

Relevant Law ; No. 9/2009 Foreign investment
 up to 49% in non formal education and 100%
 ownership of non-profit educational institutions.

The number of places available within Indonesia's leading academic institutions is severely limited with only 20% of applicants finding places. With the rising income of Indonesia's middle class, increasing numbers of parents are choosing to send their children abroad for higher education with an estimated 40,000 Indonesian students abroad in 2010 according to the Deputy Minister of National Education with 17,000 of those in Australia. Parents who can afford the fees send their children abroad for them to receive not only good quality education, but also to learn English within an international environment. Studying abroad is out of reach for the majority considering the cost of tuition and living expenses and it can be a cultural upheaval in a country where

being close to the family and community is still of great importance. There is therefore an opportunity for international universities to set up branch campuses that offer the same level of education and resulting qualifications. Other countries have been very active in attracting foreign universities to set up such branches such as in Qatar and Malaysia where incomes are far higher than Indonesia but where student numbers are a fraction of Indonesia's total tertiary education population.

Foreign universities have faced a challenge to set up in the country in obtaining the necessary licenses and have been discouraged by the National Education Law that prohibits foreign owned, for profit educational institutions. Only a handful of foreign universities

can be found in Indonesia including Australia's Monash University and the Melbourne Institute of Business and Technology.

In lieu of the publication of the Negative Investment List in April 2010, it was hoped that changes would be made to the laws governing investing in education to encourage more foreign universities to set up in the country and bring Indonesia closer to meeting its WTO-GATS commitments, namely the fourth mode of delivery of borderless education through 'commercial presence'. The Law 09/2009 created the BHP form that all universities had to take which was designed to turn educational institutions into independent, corporate entities. It was also intended to attract foreign universities to the country. This law was overturned in March 2010 and the Negative Investment List had to be amended to meet this. Therefore, the way in which universities can set up is still limited as part of the country's efforts to encourage partnering with existing local universities.

Universities can set up as a non profit institution subject to a special license, and can do so with 100% foreign ownership as per the 2010 revisions to the Negative Investment List. To offer commercial, for profit services; such institutions can set up a company with a local partner that provides services to the education sector such as teacher training, research and academic advisory.

Investment opportunities can be found in non formal education that offer specific concentrations such as language schools, ICT and hospitality training. Language schools in particular for

English and Mandarin Chinese are in high demand. The Negative Investment List has increased the permitted foreign ownership in non formal education by up to 49% from 45% previously.

Partnering with a local institution is the most effective way of entering the Indonesian higher education market and has been the preferred method in the past by numerous centres of higher learning from all over the world. It is also arguably the most beneficial way for Indonesian universities to reap the benefits from higher standards of teaching and absorb the best practices implemented by foreign counterparts.

The education sector in Indonesia offers attractive opportunities for investment given the limited number of places available in the state universities and the growing trend of private universities. This trend has not been seen as strongly within primary and secondary schools as the government's education strategy and spending have been more focused towards education at this level and is in theory free of charge. The private primary and secondary schools that have been set up have mainly been to cater to expatriates in the form of international schools, as opposed to the local market. Higher education presents the most attractive opportunities for investment as the market is comfortable with paying for private education at the tertiary level and the enrolment level is still comparatively low at 23.5% in 2009. However setting up as a single entity in the form of a foreign university or branch campus is a challenge in light of non-profit form that universities must take so joint degree and twinning programs are preferred.

Global Business Guide Indonesia meets with Professor Sammy Kristamuljana, Dean of Prasetiya Mulya Business School.

Since the establishment of the Prasetiya Mulya in 1982, how has the strategy of the school evolved to date?

Today we are becoming more globally orientated; this means that we cannot fail to be part of business schools being more global. We are in process for the AACSB accreditation, we hope to receive the accreditation in the next 3-5 years.

As a school, we are very much recognising global issues of today. The idea of the triple bottom line of 'People, Planet and Profit' is very real in a country like Indonesia. All over the world, people in business education are in the process of finding effective methods to teach students the idea of this triple bottom line. It will fundamentally change how students are educated.

What are the priorities for establishing partnerships with international institutions?

Our main priorities are to establish partnerships with other business schools that have the same or even better reputation than PMBS, from which both can gain mutual benefit. The location of the business schools should be present in the ASEAN, Asia Pacific region, Europe, the East coast of the USA and South Africa.

With the signing of the China-ASEAN Free Trade Agreement, what further opportunities do you see in China?

With the increasing export of natural resources between Indonesia and China,



As a school, we are very much recognising global issues of today. The idea of the triple bottom line of 'People, Planet and Profit' is very real in a country like Indonesia

and the increasing number of Chinese companies investing in Indonesia, students' business experience should be enriched with that of the country's business environment.

Prasetiya Mulya can explore the possibilities for cooperation in education by offering interesting and beneficial programs for both parties, starting with student and faculty exchange programs that hopefully will lead to Double Degree Programs for students in the future.

Global Business Guide Indonesia meets with Dr Haryanto, Rector of the Institute of Business and Information Technology of Indonesia.

What can you tell GBG about the background to the founding of IBII in 1987 and its approach to business education to date?

The founders were made up of two businessmen and another who had experience in education. The two businessmen complained about the difficulties of graduates coming out of university that are not ready for work but only ready for training. So the two

This is our key competitive advantage at IBII as our students are ready to work from day one



businessmen challenged this man to create people who are ready to work. This is our key competitive advantage at IBII as our students are ready to work from day one.

How we achieve this is that I consider that business is different from other disciplines that you have to have practice. You cannot teach someone to swim without putting them in the swimming pool. So we take case studies and bring them into the classroom. We believe that the student should be able to engage with the lecturer and not just sit and learn, rather they should comment on how to use what they learn in real life situations. I encourage my students, when you analyse do not be influenced and think that an executive makes the right decisions all the time. So they can know what to expect when they become executives.

What differentiates Indonesia from other countries in the region for students and higher education professionals seeking international experience?

I think they can learn a lot by going to Indonesia as the diversity of the country is quite amazing. So many ethnic groups and languages, coming here you can see different religions living in harmony. It is an open and inclusive society. You can go to Aceh in Sumatra and see very strict Muslims, then further down you see Christians and then Muslims again who are quite different from the Muslims before [in Aceh]. Particularly after events such as 9/11 there are a lot of misconceptions about Muslim societies, but Indonesia is an example of acceptance with many religions living side by side.

Energy

- 60-64 **Overview of the Oil & Gas Sector in Indonesia**
Once an OPEC member and the world's leading LNG exporter, Indonesia is now a net oil importer and has lost its position in LNG to Qatar. This section covers the outlook for oil and gas as domestic energy demand continues to rise in line with development.
- 65-66 **Challenges in Indonesia's Oil and Gas Industry**
Investment in exploration of new blocks to compensate for ageing oil and gas fields has been slow to come forward and thus output has seen a steady decline for oil in particular. This section looks at what has held back investors and the challenges that lay ahead for the sector.
- 67-68 **Overview of the Coal Industry in Indonesia**
Environmental concerns and events in Japan have put the spotlight on developed country's sources of energy. This section looks at the key trends impacting the coal industry worldwide and the effect on Indonesia as the leading thermal coal exporter.
- 69-71 **Balancing Domestic Demand and Exports in Coal**
While being a relative newcomer to the coal industry, Indonesia is well positioned to serve the energy hungry markets of Japan, India and China. This section looks into how the country is meeting the growing domestic consumption alongside demand for exports.
- 72-75 **Overview of Geothermal Energy in Indonesia**
Indonesia has the largest proven reserves of geothermal energy in the world and is aiming to become the largest producer of it over the next decade. This section looks at some of the challenges in the sector that have held back development and the recent regulatory changes to boost it.
- 76-77 **Investing in Geothermal Energy in Indonesia**
Indonesia's domestic electricity demand is increasing at an average of 9% annually thus pressing the need for accelerated development of its geothermal resources. This section looks at how investors can enter the sector and the legal framework governing the industry.
- 78-81 **Opportunities in Energy: Beyond Fossil Fuels**
Indonesia has ambitious goals to cut its greenhouse emissions and move into becoming a low carbon economy by putting to use its vast resources in renewable energy. With clear targets set for 2025 to diversify its energy mix, the sector holds wide ranging opportunities for investment.
- 82 **Interview**
Mr Mochamed Harun, Vice President of Corporate Communications at Pertamina.
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Mr Supramu Santosa, President Director of Supreme Energy.

Overview of the Oil & Gas sector in Indonesia



Oil Production :344 million barrels (2010)
Proven Oil Reserves : 4.2 billion barrels (2010)
Targeted Production : 945,000 bpd (2010)

Gas Production :9,365 mmscfd (2010)
Proven Gas Reserves :108.4 trillion scfd (2010)
Targeted Production :

Having been a mainstay of the economy for many decades since the first discovery of oil in 1885, Indonesia's oil and gas sector is perceived as in a state of decline. Having become a net importer of oil in 2004 and relinquishing OPEC membership in 2008, oil production figures have continued to decrease from their peak at 84.9 MET in 1977. Since the Asian Crisis of 1998, investment in exploration of new fields has dwindled and the sector shrank by 3.61% in 2010 according to the Central Statistics Agency. The country still has significant reserves of both oil and gas, but substantial investment is required to access them and fund the necessary exploratory infrastructure. Changes in governmental regulations are also required to incentivise investors and guarantee cost recovery for exploring

new blocks. As global demand for both oil and gas picks up with global recovery; renewed focus has been placed on production and exploration. The state oil and gas company Pertamina is targeting 1 million bpd by 2015 to once again make the country a net oil exporter; but this will be no easy task. The energy sector faces the challenge of meeting its export commitments, satisfying domestic demand and effectively leveraging its resources for economic growth.

Gas

BP Migas is the upstream regulator in the oil and gas industry, while distribution is carried out under state owned Perusahaan Gas Negara (PGN). Pertamina accounts for about 15 percent of total natural gas production, CNOOC for

37% as per 2009 alongside local and international energy companies such as Total, BP, ConocoPhillips, and Exxon-Mobil who dominate the upstream gas sector. The main production sites are in Arun Aceh, the site of the first LNG exports in 1978, Bontang in East Kalimantan and Tangguh in Papua. The main domestic purchaser of gas is PLN for gas fuelled power stations with sales and distribution heavily dominated by the state owned institutions of Pertamina and Perusahaan Gas Negara (PGN). While there are hundreds of companies operating within the sector, exploration and production is concentrated among the key players aforementioned.

From 2006, the government has aimed to reorient domestic energy consumption towards gas in light of high oil prices and the environmental benefits

Indonesia has the third largest reserves of natural gas in the Asia Pacific region at 108.4 trillion cubic feet of proven reserves at the end of 2010; three times that of its oil reserves. From 2006, the government has aimed to reorient domestic energy consumption towards gas in light of high oil prices and the environmental benefits considering the 50% reduction in carbon emissions that gas offers compared to oil and coal. This preference for gas has been espoused at the international level as Asian countries secure gas exports for their energy

needs. In 2008, 52.2% of natural gas was exported to the traditional markets of Japan, South Korea and Taiwan. The share of supply taken up by the domestic market has been doubled since 2004, to 50.3% in 2010. While gas production has been increasing for the past decade and was up by 14% in 2010 from 2009, domestic demand is reducing the country's capacity for LNG exports. Hanung Budy, President Director of Badak LNG, a state owned company, believes that the potential of Indonesia eventually becoming an LNG importer is 'unavoidable' in the next 10 to 15 years to fulfil domestic demand. Mr Budy told GBG that he envisions current and future LNG plans to become receiving and re-gasification facilities.

Indonesia began exporting LNG from the Badak gas field in 1977 as a pioneer in the sector and positioned itself as the world's leading LNG exporter until 2005. Badak LNG operates the Bontang gas field in Kalimantan that made up the backbone of the country's LNG sector, producing 22 million tons of LNG/year and 1.2 million tons of LPG every year for the 2001-2005 period. According to Mr Budy, the company is preparing for the decline in capacity of the over 30 years old gas field. 'We are now operating at 65% of capacity due to the lack of feed gas, so this year we only produced around 15.5 [million tons of LNG]. The strategy is that PT Badak will become one of the first producers in Coal Bed Methane with Vico... we will also use our facilities for storage as a receiving terminal. We are already selling our expertise to companies abroad by training operators and providing technical expertise'.

The country now faces increased competition from countries such as Qatar and Malaysia. New projects that are underway such as Tangguh in Papua under BP, that came on-stream in 2009 and the Cepu block in Central Java by Exxon Mobil and Pertamina are designed to give a boost to the country's role as an LNG exporter. With adequate infrastructure development, Indonesia is in the ideal position to further serve the Chinese market as well as the west coast of the USA. Outlook on gas production is therefore positive with new sources to allow the country to keep up its exports and take advantage of its advantageous geographical position for energy exports. Pricing of LNG export contracts that are undertaken by BP Migas require revision for the future to ensure that such exports pay back to the country accordingly. A 2004 contract signed with China setting the purchase price at \$2.4 USD mmbtu, which was then subsequently raised to \$3.8 USD mmbtu for 25 years is an example of the employment of weak pricing formulae. The MEMR stated that it will be stepping in to renegotiate agreed contracts as of June 2011 to bring prices in line with the market prices of \$6 USD mmbtu and linked with that of oil prices.

Oil

The future for Indonesia's oil industry is an uncertain one given the lack of exploration being undertaken in the sector and with 4.2 billion barrels of proven reserves with only 23 years left at current production figures. Indonesia ranks 20th place in the world as an oil



producer, accounting for 1.2% of total global production. The two largest oil fields by production are Minas and Duri on the east coast of Sumatra that are both maturing with over 80% of reserves realised for both. This has yielded a pessimistic outlook on the sector as production figures steadily declined by 33% from 2000 to 2009. The suspension of OPEC membership from 2008 and the country's position as a net importer of oil has been heralded as a 'sunset' of the industry with focus on other sources of energy being the governmental priority. The main players in the country's oil sector are Chevron, Pertamina, Total, Conoco Phillips and Medco. Chevron is the leading producer of oil accounting for 47% of total production in 2009 after acquiring Unocal in 2005 to cement its dominant position. Pertamina accounts for 16%, but is looking to further consolidate its position within the oil

sector and take a more aggressive stance to be a standalone company rather than rely on joint ventures. The company is bolstering its role within the country; Vice President for Corporate Communications at Pertamina, Mochamed Harun, told GBG that 'Pertamina is focused on employing enhanced oil recovery activities to increase efficiency and production from existing fields and reactivating idle fields.' Ambitious targets for production increases have been set at 1 million bpd by 2015, up from 2011 production figures at 443,790 bpd. Mr Harun revealed that the company is currently raising \$2.5 billion USD in investment with a May 2011 global bond issuing for

Refined product capacity is also failing to keep up with demand from industry as production remained stagnant at 1127 thousand barrels per day in 2001 and 1158 in 2010 which met only 70% of domestic demand in 2009

\$1 billion USD. Of the total, 75% of it is earmarked for exploration and upstream activities.

Domestic demand for oil is rising and thus imports are increasing, with the gap between imports and exports widening. Indonesia's main sources of imports are from Asian countries and



the Middle East including Saudi Arabia. In 2010 MEMR data shows that 277,000 bpd of crude oil were imported as well as 407,000 bpd of fuel oil. The spike in oil prices in 2006 accelerated the shift from oil to gas fired power stations, thus reducing reliance on oil for electricity generating purposes only to be replaced by increased demand from vehicles and other transportation means. Figures from the beginning of 2011 show a 22% jump in imports from December 2010, mainly for diesel and fuel oil which doubled to 5.2 million barrels and tripled to 510,000 million barrels respectively.

Refined product capacity is also failing to keep up with demand from industry as production remained stagnant at 1127 thousand barrels per day in 2001 and 1158 in 2010 which met only 70% of

domestic demand in 2009. Pertamina, which accounts for almost half of all oil refining capacity, is aiming to address this reliance on imports by 2015 through the expansion of existing facilities and construction of 8 new refineries that will double current output figures. While demand will still outstrip supply of oil, the development of the country's renewable energy and other resources as part of the plans laid out in the Energy Law of 2007 will ideally curb further import needs. Further refinery capacity is still required and is an area

The inevitable removal of fuel subsidies will renew the need for better infrastructure to distribute Pertamina's 'Pertamax' fuel that will require an estimated \$400 million USD for the construction of new gas stations to 2014

that has attracted foreign investors such as the Kuwait Petroleum Corporation that announced in April 2011 plans to construct a refinery at Balongan, West Java. In June 2011, the Ministry of Energy and Mineral Resources and the Ministry of Finance authorised a study to be carried out on new tax incentives for investors that would thus amend Government Regulation No. 62/2008.

Indonesia heavily subsidises fuel consumption which is mainly made up of kerosene accounting for nearly half of the total and through a subsidised gasoline called 'Premium' produced by Pertamina. Subsidies are becoming an increasingly untenable situation given the rise in car sales that increased by 57% in 2010 from 2009. The maintaining of a low fuel price encourages unsustainable and wasteful use of the subsidised fuel as well as a lack of controlling mechanism to ensure that only the low income segment use it. The abuse of the subsidised system has been further exacerbated by soaring oil prices due to volatility in the Middle East that has given rise to smuggling of fuel. In Q1 of 2011, consumption of subsidised fuel reached 9.6 million kiloliters (6.85% more than the same time last year) out of the allocated 38.6 million kiloliters for the year. Should consumption rise above the allocated amount, it may force the government to revise up the state contribution to fuel subsidies which currently stands at 18.1 trillion RP. As of the end of April 2011, subsidised fuel was only to be available for motorcycles and public transport in Jakarta with the plan to roll it out to other parts of the country and phase out subsidies completely by 2014-15. These plans were thwarted by the high oil price, growing inflation and fears of protest by the public although it is slated to go ahead in Jakarta from July 2011. The inevitable removal of fuel subsidies will renew the need for better infrastructure to distribute Pertamina's 'Pertamax' fuel that will require an estimated \$400 million USD for the construction of new gas stations to 2014.

Challenges in Indonesia's Oil and Gas Industry



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Gas Production :9,365 mmscfd (2010)

Proven Gas Reserves :108.4 trillion scfd (2010)
Relevant Law : Oil & Gas Law No. 22/ 2001 and
Ministerial Regulation No. 6/2010.

The greatest challenge facing the oil and gas sector is the lack of logistical infrastructure available to support distribution and commercial exploration. The main production sites are located in areas situated a substantial distance from the electricity grid network and the main population centres of Java. The Indonesia Economic Corridors Master Plan to 2025 aims to address this by positioning refineries and industrial production sites at the sources of primary energy production but this will only materialise in the long term. PGN operates more than 3,100 miles of gas distribution pipelines made up of 9 networks across the country with 4 more being added as part of the Integrated Gas Transportation System that would connect across all the islands. Construction of some parts of

the network is being held back due to lack of funds such as in East Kalimantan. Transport of LNG between the islands requires costly LNG plants to liquefy the gas and terminals at the destination point to receive it which is not on the priority list for national infrastructure. It is the lack of connectivity between the islands and primary energy production centres that keeps transport costs high and thus results in import of other energy sources to meet domestic needs.

Exploration and incentivising investment are a further challenge considering oil production is declining by 12% each year according to the National Statistics Agency. This is due to the ageing fields such as Minas and Duri in Sumatra and the decline in exploration from the end of the 1990s in the lead up to the new oil

and gas law of 2001. In gas too, only a third of known gas basins have been explored meaning that potential reserves could well be the largest in the region. According to BP Migas, out of the 107 oil and gas blocks offered from 2002 to 2008; 77 have yet to begin exploration as per May 2011. While there have been some new oil discoveries in the past decade in the western part of the country; it is the eastern part of the country that holds huge potential in deep sea reserves of oil and gas that are costly to explore. Energy companies face regulatory hurdles, stalled coordination between ministries and local government as well as an uncondusive environment for taking on risky exploration. Difficulties in land acquisition and lack of government assistance in the process stall energy companies' plans to move forward with projects, while land prices continue to increase.

New regulations introduced at the end of 2010 were designed to encourage more investment into the sector, but provided a mix of both new benefits and disadvantages. Ministerial Regulation No. 6/2010 introduced a 5% tax on transfers of contracts during the exploratory stage thereby penalising companies trying to share the risk. The ring fencing principle whereby only one Production Sharing Contract may be issued per business entity is a further hindrance that requires the set up of separate commercial bodies to take on new blocks.

There have been some improvements made to the investment climate such as the decision to introduce direct bidding as opposed to tendering blocks and the increase in production splits for

companies to 25% for oil and 40% for gas. The abandonment of the proposed \$12 billion USD cap on cost recovery that could be claimed by companies in the exploratory stage was another welcome move by energy companies looking to bid on new blocks.

Uncertainty remains over regulations as discussions by the House of Representatives were underway in mid 2011 on changes to the Oil and Gas Law No. 22/2001. Articles undergoing debate include Article 22 Paragraph 1 on the domestic market obligation of 25% of production as well as Article 12 Paragraph 3 on the term 'provided with authorisation' in relation to working areas given the current overlap between the Ministry of Energy and Mineral Resources and other bodies.

Fuel subsidies continue to plague the commercial viability of new projects for independent power producers; such subsidies cost the government \$5.9 billion in 2010. Investors are therefore required to propose a price that is affordable for the domestic market for purchase by PLN, which is often an impossible task and renders the project unworkable due to costs for not only exploration but infrastructure to support exploitation.

While the government aims to remove such subsidies by 2014, it is highly unlikely to happen within that time period and caveats regarding certain subsidies have already been stated. Revisions to the pricing system and a braver approach by the government towards the cost of energy for the domestic market are needed to unleash the potential of unexplored blocks and the country's full potential.

Overview of the Coal Industry in Indonesia



Coal Production : 320 m MET (2010)
Proven Reserves : 5,529 m MET (2010)
Total % Global Reserves : 0.6 %

Targeted Production : 340 m MET (2011)
Main Production Areas : South Sumatra, South Kalimantan and East Kalimantan.

Coal generates 41% of the world's electricity according to the World Coal Association and global consumption is expected to increase by 56% to 2035 or 260 quadrillion Btu (US Department of Energy). The global economic crisis saw a drop in demand from OECD countries in line with declining industrial productivity coupled with environmental concerns to reduce reliance on coal. However the continuing volatility in the Middle East which maintains high oil prices and doubts over the future of nuclear energy is keeping up demand for coal. Indonesia is one of the world's largest exporters of coal, being suitably positioned to take advantage of the energy hungry markets of China and India. Increased domestic consumption is also driving coal production with

rising demand for electricity from industry and the growing population. Confidence in the coal sector is at an all time high with coal stocks outperforming the main index; companies outside of the industry are entering the fray on top of the high profile deal between one of Indonesia's most high profile business tycoons and the Rothschild family. Indonesia has 5,529 million tons of proven coal reserves or 0.6% of the world total, as per the 2011 BP Statistical Energy Survey. The main producing regions are found in South Sumatra, South Kalimantan and East Kalimantan with 39%, 43% and 16% of reserves respectively. The country has become a major coal exporter relatively recently over the past decade with total production quadrupling from 1998 and total production reaching 320 MET in

2010. Indonesia is the world's third largest coal exporter and the leading thermal coal exporter to date, while annual exports are expected to grow to 421 MET by 2025 to take advantage of the increasing appetite for coal in Asia's emerging markets. The proximity of Indonesia's main mining sites in Kalimantan to China and Japan, as well as waterways for shipping that avoid congested ports and routes, are contributing factors to its recent successes. The low wages and vast

The proximity of Indonesia's main mining sites in Kalimantan to China and Japan, as well as waterways for shipping that avoid congested ports and routes, are all contributing factors to its recent successes

amounts of shallow deposits of coal that make its range of coal qualities competitively priced for the global market is a further aspect. In terms of type of coal, 13% is high quality bituminous coal at more than 7100 Kcal/kg or 'coking coal', 62% is bituminous thermal coal at 6100-7100 Kcal/kg and 24% is low quality coal at below 5,100 Kcal/kg. The average calorific values of 5000-7000 Kcal/kg, with low sulphur and ash content makes Indonesian coal highly sought after. Despite the economic downturn that

depressed coal demand around the world from 2008-2009, Indonesia's coal exports have continued to increase accounting for 70% of total production. The sources of increased demand for coal are centred in emerging markets such as China and India that need to power their rapid industrial growth and are among the top coal consumers worldwide. China's electricity sector must grow by 3.5% a year to keep pace with economic growth and more than 70% of its electricity is currently fired by coal. India's coal fired generating capacity is also expected to increase by 2% a year. Japan has been a traditional market and main export partner for Indonesia's coal; Japanese purchases increased by 157% from 2000 to 2007. The beginning of 2011 has seen a change in this trend with India set to become the largest importer of Indonesian coal with an increase of 5 million MET from 2010 figures. Total exports to India are expected to reach 90 million MET by 2013, according to the Indonesian Coal Mining Association.

With the events in Japan having cast doubt on nuclear energy as a future energy source for developed markets, coal may once again see high demand from developed markets as well as emerging ones. Japan in particular will rely on Indonesian coal for its short term energy needs as it engages in the process of recovery. Indonesia has the advantages of high quality coal that offers lower environmental impact in comparison to other export markets and thus maintains its competitive edge. Confidence in coal for producers and investors will therefore be sustained in the short and medium term.

Balancing Domestic Demand and Exports in Coal



Coal Production :320 m MET (2010)
Proven Reserves : 5,529 m MET (2010)
Targeted Production : 340 m MET (2011)

Total Exports : 260 m MET
Main Export Markets :China, India,Japan, South Korea, Taiwan.

Domestic consumption of coal has been rising as PLN has been increasingly using it to generate electricity as part of the first Fast Track Program from 2004. Despite the efforts to diversify the energy mix and prioritise renewable energy as part of the second Fast Track Program; coal is still dominant. In June 2011 PLN proposed \$3 billion USD of coal powered power plants under the PPP scheme (see Public Private Partnerships) illustrating persistent reliance. Meeting domestic energy needs has become an increased priority in energy resource production as electricity demand is rising by 9% every year and the National Energy Council has predicted Indonesia's energy demand will increase three fold by 2030 from 150 MTOE at the end of 2010. This is

reflected in the Law on Mineral and Coal Mining in 2009 whereby local mining companies are obliged to sell at least 24.2% of their production to the local market. Domestic demand is now constraining the amount available to export as domestic needs took up 24% of total production in 2010 but this figure is set to increase to 37% by 2015. The Ministry of Energy and Mineral Resources announced in January 2011 that a ban on exports of coal with a calorific count below 5,400 in order to conserve reserves as well as to urge producers to upgrade the heating value before it is exported, by 2014. The forecasted decline on coal export availability has worried countries such as India as well as local producers who contest the move as they lack the technology to undertake the value addition.

Expectations for the coal industry remain positive as demand from Indonesia's key export markets as well as its own domestic market continue to grow. Key export markets as well as its own domestic market continue to grow and output targets are raised to keep apace. Increasing production will require intensive investment in exploration, further clarification on the implementation of the new mining law in order to lure foreign investors and improved infrastructure for the efficient transportation of coal. A \$1.5 billion USD coal railway in Central Kalimantan

Increasing production will require intensive investment in exploration, further clarification on the implementation of the new mining law in order to lure foreign investors and improved infrastructure for the efficient transportation of coal

is being offered under the Public Private Partnership scheme to replace the current transport methods of private roads then barged by river that is constraining coal production. The report on the project by the Governor of Central Kalimantan states that annual

production of the area is only 1.5 million MET but would reach 10 MET in the first ten years with the construction of the new railway .

Accelerated infrastructure development is therefore a necessity to maintain the momentum in the coal mining sector. Scarcity of adequate transport facilities, particularly for mines situated in land and deep in the forest forces concession holders to construct their own infrastructure, which is not an attractive prospect for future investors. However the robust outlook for coal has attracted international interest in infrastructure related projects; Reliance Power Limited announced in May 2011 plans to make investments of \$5-10 billion USD in coal mining infrastructure in Indonesia.

Established domestic companies have recently made moves into the market to take advantage of the boom in prices as thermal coal is expected to reach up to \$170 a tonne in 2012 according to Nomura's forecast. United Tractors, a heavy equipment firm that is part of Astra Group, having been engaged in mining contracting, made the move to acquire its own concessions in 2007. President Director Djoko Pranoto spoke with GBG about the companies' involvement in coal: "We were already involved in Coal before in Berau Coal but during the crisis we sold the company. We have since then returned to this sector and see great potential".

Cipaganti Group, a transport service and heavy equipment leasing company also entered into coal in 2008. Investors are eyeing the sector with interest as coal stocks have risen in line with the market; the coal index on the IDX was



up 39% in May 2011 from the same time last year keeping investors bullish on coal. Bumi Resources, the largest coal producer in Indonesia saw their share price soar well above this to 81.3% in the same period. The high profile deal between the Bakrie Group that owns Bumi Resources and Nathaniel Rothschild's Vallar is a signal of the high level of international interest that the sector is generating. The \$3 billion USD deal will see Vallar taking stakes in both Bumi Resources and another Bakrie owned coal company called Berau Coal to form Bumi plc. The plan is for the firm to eventually list on the FTSE 100 index and reap further rewards from investors and index funds. The fundamentals for Indonesia's coal sector pricing as well as improving infrastructure and governing regulations. However, the coal sector faces a measure of uncertainty given the global pressure to reduce green house gases and further moves to price carbon emissions more stringently. While not posing an immediate threat to exports; Indonesia

faces the challenge of meeting its own environmental targets and stance on climate change with that of its exports. As a vocal advocate for emerging markets to shape themselves as low carbon economies, President Yudhoyono must put these words into practice at home and abroad. Within Indonesia itself, environmental responsibility of coal producers has become a highly charged

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political issue as the impact of unregulated mining is made apparent in areas such as Kalimantan where the island's ecology and wildlife have been heavily damaged while the local population have gained limited benefit. The Environmental Law No. 32/2009 and the Law on Mining and Minerals No. 4/2009 was designed to address these issues, but the damage that has been done will remain as a backdrop to how new coal concessions are delineated, business permits are administered and the future conduct of coal mining companies.

Overview of Geothermal Energy in Indonesia



*Proven potential in Geothermal Energy : 27 GW
Total as % Global Reserves : 40%
Current Utilisation : < 5% (2010)*

*National Electricity Demand : 31 GW (2010)
Targeted Production : 9,000 MW (2025)
Targeted Power Plants : 44 (2014)*

Indonesia has the largest estimated geothermal energy reserves in the world at approximately 27 GW or 40% of the global total. The country's unique geographical position on the Asia Pacific 'Ring of Fire' means that the amount of potential reserves could be far higher than current estimates and provides scope for the country's much needed shift to use renewable energy sources to meet environmental commitments and to diversify its energy mix. Currently, Indonesia utilises less than 5% of the estimated potential or 1,191 MW and is only the third largest producer of geothermal energy behind America and the Philippines. The development of the sector has been delayed by numerous issues ranging from lack of financing for projects, conflict between central and local

government as well as the high risk for investors given that the national electricity company, Perusahaan Listrik Negara, is the single buyer and has cheaper options available to it. Key developments on these issues such as the finalisation of the Power Purchasing Agreement with PLN for all geothermal power tenders and a Presidential Decree opening up areas of protected forest of strategic importance are providing a new impetus in accelerating development of the sector's potential. Indonesia's intensified economic activity is coupled with an increased demand for energy; but supply is not keeping up. Brownouts are a regular occurrence and a shortage in capacity is often cited as a hindrance to industrial growth. Current electricity capacity for the entire country is approximately

31 GW with demand increasing by 9% every year. Approximately 80% of Indonesia's electricity generation is currently generated by fossil fuels according to the World Bank (2010). Since the initiation of the Fast Track Program in 2006, this has shifted from oil to the cheaper alternative of coal. However, since 2008 the government introduced a second Fast Track Program to tap into renewable sources for an additional 10,000 MW of electricity, with the main focus on geothermal energy. President Yudhoyono has been very vocal about his commitment to geothermal energy and stated his

The advantages of geothermal power are clear; it provides clean, green energy utilising an abundant resource in a country where it is estimated that 35% of the population does not have access to electricity

ambition to be a geothermal superpower at the World Geothermal Conference in 2010. The plan is to generate 9,500 MW of geothermal energy by 2025 that will propel Indonesia to being the largest geothermal producer in the world, ahead of America.

The advantages of geothermal power are clear; it provides clean, green energy utilising an abundant resource in a country where it is estimated that 35% of

the population does not have access to electricity according to the International Energy Agency. In light of political uncertainty in the Middle East and rising oil prices, geothermal power represents an energy source that is not subject to volatility as the price remains flat. The country's geothermal potential is also being underestimated; President Director of Star Energy, Bret Mattes told GBG that 27 GW of proven reserves only represents that of high temperature geothermal power 'lower temperatures are being utilised in Australia [for geothermal power] and Indonesia's reserves of this may be infinite'. Increased exploitation of geothermal energy to meet domestic needs would improve the country's energy security, reduce greenhouse gas emissions while freeing up resources such as coal and oil for export.

In spite of the clear benefits, the sector has been slow to develop with only 4.2% of reserves being tapped as per 2010. This inertia has not been through lack of interest from investors, but rather through the uncertainty of overlapping government regulations as well as lack of knowledge among local authorities and the challenges of negotiating a power purchasing agreement with PLN that determines the commercial viability of a project. Financing is also very difficult to secure due to the high exploration costs involved and the lengthy process to recoup investment in comparison to oil and gas. The capital expenditure for a geothermal project estimated at \$3 million USD per MW is far higher than a gas or coal fired power plant which are \$0.6 million USD and \$1 million USD respectively.

President Director of RMI Group, Rohmad Hadiwijoyo explains that banks are still weary of geothermal projects; 'the banks are only looking at the conventional methods, what you have got and what you get. They are not putting investment into renewable energy... what they forget is that in geothermal you only invest just the one time.' New entrants to the market will find financing particularly difficult considering the negotiations on pricing only take place once the project has been quantified so value is still wholly uncertain. While this is the same case for oil and gas exploration; the risk and return is less favourable as the payback period is far longer for a utility.

Electricity in Indonesia is administered by state owned PLN who controls 83% of total capacity and is the single buyer for all power generation projects. At the beginning of 2011, the long awaited Power Purchasing Agreement was finalised with PLN. Regulation No. 2 of 2011 on the assignment of PLN to purchase electricity from geothermal power plants and setting a benchmark price for the purchase of electricity replaces the previous Regulation No. 32/2009. This regulation caps the purchase price of geothermal generated electricity at \$0.097 USD/kwh obliging PLN to purchase electricity from all future tenders of geothermal concessions.

While the PPA is a very welcome move for independent power producers, it is not without its challenges in implementation. Geothermal concession tenders are done at a national level while the licenses are granted by the local

authorities as per the Geothermal Law. PLN is not involved in the tender process itself and is not given a choice in selecting its supplier; the PPA must therefore be negotiated after the contractor has been selected. The company's position as a monopolistic purchaser who is under obligation to sell electricity at a subsidised price to the public means that geothermal is an expensive option compared to coal for example. Supramu Santoso, President Director of Supreme Energy was heavily involved in lobbying to implement the PPA. He told GBG that PLN cannot be relied on to buy geothermal energy indefinitely because it is a commercial entity therefore price must be a key factor: 'there needs to be further improvements to the regulations for the purchase by PLN. PLN rightly as a company wants to buy at the lowest possible price which is coal at the moment. If you look into the long term, geothermal will be able to compete with coal in my opinion in 5 years from now'. The pricing of electricity and the removal of subsidies will therefore be a critical factor in the further development of geothermal energy. Currently subsidies for electricity and fuel eat into the state budget, costing \$5.99 billion USD in 2010. The value of geothermal therefore goes beyond just the price of the utility as it frees up valuable commodities such as oil and coal for export. The scheduled ending of subsidies by 2014 - 2015, as announced by the Ministry of Energy and Mineral Resources (MEMR) will therefore further highlight the benefits of investment in geothermal energy generation.

Decentralisation since 2001 is still in the adjustment phase and has given rise to varying levels of local government cooperation on geothermal projects. The various layers of authority have been a challenge; Bret Mattes of Star Energy notes the 'teething problems' that always accompany the process in any country and that 'it takes time to sort out as there will always be differing interests at the national, regional, local and provincial level'. Under the Geothermal Law of 2003, all developers must work with the local government who are responsible for issuing the licenses for concessions. Many local governments do not have the expertise needed to gather the data on potential sites, to accurately judge the short term tradeoffs needed and to administer tenders effectively. The costs involved for initial exploration estimated at \$4-5 million per exploration well fall outside of local budgets so the data is not available to administer the areas effectively before exploration begins. Operators therefore face a delicate task in balancing their project ambitions with the short term impact on the local community. The benefits are also not as clear cut considering there is only one buyer, in comparison to oil and gas where a proportion of revenue is submitted to the government.

Forestry is another tricky issue in the acceleration of geothermal power as around 80% of potential sites are in conserved forest according to the Minister of Forestry, Zulkifli Hasan. The Forestry Law No 39/2004 prohibits open mining in forest areas and places protected forests off limits. This law has been a major hindrance to the

development of geothermal exploration. A Presidential Decree in February 2010 has derived from this law and permitted geothermal mining and power plants of strategic importance in areas of protected forest.

In an effort to create a more conducive investment environment for geothermal energy to meet long term goals for both green house gas emissions reduction and improving domestic energy capacity; the Indonesian government has called on international bodies to stimulate renewable energy development with particular focus on geothermal, and reform the regulatory framework. Up to \$400 million USD is being provided by the World Bank Group and the Asian Development Bank from the Clean Technology Fund for the Geothermal Power Development Project as per March 2011. The project is designed to help mobilise investment in the sector by refining the tendering process and help fill financing gaps in projects by offering attractive financing terms. Existing resources that are currently under exploration and operation by Pertamina Geothermal will also get a much needed boost to accelerate. The World Bank is also assisting the government in preparing a Carbon Finance Framework to facilitate pricing and adequate compensation for geothermal projects. The setting up of a \$39 million USD risk exploration fund by the Ministry of Energy and Industry at the beginning of 2011 is another welcome move to attract investors. With the agreement of the PPA, this will bolster the commercial viability of geothermal projects and encourage banks and investors to back existing and future projects.

Investing in Geothermal Energy



*Proven potential in Geothermal Energy : 27 GW
National Electricity Demand : 31 GW (2010)
Targeted Production : 9,000 MW (2025)*

*Targeted Power Plants : 44 (2014)
Relevant Law : Geothermal Law No. 27/2003
regarding private investment in geothermal energy.*

Recent changes in regulations surrounding geothermal energy signal an effort to encourage private sector involvement in the sector and the issuance of new geothermal working areas has surged in the past year. Foreign companies have been involved in the sector since Chevron pioneered the first geothermal plant 20 years ago. Recent developments in the sector to encourage investment have witnessed other big names come to the fore such as General Electric, Tata Group and the joint cooperation between GDF Suez and Sumitomo Corporation with Supreme Energy. The sector is incredibly attractive to investors given the imminent demand for electricity from Indonesia's rapidly growing population, but it requires investors who are in it for the long run.

Bureaucracy and regulatory hurdles heavily delay the execution of projects and reduce attractiveness. In addition, it takes around 8 years for a plant to be fully operational and then, as with any utility; the internal rate of return is around 15%. Bret Mattes of Star Energy notes that 'the company's project in West Java took 10 years to get going but is now very successful' and advises investors to 'stick with it' considering that the fundamentals are very much there and the business works.

Geothermal operators are keen to attract investors and partners considering the high initial costs of the projects. The tender process requires that bidders deposit 2.5% of the first year exploration costs as well as an exploration security deposit of \$10,000,000 USD for the winning bidder. Then there are

additional costs for developing infrastructure around the working sites that area round the working sites that are mainly in remote areas such as roads as well as access to the electricity transmission and distribution grid. Financial partners as well as technical expertise due to the lack of qualified human resources are in high demand by geothermal companies and consortiums planning to bid on future working area tenders. Rohmad Hadiwijoyo of RMI Group spoke to GBG about the need for international investment in the sector;

Financial partners as well as technical expertise due to the lack of qualified human resources are in high demand by geothermal companies and consortiums planning to bid on future working area tenders

'geothermal takes a lot of initial investment so there is an unwillingness of the government and the private sector... we still need investors in the geothermal sector, locals here are not prepared to put in the investment.' Working with a local partner is advantageous for new investors as geothermal involves dealing directly with regional governments and therefore demands a deep understanding of local knowledge. Supramu Santoso

stresses the paramount need for local knowledge when operating a geothermal working area; 'with local government you have to know the way to handle them effectively, some local governments are very friendly, some are still very difficult so it is very varied. I do not see it as a problem but for a newcomer local knowledge is very important'. Selection of a local partner should therefore take into account their connections and experience in a given working area as a priority alongside their professional history. Local partners differ in their requirements; companies with expertise and experience in geothermal are seeking out financing for projects that cannot be obtained through local banks whereas others may look for operational and technological partners to assist in putting together a competitive bid for tenders.



Opportunities in Energy: Beyond Fossil Fuels



Contribution to GDP : 11% (2010)
Proven Oil Reserves : 4.2 billion barrels (2010)
Proven Gas Reserves : 108.4 trillion cubic feet

Proven Coal Reserves : 5529 million MET
Proven potential in Geothermal Energy : 27 GW
Proven potential in Hydropower : 75 GW

The Energy Law of 2007 set in motion Indonesia's plan to shift its reliance on fossil fuels, mainly coal and oil, towards more environmentally friendly and sustainable means. The reorientation of the energy mix will not be an easy process; in order to tap the abundant reserves of geothermal, hydro energy and coal bed methane wide scale investment and infrastructure will be required to meet the 9% annual growth in domestic energy demands. Energy source reliance as per 2010 was 43.9% on oil, 21.29% on gas, 26.38% on coal and the remaining on geothermal and hydro power. The aim is to reduce oil dependence to 20% by 2025 while increasing the input of renewable and alternative forms of energy to make up 15% of the total. Within non-renewables, the country is seeking to capitalise on its

vast reserves of coal bed methane. This presents a number of opportunities for investment and technology partnerships as the government aims to incentivise investment in these areas in order to realise its goals to be a low cost, low carbon economy.

Coal Bed Methane

Indonesia holds the potential to be one of the largest producers of coal bed methane (CBM) with reserves of 453 trillion cubic feet, even larger than total gas reserves, although it has been slow to utilise it for domestic needs. Plans to develop the source only came about as late as 2008 while such plants have been common place in North America and Australia for decades, accounting for 10% of total natural gas production in the USA. Indonesia has some of the

largest proven reserves of CBM with the main sources being located in Kalimantan, South Sumatra as well as Riau. The first CBM fed power plant located in East Kalimantan will come on stream in 2011, operated by a local company PT Ephindo in a consortium with General Electric. Five further work areas are also expected in 2011 including West Sangatta I Block operated by West Sangatta CBM Ltd and WK CBM Sekayu Block operated by Medco. The timing for further exploration into CBM is ideal with natural gas prices increasing on the global market and PLN actively searching out cheaper fuel alternatives. Pricing of CBM power for the domestic market is also highly competitive at \$0.27 USD per kwh; 50% lower compared to diesel. PLN forecasts that CBM could produce as much as 2000 MW of power for the country by 2015. The government through the Ministry of Energy and Mineral Resources is stepping up its efforts to encourage investment into CBM by offering a 45% production split and is due to offer 60 CBM blocks in 2011. The production targets are set at 500 mmcf by 2015 rising to 900 mmcf by 2020. Pertamina currently has 4 CBM blocks through its subsidiary PT Pertamina Hulu Energy and international energy giants such as Exxon Mobil have also taken an early stake in this highly promising sector. However, a lot needs to be done in relation to infrastructure and regulations. The construction of the gas pipeline from Kalimantan to Java that was approved back in 2005 and delayed due to a perceived lack of supply, now has impetus to recommence in order to provide distribution infrastructure.

Developing the necessary legal framework will take time given the environmental impact of extracting CBM due to the dewatering process required. The mechanism by which CBM producers can sell their gas to PLN is also unclear at this stage as in June 2011 BP Migas announced a ban on selling of electricity directly to PLN to avoid state owned producers under-selling their gas

Waste Fuelled Power Plants

Waste fuelled power plants are another exciting area of Indonesia's diverse energy mix. Indonesia produces 200,000 MET of garbage per day and it is estimated that of the existing waste, at least 4,000 MW of electricity could be generated. The largest project of its kind was undertaken originally in a joint venture between PT Godang Tua Jaya and PT Navigat Organic Energy Indonesia (PT Navigat's stake was since sold to Wirose Investments) using General Electric machinery in the plant. Located at Bantar Gabang Landfill in East Jakarta, the waste to power plant had produced 4 MW of power in 2010, due to increase to 16 MW by 2015. The success of the Jakarta plant and other small scale projects around the country such as in Bali and Bandung illustrates the potential of such plants in the future. Yet the required investment is substantial, ranging from \$33 million to \$70 million USD for the development of the plant and obtaining financing can be challenging considering the long pay back period and novelty of the technology. Initial investment is therefore required to set up the plant with a low government support considering their

generating capacity which can then be ramped up on agreement of a commercially viable PPA. However, such projects will require greater attention from financing sources as well as government support considering their twin benefits of power generation and addressing waste management in densely populated urban areas.

Geothermal

The geothermal sector and investment opportunities within it are discussed in depth in 'Investing in Geothermal in Indonesia' on page 76.

The aim is to reduce oil dependence to 20% by 2025 while increasing the input of renewable and alternative forms of energy to make up 15% of the total.

Indonesia has 27 GW of proven geothermal energy reserves and currently taps less than 5% of the potential. President Yudhoyono announced at the Geothermal Energy conference in Bali in 2010 that he intends to make Indonesia the largest geothermal energy producer in the world. The plans as per the second Fast Track Program are to build 43 geothermal power plants by 2014 and to produce 9,000 MW by 2025. Recent changes within the regulatory framework have been designed to encourage investment into the sector as well as the announcement



of the long awaited Power Purchasing Agreement with PLN for all coming tenders in geothermal.

Hydro Power

Indonesia has approximately 75 GW of hydro power potential and there are over 100 hydro sources of varying sizes that have been identified as per the end of 2010; yet less than 8% of capacity is utilised. Despite hydro power being considered as part of the second Fast Track Program to generate 10,000 MW of electricity and the Electrical Supply Business Power Plan aiming to have 5,140 MW of hydro powered electricity on stream by 2019, there were only 3 large scale projects being executed at the end of 2010. The varied sizes and lack of experience in quantifying the commercial potential of smaller sources has led to most projects not making it past the pre-feasibility study. Bureaucracy regarding contradictions of land ownership around river areas between central and regional government is a further obstacle holding back

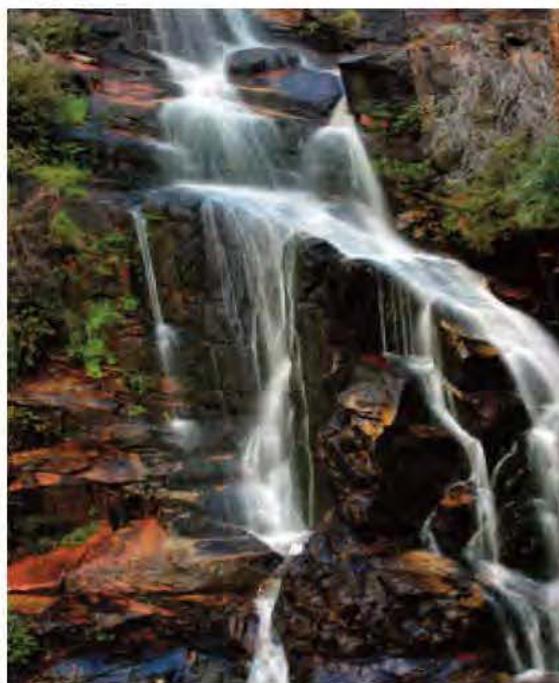
development, although not unique to hydro power projects.

While the regulations are still troublesome to navigate, the will from the government to encourage independent power producers is there

While the regulations are still troublesome to navigate, the will from the government to encourage independent power producers is there. Ministerial Regulation No. 9/2009 stipulates that PLN is obliged to buy energy from renewable power plants below 10 MW and ensures a higher pricing system for mini and micro plants outside of Java and the eastern regions. Investors in the past have not been interested in really taking advantage of the mini hydro sources (up to 4 MW) or micro (1MW - 10MW) due to the potential returns versus the difficulties of land acquisition. Connecting such plants to the electricity grid is also a challenge requiring consideration due to remote location of sources, although international organisations efforts have improved this situation dramatically such as the United Nations Development Program and the GIZ.

Recent data from the International Energy Agency illustrates the potential long term returns on such projects as the investment needed for small scale plants is \$3,000 USD with operational costs at

\$60 USD per kwh to 2050. The price of generating hydro power is therefore below that of other sources such as coal due to the low upkeep costs of the machinery used. The environmental and social benefits are also a factor to consider when assessing the value of such projects that are often situated in under developed regions thereby creating local self sufficiency as well as generating jobs. Large scale hydro projects have proved more popular as an investment opportunity. The beginning of 2011 saw a number of new projects from foreign companies; South Korea's Hyundai was awarded at \$340 million USD contract to build an 88 MW hydro plant in Aceh, Sumatra in May 2011 while Norwegian and Chinese firms have also won contracts for plants in Sulawesi. The World Bank also announced a \$640 million USD loan to contribute to a pumped water system at an existing plant in Upper Cisokan to expand electricity capacity during peak hours.



Global Business Guide Indonesia talks to Mochamad Harun, VP of Corporate Communications at state energy company Pertamina.

Indonesia's oil production has been in decline at the rate of approximately 12% every year. Pertamina has set the target of 474,000 BOEPD in 2011 and 1 million BOEPD by 2015, what strategies are in place to achieve these targets?

Our strategy in upstream is divided into organic and inorganic expansion. In the organic, we are focused on employing enhanced oil recovery activities to increase efficiency and production from existing fields and reactivating idle fields.

In the inorganic, our strategy is to continue to pursue strategic acquisition, joint ventures and investments that will expand our oil, gas and geothermal businesses.

Coal bed methane represents a welcome addition to diversifying Indonesia's energy mix to reduce the country's reliance on oil from 55% to 20% by 2025. What are Pertamina's operations and future plans within this area?

Coal Bed Methane is a relatively new type of energy compared to geothermal. Pertamina's subsidiary, PT Pertamina Hulu Energy currently manages four CBM blocks in Indonesia, i.e. Sangatta 1 and Sangatta 2 in Kalimantan Timur, Tanjung Enim and Muara Enim in Sumatera Selatan. PT Pertamina Hulu Energy is targeted to produce CBM of up to 200-300 MMSCFD. However, CBM development is far more complicated than oil, especially due to

We are focused on employing enhanced oil recovery activities to increase efficiency and production from existing fields and reactivating idle fields

the dewatering process which poses serious threats to the environment. This unfavourable condition needs to be seriously addressed by authorities in order to accelerate CBM production. There are several interrelated issues that need to be resolved, including legal aspects, business aspects, as well as the social aspects. We need more government attention to ensure that CBM development will proceed in the right direction.

With President Yudhoyono's targets of cutting Indonesia's greenhouse gas emissions by 26% by 2020, how is Pertamina contributing to these ambitious goals?

We support various policies and programs which have been implemented or are to be developed by the Government of Indonesia. For example, using LPG for households, CNG and LPG for transportation, coal and gas for electricity power and increasing the use of new and renewable low pollution energy sources (i.e. non-fuel energy such as solar energy, micro hydro, geothermal and bio-fuel).

Global Business Guide Indonesia meets with Supramu Santosa, President Director of Supreme Energy.

What is the background to the founding of Supreme Energy?

I have always been involved in the oil and gas industry in all aspects. I was working as a roughneck and then for Gulf Oil until 2002. In 2002 I decided to establish my own company because the way that I saw it is that there were plenty of oil fields in Indonesia that were too small for large multinationals but good enough for local companies. I acquired an oil and gas field owned by Conoco Philipps and bought it with

The way that I see it is that eventually, Indonesia has to develop its geothermal energy potential



Nusantara Capital which are investment bankers. We managed to increase the production from 5,000 bpd to 10,000 bpd. In 2004 I purchased a geothermal field in West Java that was owned as a 'stranded asset' by Deutsche Bank after an the Australian company that owned it defaulted. Following this in 2007 there was a difference in vision, I sold me interests in Star Energy and I decided to establish Supreme Energy. The reason I did this is because I think geothermal energy is the future and the way I see it is that eventually Indonesia has to develop its geothermal energy potential.

What has held back the development of geothermal energy in Indonesia ?

The reason for this is the subsidies, the pricing of energy in Indonesia is based on political considerations rather than economic. Before oil was subsidised, in the 1990s PLN was using oil for the majority of their needs and so alternative energy did not develop as it should. When the oil price spiked, Indonesia faced a shock due to its reliance on oil so they looked elsewhere. Gas has been committed on long term contracts for export so is not available for domestic use.

What advice would you give to an investor looking to enter the geothermal sector?

Having a local partner for new investors is very important as the regional authorities really vary in their approach and attitude to investors. Local knowledge for dealing with issues such as forestry is also key for any investor in geothermal.

Finance

85-88 Opportunities in Indonesia's Banking Industry

The robust growth of the banking sector since its recovery from the Asian financial crisis is making the sector highly attractive to investors. This section looks at some of the current opportunities to be found in the burgeoning industry.

89-91 Capital Markets Overview

As the best performing index in the Asia Pacific region over 2010, Indonesia's capital market is flourishing and will play a larger role in economic development. This section provides an overview of the key trends and the outlook for the bourse in the medium term.

92-95 Indonesia's Islamic Banking Sector

Being the largest Muslim majority country in the world, the finance industry has high hopes for the future of the Islamic banking sector in Indonesia. This section looks at the main developments of the sector and some of the key opportunities within it.

96-98 Making the Banks Work for the Real Economy

While the Indonesian banking sector continues to book healthy profits, the high rate of lending has led to criticism over the industry's contribution to real economic development. This section looks at the challenges being faced to improve lending.

99-101 Capital Markets: Widening the Local Investor Base

Despite the encouraging performance of Indonesia's capital markets over recent years, the participation of domestic investors still pales in comparison to that of foreigners. This section looks at steps being taken to educate the public and widen the local investor base.

102-105 The Prospects for Indonesia's Insurance Industry

Offering a young population and a low penetration rate; Indonesia's insurance industry is the fastest growing of the ASEAN. This section looks at the trends for the full range of Indonesian consumers from micro insurance to unit linked products.

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Mr Maryono, President Director of Bank Mutiara.

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Mr Arvin Arifin, President Director of Bank Muamalat

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Mr Eddy Berutu, President Director of WanaArtha Life.

Opportunities in Indonesia's Banking Industry



Contribution to GDP : 3% (2010)
Real Sector Growth : 27%
Number of Commercial Banks : 121 including 4

State Owned banks.
Number of Islamic Banks & Units : 11 & 23
Total Assets : 3,065.8 trillion RP (2010)

The liberalisation of rules on foreign ownership allowing up to 99% ownership in the finance sector in the past decade has seen foreign players entering the market with 10 majority foreign owned banks including HSBC, ANZ and Rabobank as well as 28 foreign joint venture banks. Foreign investors took significant stakes in the banking sector during 2002 to 2005 which saw the sales of a number of state owned institutions. The robust performance of the banking sector during the global economic downturn and continued growth at a 26.74% increase in profits for 2010 is once again piquing investor interest. This comes at a key time as Bank Indonesia seeks to further consolidate the banking sector under the Indonesian Banking Architecture (API).

Foreign interest in the banking sector picked up with the enforced consolidation of the sector following the introduction of The Single Presence Policy (SPP) in 2006. Under Regulation No.8/2006, Bank Indonesia enforced the rule preventing a shareholder from having more than one controlling stake in a bank. Any banks with the same beneficiary were therefore under obligation to merge or to sell the controlling stake. The policy was designed to bring greater transparency to the sector, as well as encourage consolidation. Within the private sector, the measure has seen the merging of Bank Lippo and Bank Niaga to form CIMB Niaga and the selling off of Temasek's (Singapore's sovereign wealth fund) share in BII to Malaysia's Maybank. While the deadline for the SPP was set

for the end of 2010, the challenge of enforcement in the public sector has led to an extension of the deadline. The four state owned banks, namely Bank Mandiri, BRI, BTN and BNI are positioned within the top ten banks of the country and a merger would require mammoth restructuring by centralising 39% of total commercial banking assets within one body on top of reorganisation of thousands of personnel. In March 2011 Bank Indonesia announced a two year postponement of SPP and that state owned banks may be exempt from the policy altogether; although a final decision on the matter has not been reached.

As the banking sector matures, Bank Indonesia is keen to see greater consolidation in the sector to encourage specialisation among the banks

As the banking sector matures, Bank Indonesia is keen to see greater consolidation in the sector to encourage specialisation among the banks. Pressure for consolidation is also coming from the need to boost capital adequacy ratios (CAR) with the largest banks planning rights issues to meet funding requirements. Bank Indonesia has stated that it will offer incentives to banks that choose to make public offerings which will spur further actions in the near future. Smaller sized banks with less than \$11 million USD in capital

face the need to merge or be acquired. This end of the market therefore represents a key opportunity for foreign investors seeking access and exposure to the Indonesian market's highly profitable banking sector.

An immediate opportunity in the banking sector is Bank Mutiara, formerly Bank Century which was bailed out during the financial crisis in November 2008. Currently the Indonesian Deposit Insurance Corporation owns a majority stake but as per the regulation plans to sell this by the second half of 2011. President Director of the bank, Mr Maryono, has completely restructured the company's corporate governance and culture with the vision of being a leading retail bank in the country. The results have been positive with assets almost doubling to 12.6 trillion RP and net profit up by 86.08% in the first quarter of 2011. GBG spoke to Mr Maryono about the benefits of the bank as an investment opportunity; 'Bank Mutiara has an established network throughout Indonesia with 58 branches, as well as offering a broad range of products for consumer and business needs. We are looking for an investor with expertise in the banking sector'. Another interesting opportunity is the announcement in June 2011 of Avenue Cap, an American hedge fund, which plans to sell its nearly 30% stake in Bank Mayapada. The bank, which is mainly held by the Tahir family, has a long term rating of A- from Fitch following a rights issue of 400 billion RP at the end of 2010. Both represent well timed opportunities considering the global interest in Indonesia's banking sector.

Rural banks and micro finance initiatives that serve the rural population outside the main cities of Java are seeing impressive growth in credit lending; particularly for working capital use. Indonesia was the pioneer in commercial micro finance in South East Asia. State owned BRI began micro lending facilities in 1978 and had

Rural banks and micro finance initiatives that serve the rural population outside the main cities of Java are seeing impressive growth in credit lending, particularly for working capital use

outstanding micro loans to the value of \$7.4 billion USD at the end of 2010. Bank Tabungan Pensiunan Nasional is a further example of such success. On entering the micro market in 2008 after a takeover by Texas Pacific Group, the bank has seen their micro loan portfolio double to \$500 million USD in 2010 and the numbers of branches triple to over 1,000. This growth in rural lending and micro finance has been boosted by the adoption of new technology that allows agents to keep track on borrowers through portable card swiping machines that allow cash to be administered and deposited on the spot. Finger printing technology for identification of illiterate borrowers is also expanding access by



enabling data control for micro lending.

Shariah banks are another area of potential interest for investors considering the size of the Muslim population in the country and the rapid growth of the sector over the past 5 years. Strategic investment and partnerships are to be found in expanding the product base that shariah banks are able to offer consumers. Limited knowledge of more sophisticated banking products also presents collaboration opportunities. Islamic hedging products for inter currency transactions or tahawwut are an example of this; being recently approved by the International Islamic Finance Market in Bahrain, Indonesian banks will be keen to execute these products once it is approved by the National Shariah Board. Hedging in Islamic finance will encourage inflows of foreign capital into the shariah banking sector.

The announcement by Bank Muamalat's largest stakeholder the Islamic Development Bank, that they plan to sell a portion of their share in June 2011 due to internal regulations saw a surge of interest from Standard Chartered and Qatar Islamic Bank. This is again a well timed opportunity considering the fast paced growth of the sector; however as per July 2011 the sale was postponed due to pricing issues (Reuters). Future opportunities can be expected as existing shariah windows of conventional banks come to be spun off as standalone banks under Law No. 21/2008. South

Future opportunities can be expected as existing shariah windows of conventional banks come to be spun off as standalone banks under Law No. 21/2008. South Sulawesi Development Bank is one such bank that will spin off its shariah unit in the next five years

Sulawesi Development Bank is one such bank that will spin off its shariah unit in the next five years, as of mid 2011. This prospect is an even more lucrative opportunity under Bank Indonesia Regulation No.11/2009 whereby the minimum capital requirement for a standalone Islamic bank was lowered

from 1 trillion RP to 500 billion RP.

The future growth of Indonesia's banking sector is placing it firmly in the limelight for strategic investments. However while the current legislation that allows up to 99% foreign ownership this may well be revised in the near future. In July 2011, the Minister of Finance, Agustin Martowardojo made a request to Bank Indonesia to curb the amount of shares that a single foreign investor can hold in order to give Indonesians a larger stake in the sector. This is creating uncertainty for foreign investors while Bank Indonesia mulls what action to take. This may also trigger the selling off of shares in banks that do not comply with the requirements so investors should be watching closely.



Capital Markets Overview



Bourse Name : Bursa Efek Indonesia (IDX)
 Main Index : Jakarta Composite Index
 Market Capitalisation : 3,384 trillion RP (April

2011)
 Record High : 4,003.69 (July 2011)
 Number of Issuers : 425 (May 2011)

Indonesia's stock exchange showed stunning results for investors over 2010 with the Jakarta Composite Index (JCI) as the best performing index in Asia Pacific, increasing by 44%. While notoriously volatile, the stock exchange saw unprecedented calm over the course of the European debt crises. As emerging markets continued to outperform indexes around the world, investors were quick to move in and the Bank Indonesia had in place sound measures for controlling the hot inflows of cash. The first half of 2011 has seen volatility again return to the market and highlighted some of the challenges that lay ahead in deepening the capital markets to reflect the real economy. Thus far, developments have lagged behind that of real economic growth which is a central issue to be addressed

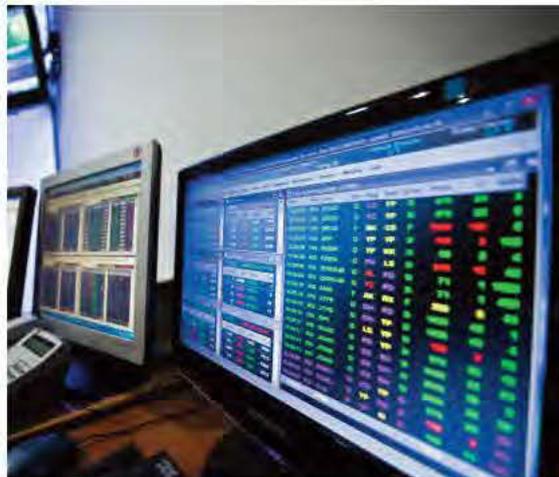
with the upcoming integration of the ASEAN capital markets by 2015.

Behind positive results of the IDX performance for 2010 lays the more pressing issue of the shallowness of Indonesia's capital markets. With only nine industrial categories and 425 companies listed, the capital markets remain unrepresentative of the economy as a whole and uncompetitive by regional comparison. Market capitalisation to GDP remains low at 36% compared to 81.74% for Malaysia at the end of 2010. The dominant sectors remain in finance, commodities and consumer goods despite such sectors making up less than 30% of GDP. Agriculture and manufacturing are notably unrepresented despite making up 14% and 21% of total GDP respectively. Some of the largest companies in Indonesia remain unlisted and under

family ownership. This should change gradually as existing companies seek more capital for investment and expansion in the near future. The IDX is keen to encourage more companies to come to the fore and offer IPOs. During 2010 there were 23 IPOs raising 30.7 trillion RP, with the majority performing well and bringing satisfactory returns for investors at an average of 28.9% (IDX). The IDX announced in a statement at the beginning of 2011 that it aims to increase the number of listed companies to 500-600 by 2015.

Behind positive results of the IDX performance for 2010 lays the more pressing issue of the shallowness of Indonesia's capital markets

The seemingly relentless momentum with which the JCI rose throughout 2010 created a surge in lower quality stocks and an inevitable market correction. The end of 2010 and the beginning of 2011 witnessed a sharp drop in value of the IDX while recently issued IPOs made headlines for not only poor performance but mismanagement by the underwriters. The floating of Garuda, the national airline carrier and Krakatau Steel, a state owned company at the end of 2010 were both marred by accusations of political intrigue in the timing and pricing, resulting in the initial stock price being grossly undervalued. The weak regulatory



system on the conduct of underwriters was further exposed and has reduced confidence in future SOE floatations. Two private sector IPOs at the beginning of 2011 were both oversubscribed by investors but managed to produce negative returns on their debut reinforcing the need for stronger market oversight as well as signalling a return to volatility. The Indonesian Capital Market Authority BAPEPAM-LK is the solely responsible regulatory body for all matters concerning the stock market and exchanges including issuers and underwriters, being found under the Ministry of Finance. It has come under scrutiny for its failure to meet international standards as prescribed by the IOSCO and its ability to act effectively as an independent entity. This aims to be addressed by the formation of the Financial Services Supervisory Authority, OJK, which would take over from the Central Bank and the Ministry of Finance, however a failure to find an agreement between the two on how such an independent body would function continues to stall the passing of the bill that had an original timetable of completion by the end of 2010.

The integration of the ASEAN capital markets with the Implementation Plan for 2015 gives further pressure for Indonesia to bring its regulatory procedures up to par. BAPEPAM has been preparing for this by upgrading its capital markets data warehousing infrastructure but much more is required in building the supporting IT infrastructure. Regulation and dispute resolution procedures will have to be aligned with that of the other members and so far Indonesia is behind on execution of reforms. The blueprint will enable ASEAN members to move freely among members' bourses in cross border transactions to raise capital and place investments. Indonesia's bourse will therefore face stiff competition from regional counterparts when a company decides to perform a rights issue. Therefore, while the Indonesian market remains attractive due to the domestic potential, the exchange must be ready to compete by 2015. Obtaining investment grade status has been long awaited by investors in Indonesia.

In April 2011 Standard and Poor's upgraded the country's sovereign credit rating to BB+, the last of the three main rating agencies to bring their rating to just below investment grade. Inflation and the risk of capital flight are the obstacles that stand in the way of the final push to reach investment grade status, despite the sustained GDP growth and mounting foreign exchange reserves.

Inflation remains another potential flashpoint that rating agencies are observing. The rise in inflation caused Bank Indonesia to raise its benchmark interest rate to 6.75% in February 2011

as consumer prices were up by 6% on average year on year in the first quarter of 2011, but slowly decreased in the second quarter. Provided that Indonesia manages to keep a handle on its inflation; investment grade status seems well within reach by the end of 2012. This will see greater involvement of both domestic and international investors in the market, opening the way for large scale funding and investment.

The integration of the ASEAN capital markets with the Implementation Plan for 2015 gives further pressure for Indonesia to bring its regulatory procedures up to par

Deepening the capital markets will bring immense benefits to the country in terms of providing sources of funding for companies as they undergo expansion plans to take advantage of the booming economy. The potential of Indonesia's stock exchange is pronounced; low GDP to market capitalisation ratios illustrate that liquidity is in short supply; testament to the remaining room for growth. As the largest economy in the ASEAN, being home to unrivalled natural resources and some 400,000 companies; the exchange has the potential to be the largest in the region in the medium to long term.

Indonesia's Islamic Banking Sector



Muslim % Population : >85%
Number of Commercial Islamic Banks : 11
Number of Islamic Units : 23

Total Shariah Banking Assets : < 5%
Total Assets : 100.8 trillion RP (2010)
Deposit Accounts : 6,053,658 RP (2010)

Indonesia is the largest Muslim majority country in the world with approximately 80% of the population identifying themselves as part of the religion. Despite its seemingly demographic predisposition to be a centre for shariah banking, the sector accounted for just 3.2% of the total banking assets as per the end of 2010. While the UK has cemented its position as a hub for shariah compliant banking in Europe, Malaysia has very much led the way in South East Asia; leaving Indonesia somewhat behind. Bank Indonesia (BI) is actively pursuing the long term development of the sector through the Islamic Banking Blueprint to 2015. BI has the vision of making Indonesia's Islamic banks the most attractive in the ASEAN through the Grand Strategy of Islamic Banking

Market Development by building on Indonesia's own brand of modern Islam; but a lot lays ahead in order to achieve this. Yet, the prospects for Indonesia's shariah compliant banking are looking bright; the four largest Islamic banks are targeting more than 50% asset growth for 2011. Investors are also eyeing the industry in light of the saturation of neighbouring Malaysia as well as the political unrest in traditional markets of the Middle East.

In the last five years, Indonesia's shariah banks have seen assets grow by 38% compared to 15% for conventional banks (Bank Indonesia). The country currently has 5 Islamic banks and 27 conventional banks with a separate shariah platform for handling such transactions. The sector is currently dominated by two leading players,

Islamic Banking in Indonesia - Main Indicators

	2008	2009	2010
Islamic Commercial Banks	5	6	11
Islamic Banking Units	27	25	23
Islamic Rural Banks	131	139	150
Total Assets (Trillion RP)	51.3	68.2	100.8
Total Deposits (Trillion RP)	36.8	52.27	76.0
Total Financing (Trillion RP)	38.2	46.8	68.18
Deposit Accounts (Trillion RP)	3,776,067	4,537,565	6,053,658

Source: Bank Indonesia

namely Bank Mandiri Syariah and Bank Muamalat that count for 50% of total shariah financing between them. The move into shariah banking by conventional banks has surged since the passing of the Law No.21/2008 and the Regulation on the Conversion of a Conventional Bank to a Shariah Bank No.11/2009 that allowed banks to function in both capacities. More banks are expected to set up shariah units with 32 pending requests for establishment permits according to Bank Indonesia. The current regulations are such that the separate platforms are expected to spin off into independent banks with 2023 as the deadline for conventional banks to do this.

Indonesia appears as a natural growth market for shariah compliant banking services given the size of the Muslim majority population; however the character of the market is starkly different to that of neighbouring Malaysia or the Middle East. The majority of Indonesia's potential Islamic banking customers fall under the

'rational market' as opposed to that of the 'spiritual market'. Islamic banking products are therefore pitted against their conventional counterparts and judged on their commercial merits as opposed to being chosen on the basis of faith. This trend is clearly exemplified by the popularity of utilising shariah platforms within conventional banks over solely banking with a standalone Islamic bank. The market leader Bank Syariah Mandiri, uses its sister conventional bank Bank Mandiri to sell its shariah banking services within a 'secular' and familiar banking environment. The larger local network of conventional banks is also to its advantage as the banking sector still relies on face to face in branch transactions so proximity to the customer is a necessity.

How to market Islamic banking towards the population therefore presents a unique challenge in 'demystifying' the sector to consumers and shake off misconceptions regarding the perceived religious commitments that Islamic

banking entails. Appealing to the mass market, including non-Muslims, poses challenges but also promises high rewards considering the increasing financial literacy of the country and the growing sophistication of the middle class consumer. The untapped market of the rural 'unbanked' population presents potential given their need to access unsecured loans and their preference for the profit sharing

Appealing to the mass market, including non-Muslims, poses challenges but also promises high rewards considering the increasing financial literacy of the country and the growing sophistication of the middle class consumer

mechanism that shariah banking offers. The consumer lending side is where Shariah banks have been the most successful in the past, consumer financing made up 32.4% of all the shariah compliant loans issued in 2010 (Bank Indonesia). Auto financing in particular is growing increasingly popular as around 80% of all car purchases in Indonesia are through loans. This trend is set to continue as car sales continue to increase with projected unit sales at 800,000 for 2011. Shariah loans are expected to increase over 2011 with Bank Indonesia setting the target of 40%



growth from 2010 figures of 68.18 trillion Rupiah. The focus for 2011 is for shariah compliant lending to go towards financing investment for real economic growth such as infrastructure as well as agriculture. Islamic bonds or sukuk bonds have made impressive progress in Indonesia, being used to fund state infrastructure projects as well as by private companies. The domestic investor base in retail *sukuk* bonds is growing rapidly with the issuing of Islamic government infrastructure bonds. Indonesia has been relatively late in the Islamic bond market compared to other Muslim majority countries but their issuing since 2008 have been very popular among domestic investors. The shariah bond market still has a long way to go; in 2010 shariah corporate bonds accounted for only 2.43% of total corporate bond transaction values based on Indonesia Bond Pricing Agency's (IBPA) data. Islamic or *sukuk* bonds are developing in line with the efforts by the IDX to educate the public on domestic investment, while deepening the capital

markets. Yet, SOEs have failed to capitalise on the popularity of *sukuk* auctions to raise funds. Only five SOEs have issued *sukuks* in the past. However, given their need for vast sums to fund public services, the instruments are a natural solution as an alternative funding method. More SOE *sukuk* offerings are likely to occur in the near future with the broadening of the range of underlying assets that can be utilised. Challenging bureaucracy and unclear regulations have been a challenge to the growth of the industry as the banking infrastructure remains weak and transactions are overly complex. Further reforms have been undertaken in the shariah banking sector since the law of 2008 which provided a comprehensive regulatory framework and created a dual banking model. The issue of double taxation on shariah compliant products was a long time drag on profitability in the industry by making transactions expensive and uncompetitive. However moves were taken to address this in the form of Tax Law No.42/2009 that came into effect in April 2010, which is positioning the sector on an even fiscal playing field with that of conventional banking. The country is taking steps to unleash the potential the sector holds in contributing to investment, lending to corporations and raising funds for much needed public infrastructure projects. Trained human resources with expertise in shariah compliance are what is really needed to move the sector forward and allow Indonesia to carve out its niche as an Islamic finance destination.

The long term growth prospects for Indonesia's shariah banking sector are

positive. A general shift in attitude following the financial crisis towards more 'ethical investing' has taken hold of the country's both Muslim and non Muslim population. To take advantage of the interest in shariah banking not only from Indonesia but also from international investors, the government needs to streamline the bureaucracy to make the sector more competitive. Building up the capacity of human resources to be able to provide expertise to the sector and create innovative products that serve the needs of the market is another area where the country is lagging. Indonesia is finding its way in the field, looking to formulate its own brand of Islamic finance rather than just follow the models of hubs such as the UK, UAE and Malaysia. What is important is to ensure that the necessary regulations and framework is in place to avoid the country being behind.



Making the Banks Work for the Real Economy



*Contribution to GDP : 3% (2010)
Number of Commercial Banks : 121 including 4
State Owned banks.*

*Loan to GDP Ratio : 26.1 % (2010)
BOPO :81.6% (2010)
NIM : 5.8% (2010)*

Indonesia's banking sector has been booking impressive profits over the past 5 years, even during the global economic downturn where it showed immense resilience. Looking beyond profits as a yardstick of the sector's performance, the banking sector has come under criticism for its more limited contribution to the real economy. Having remained cautious after the Asian crisis, lending rates remain high and loans difficult to obtain for SMEs and entrepreneurs. Bank Indonesia has therefore stepped in and introduced strict loan to deposit ratios as well as measures for greater transparency to improve competitiveness and efficiency in the banking sector. The low penetration rate of the banking sector and shallowness of the capital markets gives the banking sector plenty

of leverage over lending rates. Indonesia's net interest margin (NIM) stood at 5.8% for 2010 compared to 2.3-4.5% for the other ASEAN economies. This has dropped by only 27 basis points in Q1 2011 despite Bank Indonesia holding the benchmark interest rate steady at 6.75% (Bank Indonesia). The lack of lending is also illustrated in the loan to GDP ratio which was 26.1% for 2010 in stark comparison to 90% for Vietnam or 78% for Thailand. Banks blame the high overhead costs for keeping rates high which highlights issues of efficiency within the sector as a whole.

The issue of efficiency is a contentious one as Indonesia has one of the highest ratios of operational costs to revenue (BOPO) among the ASEAN's 5 largest economies. Indonesia's BOPO stood at 81.6% for 2010, compared to 31.7-73.1%

for the other ASEAN 5 and a 50-60% average for developed economies.

Costs for Indonesian banks have been gradually increasing, with a 17.7% rise between 2004 and 2010. The vast majority of operational costs are taken up by the cost of staff including board members and credit analysts to oversee the lengthy process involved in extending loans. Risk premiums are high in Indonesia due to the political and social environment as well as high volatility in dominant sectors such as real estate and commodity prices. Ironically, the poor efficiency of banks is coupled with high profits as they continue to take advantage of high NIM profit margins.

The issue of efficiency is a contentious one as Indonesia has one of the highest ratios of operational costs to revenue (BOPO) among the ASEAN's 5 largest economies

As of 2011, Bank Indonesia (BI) introduced penalties for banks that have a loan to deposit ratio (LDR) below 78%, thereby urging banks to meet the aim of a 20-23% credit increase for 2011 as well as to lower their net interest margins to facilitate borrowing. BI will levy a 0.1% fine of the bank's deposit base for every 1% below the set LDR. Yet many banks will be prepared to pay the necessary fines to avoid lending on poor quality

assets and trigger a rise in non performing loans in the short term. In addition, a further measure by the Central Bank has seen banks with more than 10 trillion RP of capital forced to disclose their rates to the public through their websites and to the media since March 2011. This is an effort to promote greater transparency and let the consumer decide thereby increasing greater competition among the banks to set in motion a lowering of lending rates for the sector as a whole.

Despite the high rates; lending has been increasing. The course of 2010 saw a 20.46% increase from 2009 in combined lending (Bank Indonesia). Working capital loans saw an increase in 21% and investment lending up by 18.4% year on year, although just over 30% of these loans remained undispersed. For 2011, there are signs that there will be further growth with lending up by an average of 5 trillion RP a week in the first half of the year which if maintained could well see lending reach the 23% target. Banks have also been pledging their commitments to a number of sectors that require investment such as manufacturing as well as increasing lending for home ownership. Islamic banks have been particularly active in offering financing to the agricultural sector.

Yet, the beginning of 2011 also saw a surge in the rate of non performing loans (NPLs) mainly in the working capital segment which could result in more prudent lending towards the end of the year. The total nominal value of NPLs in March 2011 stood at 50.95 trillion RP, up from 48.9 trillion RP from the same period last year (BI).

Banks have also been criticised for their reluctance to lend to development projects such as renewable energy and infrastructure initiatives. Focus has been maintained on areas with high margins such as consumer and retail credit as well as unsecured loans. However,

Banks have also been criticised for their reluctance to lend to development projects such as renewable energy and infrastructure initiatives. Focus has been maintained on areas with high margins such as consumer and retail credit as well as unsecured loans

government regulations are making lending to the private sector a challenge due to the sometimes conflicting legislation. This is particularly true for infrastructure projects under the PPP scheme whereby the law on land acquisition is stopping many projects from progressing. President Director of Permata Bank, David Fletcher notes that some of the initiatives the government are close to implementing such as reform to the land acquisition law will help but there is still a long way to go; 'if there are bankable projects they will get banked, if there are projects that still require government involvement in some way then that is telling you they



are not completely ready for private sector financing.'

Bank Indonesia's policies to boost lending and decrease the NIM will take time to implement and be truly effective. The banking sector is rightfully cautious given the sluggish growth in sectors such as textile manufacturing and agriculture in the face of the rising value of the Rupiah. The uptake of more efficient methods in analysing risk and credit history through information technology will allow banks to increase their lending and lower the costs of doing so. The introduction of cost standardisation by Bank Indonesia will also force the banks to streamline their operations and decrease costs to maintain healthy profits without passing the cost on to consumers. This will require a reordering of the banking culture in the country where the increasing salaries and bonuses have been justified by the profits being produced. In order to meet the government GDP targets of 6.7% growth for 2011, banks must take a long term and sustainable outlook on lending by extending loans to new enterprises that generate jobs and financing for large scale infrastructure projects.

Capital Markets: Widening the Local Investor Base



*Bourse Name : Bursa Efek Indonesia (IDX)
Main Index : Jakarta Composite Index
Number of Issuers : 425 (May 2011)*

Top stocks by Market Capitalisation : Astra International, Bank Mandiri, Telkomsel, Bank Central Asia, Unilever.

Indonesia's stock market has been booming with the Bursa Efek Indonesia (IDX) being heralded as the best performer in the Asia Pacific region for 2010, gaining 44% over the course of the year. Yet, trading still remains dominated by international investors who accounted for 67% of all investments on the bourse at the end of 2010 (Indonesia Central Securities Depository, KSEI). Daily trade is mainly conducted by domestic investors but with approximately 350,000 (KSEI) or less than 1% of the population participating in the market; widening the domestic investor base remains a priority. The risk of capital flight of foreign investors poses a significant threat over 2011 as emerging markets struggle to control inflation and uncertainty continues to plague the

markets with the continuing Euro debt crisis. It is also a thorny political issue to contend with. The IDX and relevant government bodies are therefore taking steps to create a more inclusive environment for investors in order to finance state infrastructure projects and benefit the country as a whole.

Indonesia's Government Debt Management Office faces the challenge of strengthening Indonesian participation in government debt and reducing dependence on foreign investors. This has led to the number of government bond issuances soar over the past few years and greater domestic purchase of debt. This is set to continue over 2011 as the government announced plans to issue global bonds worth \$22.1 billion USD or 1.8% of GDP, to meet the budget deficit for the year. Bank Indonesia

announced at the beginning of 2011 that it may offer dollar denominated conventional and shariah compliant bonds to mitigate risk against capital outflows. Allocations of shares solely for local investors may also be stepped up in future state bond offerings and IPOs undertaken by SOEs in an effort to encourage local investors to be part of their national economic development.

The rapid rise of online trading over the past 3 years has seen the number of participants in Indonesia's stock market grow dramatically

Indonesia's bond market remains dominated by government bonds and has been spurred by the issuing of new products such as government retail bonds in 2006 and shariah bonds or *sukuk* since 2008. Sales of *sukuk* bonds rose by 56% to 26.2 trillion Rupiah in 2010 (Bank Indonesia). These products are attractive to a broad scope of the market as they require a low minimum investment of around \$550 USD as well as meeting the low risk appetite of the individual investor as they are government backed. The government is also planning on using a more diverse range of assets as the basis for further *sukuk* offerings in the future. These include financing for the construction of highway projects known as *Istisna sukuk* whereby a purchase order for the

underlying asset is delivered at a future date. The government is preparing legislation to be passed as of mid 2011 to enable the issuing of new shariah compliant financial instruments. These types of issuing are considered to be more high risk than more traditional Al-ijara *sukuk* so the response of the market will remain to be seen in terms of impacting domestic participation.

In May 2011, the IDX unveiled the new Indonesian Shariah Stock Index (ISSI) to act as reference for investors in a further effort to woo both domestic and Middle Eastern investors. The existing Jakarta Islamic Index was established in 2000 but lists only 30 companies. The ISSI is made up of 214 stocks currently listed on the IDX that are considered to be shariah compliant and make up 43% of the total in terms of market capitalisation of the exchange. These measures have been taken to reassure existing and potential investors that their investments comply with Islamic law and are *halal*. Such measures will surely have a positive impact in bringing more ethically minded investors from both Indonesia and the Middle East in light of continuing political instability in Middle Eastern markets.

The rapid rise of online trading over the past 3 years has seen the number of participants in Indonesia's stock market grow dramatically, particularly outside of Jakarta. In 2008, online trading made up a marginal amount of trade volumes at less than 4%. Yet at the end of 2010, 40 of the total 119 members of the exchange are using online trading platforms with the top 3 companies accounting for over 8% of daily trade volumes; a figure that will undoubtedly increase over 2011.

Improved access and faster internet services have made online trading more appealing, particularly to the country's youth, as well as the increased affordability of handheld devices such as Blackberry. New online trading platforms and compatible software on these devices has given Indonesians the tools to take advantage of their booming stock market and strengthening currency. Online trading has deepened the investor base by allowing retail investors into the market who do not have access to brokers, which is often the case in cities outside Jakarta. The downside of this trend is its contribution to market volatility as online investors tend to be short term in their thinking focusing on quick returns by holding positions for no longer than a few days or hours.

The IDX has also undertaken campaigns to educate the population on the potential benefits of capital market participation such as the setting up of 'IDX Corners' in university campuses. Trading companies have also joined in on the action through marketing campaigns and stock trading competitions. This is proving popular among younger investors, yet memories of investment scandals in the past maintain caution among the older generation. The Capital Market and Financial Institutions Supervisory Agency (BAPEPAM-LK) and KSEI are strengthening their oversight authority as well as utilising technology to give investors greater access to their accounts in real time. At the beginning of 2011, BAPEPAM-LK issued new regulations to separate security companies' accounts with that of its clients, allowing



individual investors to control their own investment accounts. Such accounts can be set up through four nominated banks with the measure to be fully effective by February 2012. This, on top of the introduction of the KSEI Akses card in 2010 for online investment monitoring is a further effort to boost confidence in the capital markets by providing additional protection to investors.

The increasing innovation in capital market products and methods of access from both the public and private sector will continue to bring more local investors into the fold. Islamic compliant products and particularly government issued bonds are attractive to existing investors and newcomers to the market by appealing to the desire to support their national growth, while investing ethically. Deepening the capital markets through greater domestic participation will also be instrumental in keeping a handle on foreign investor volatility as the country edges towards investment grade. Future plans by the government to grant greater share allocations in global bond offerings to local investors may achieve the desired effect, but potentially at the risk of creating a less friendly environment for foreign investors.

The Prospects for Indonesia's Insurance Industry



Contribution to GDP : >1% (2010)
Real Sector Growth : 30% (2010)
Number of Life Insurance Companies : 46

Number of General Insurance Companies : 90
Number of Policy Holders : 16.75 million (2010)
Total Assets : 236.6 trillion RP (2010)

The Indonesian market is incredibly attractive for the insurance sector. In the life insurance segment in particular considering the low penetration of insurance coverage and the young demographics of the population. There remains huge untapped potential, with less than 10% of the population holding any form of insurance coverage. In light of current growth, Indonesia's insurance industry is forecasted to triple written insurance premiums to 254.5 trillion RP (US\$ 28.5 billion) by 2014 (Insurance International News). As competition increases within the sector, local providers are keen to find international partners to gain a competitive edge by diversifying their product portfolio and gain insights into marketing techniques. This comes at a key time in the

industry's development with the introduction of stricter capital requirements and therefore opportunities for mergers, acquisitions and joint ventures.

To prepare for the future role that the sector will play in the economy, the Capital Market and Financial Institution Supervisory Agency (BAPEPAM-LK) began placing strict capital requirements on insurance companies as of the end of 2010. The new requirements being enforced for both life insurance and general insurance companies are designed to strengthen and consolidate the sector over time, with required levels rising each year. As of the end of 2010, the capital requirement was 40 billion RP and 25 billion Rupiah for shariah insurance companies. This is scheduled to rise to 70 billion RP and then 100 billion RP by 2012 and 2014

respectively. The Insurance Bureau at the Regulatory Agency of Market and Financial Institution reported that at the beginning of 2011, there were 14 insurance companies that have failed to meet the requirements out of which 10 are life insurance companies. Those that fail to meet these requirements face a penalty from the regulator and pressure to merge to meet the targets. This is a significant move in unleashing the potential of the sector that has been held back due to a lack of capitalisation, leading to limitations of scope in the undertaking of risk and under pricing as a result. The new capital requirements will shift the industry from its current state of fragmentation to a sector of scale.

In lieu of the introduction of the capital requirements and spurred by the global financial crisis; a number of mergers and acquisitions took place during 2010 and the beginning of 2011. Indeed, insurance acquisitions posted some of the highest acquisition transaction values in the economy as a whole. These included Aviva's entrance into the market through acquiring a 60% stake in PT Asuransi Winterthur Life. As per the beginning of 2011, PT Asuransi Jiwa Sinarmas was awaiting licensing approval for its new partnership with Mitsui Sumitomo Insurance Corporation that will see the Japanese insurer taking a 50% stake. According to data from Bloomberg, three acquisitions over the course of 2011 amounted to \$824 million USD. More local insurance companies are looking for foreign partners to strengthen their capital base as well as for transfer of knowledge. The divestment of bank owned insurance

companies is an area that investors can expect upcoming opportunities. PT BNI Life Insurance which is majority held by state owned BNI (Bank Negara Indonesia) is widely expected to take on a partner shortly following statements from the President Director which is in line with the current divestment of their other business units. Privatisation of other state owned life insurance and general insurance companies are also awaited by investors. State owned PT Asuransi Jasa Indonesia is the second largest general insurer in the country and is slated to undergo an IPO in 2011 according to the Ministry of State Owned Enterprises. Smaller scale, undercapitalised insurers are another avenue for strategic investors as these companies seek to move up a gear in terms of customer base and their product range.

Life insurance remains the most exciting segment of the insurance industry with the number of policy holders increasing by 48% from 2009 to 2010 totalling 16.75 million people according to the Indonesia Life Insurance Association, AAJI. This stands in comparison to other types of insurance that grew by 5.7% over the same period (The Indonesian General Insurance Association). The AAJI recorded a 24.40% increase in assets for the sector over 2010 and is targeting annual growth of at least 25% to reach 500 billion RP in assets by 2014. The exponential growth in this sector is a result of the increased levels of education and awareness among the growing middle class. The popularity of the asset class as a platform for savings and investments is another factor influencing sales. This is amplified by the increasing

sophistication in the types of products available on the market which will see this upwardly trend continue.

Unit linked products have become increasingly popular among the insurance retail market since their introduction in 1998. Data from the Indonesian Life Insurance Association shows that the unit linked premium income of life insurance companies has reached 58.87% from total premium income of the industry of 75.98 trillion RP at the end of 2010 and 62.41% of all new premiums. The popularity among Indonesian consumers is due to the flexibility that the products offer through a guaranteed cash value after an agreed time as well as the benefits of the coverage coupled with the strong performance of the stock market. Insurance companies have been quick to react to meet the market demand as middle class consumers increasingly turn to insurance as an asset class for investment. WanaArtha Life launched their new WALink product in May 2011 with further products in the class expected later in the year. Companies offering shariah compliant *takaful* products such as Aviva and PT Asuransi Takaful Keluarga also introduced unit linked investment products using shariah based investment funds at the beginning of 2011.

The current regulations embodied by the Minister of Finance Decree No.424/2003 stipulates that unit linked products are limited to six different investment instruments such as cash deposits, mutual funds and bonds. A new draft of the regulation regarding Financial Performance of Insurance and Reinsurance Companies is expected to

widen the scope of unit linked products to sovereign bonds and real estate investment trusts as well as multinationals' bonds in which Indonesia has a stake. This will open up further potential in offering more sophisticated products and thus the need for collaboration with international partners in terms of knowledge and technology.

Life insurance remains the most exciting segment of the insurance industry with the number of policy holders increasing by 48% from 2009 to 2010

Indonesia is one of the markets in which micro insurance is proving very successful. As an example, for Allianz it is the fastest growing sector of their business as per 2010. While giving low premiums it remains high potential in the country considering the vast rural population, absence of social security coverage and unpredictable weather conditions. Low income consumers are slowly gaining awareness of how to transfer risk through the use of insurance for issues such as natural disasters and specific health cover such as for dengue fever. The types of product on offer have been limited so far with the main focus on life insurance and health coverage in the form of vouchers for one time coverage. This has plenty of scope to expand in the future into other areas such as flood protection, micro education insurance and income insurance for entrepreneurs.



Shariah compliant micro insurance products are also gaining in popularity among the low income market. BAPEPAM-LK announced in mid 2011 that it plans to provide incentives to insurance companies that will offer micro insurance products by reducing the cost of agent certification through the Indonesia Life Insurance Association. This would be a major boost for the sector as distribution remains a challenge. The need for personal presence is an important characteristic of the Indonesian market but this method is unsuited to micro insurance products due to agent fees.

Use of new technology will also increase penetration among the lower income bracket. PT Asuransi Jiwa Mega began cooperating with a telecom provider to sell micro insurance through mobile phone credit reduction in Q1 2011; the success of this method will be an interesting test for the market. Other methods being tried by insurance companies include going through credit card providers and telemarketing.

The potential of micro insurance is an exciting prospect for the insurance industry, finding the correct method to get the product to consumers will surely pay dividends. The announcement in May 2011 by Leapfrog, a private equity firm, that it will enter the Indonesian micro insurance market has given a further boost of confidence to the sector. The company has yet to announce which company it will take a stake in but it is keen to introduce micro insurance products that cover personal accident, motorcycle and property insurance. Further acquisitions in this sector are expected as well as the establishment of partnerships with rural banks and technology companies that offer distribution and delivery channels. Indonesia's insurance sector has numerous opportunities to be found within both the life and general insurance segment. As insurance companies face a transformed regulatory landscape in which to operate in following the financial crisis, strengthening their capital base and gaining access to technical expertise to allow them to innovate within the regulations will be crucial. Large foreign multinationals have been quick to re-enter the market thus stiffening the competition. However the local knowledge required to understand the values of Indonesia's numerous regions, particularly for life insurance products, makes local medium sized companies highly attractive. Those seeking to tap the sector should therefore look for companies with a well established distribution channels and customer base in primary and secondary cities for a competitive advantage in the market.

Global Business Guide meets with Maryono, President Director of Bank Mutiara.

What is the current strategy of the bank as it continues to restructure itself following the takeover by the Deposit Insurance Corporation in 2008?

Previously Bank Mutiara was known as Bank Century and it had problems with mismanagement, liquidity issues and a lack of profitability. On the takeover of the bank, I implemented a strategy in 3 stages. The first stage was 'survival' to ensure that the bank was not closed and to maintain our image for our customers. The second stage was building the foundations of the bank and the third stage is to focus on the business itself. Part of that strategy was to set a new vision to be the best retail bank and to provide excellent customer service, to achieve this we created a new company philosophy and culture. For the past two years I have been actively enforcing good corporate governance to grow the business and total assets to 11 billion RP. That is an increase of 5.5 billion RP in 2 years. Credit growth increased by 29% from 2009-2010. This has all been part of the fundamental transformation of the bank which I hope will lead Bank Mutiara on to be the best retail bank in Indonesia in the 10 billion RP equity segment.

With Bank Mutiara currently being up for sale, what does the bank offer potential investors as an opportunity?

The bank is a very interesting opportunity for an investor wanting to come into Indonesia's banking sector as the



The bank has an established reputation as an organisation that continues to innovate with new products

country has recently began to experience political stability and sustained economic growth. The bank must be considered against the backdrop of this economic prosperity which is fuelled by Indonesia's unique conditions of immense natural resources and a large, inexpensive labour force.

The bank has an established reputation and is an organisation that continues to innovate with new products for the whole population from rural banks to priority banking clients. The existing network of branches all over Indonesia, our partnerships and client base are all excellent advantages.

Global Business Guide meets with Arvin Arifin, President Director of Bank Muamalat.

Indonesia's Islamic banking sector still holds a marginal market share; what needs to be done to expand the sector in the world's largest Muslim majority country?

The growth of Islamic banking is much faster compared to that of conventional banking today. Referring to the data from Bank Indonesia, assets of Islamic banking industry grew 47.55% in 2010, while conventional banks grew only about 18.73% last year. Nevertheless, this growth needs to be accelerated to

Islamic banking can contribute to constructing a stronger and more equitable economy



obtain a proper market share. The expansion of Islamic banking must be followed by adequate public understanding of Islamic economics and finance. The perception that Islamic banks do not have any additional value compared to conventional banks has deterred the public from using an Islamic bank. Many people still consider Islamic banking products are only a variety of conventional banking products, and are not conscious of the fact that Islamic banking can contribute to constructing a stronger and more equitable economy.

The bank is already has an overseas branch in Malaysia, what can you tell us about future international expansion plans?

We are the only Indonesian Bank operating a full branch in Malaysia. In the future, we will continue to extend our service regionally and globally such as to Jeddah in Saudi Arabia and Hong Kong.

How is the bank working towards supporting Indonesia's global positioning and international trading activities?

Among the bank's most recent exploits is providing a *Murabaha* financing facility amounting to \$14 million USD for PT. Indo TH Plantation, a subsidiary of Tabung Haji Malaysia. Previously, we had also forged an alliance with the Malaysia based Asian Finance Bank and Qatar Islamic Bank for the promotion of Islamic Liquidity Funds. Earlier in 2010, Bank Muamalat also developed cooperation with Elaf Bank of Bahrain for a *wakalah* interbank arrangement.

Global Business Guide meets with Eddy Berutu, President Director of WanaArtha Life Insurance.

Indonesia's insurance sector presents both great challenges and opportunities. What is your outlook on the country's insurance industry?

Our perception of the Indonesian market is that it is one of the most attractive because of the low penetration rate, the huge population, consistent GDP growth so spending power is growing and having a young population which is suited to insurance. Compared to India for example, our culture is more adaptive to new technology, so we can catch up faster in the insurance industry. Our capital markets have only been flourishing for the last 5 years. Unit link is a very popular product linking life insurance and investment and is selling very well. I think we can double the premium and the assets in this every 4 years.

What role can insurance play in Indonesia's development?

The insurance sector can contribute a lot to the country and we are confident we will do so. Working alongside the government, we need to find ways to incentivise people to buy life insurance as they do in other countries. With that, the insurance sector can grow very fast in Indonesia. Currently when we have a natural disaster, the state budget has to pay out to the citizens. With the transfer of that risk to the private sector, we take on the risk and the country can use the state budget for what is needed such as infrastructure and education.



Compared to India for example, our culture is more adaptive to new technology, so we can catch up faster in the insurance industry

What differentiates WanaArtha Life as a potential local partner in the life insurance sector?

We have been in the business for 36 years, some of our friends here have been here for only 5 or 6 years. We are consistent and know how to serve the Indonesian population. Secondly, we are local and understand the behaviour of the market. Palembang is totally different from Batak for example; so from this we can add value for our partners. Thirdly, although a local company we have the work standards of an international company.

Manufacturing

110-113 Overview of the Manufacturing Sector

An introduction to the manufacturing sector of Indonesia and the main industries involved in it. This section provides an overview of the trends impacting the industry and recent changes that have taken place to shape its course of development such as the CAFTA.

114-116 Overview of Fibre, Textiles and Garments

An outline of some of the main trends in Indonesia's fibre, textile and garment industry. As the global economy recovers and demand from emerging markets within the ASEAN increases, this section looks at Indonesia's standing in terms of both exports and domestic consumption.

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Challenges in Indonesia's FTG Industry

While being one of Indonesia's oldest industries, the country's FTG producers have found it difficult to maintain a competitive edge. This section covers some of the challenges being faced by the sector in a context of intensified regional and global competition.

119-121 Overview of the Pharmaceutical Sector

The value of Indonesia's pharmaceutical market remains low considering the size of the population providing plenty of scope for future growth. This section looks at the characteristics of the sector and trends among Indonesian consumers.

122-124 Opportunities in the Pharmaceutical Sector

Indonesia's vast domestic market and positioning as the largest economy within the ASEAN make it an attractive option for pharmaceutical producers seeking to tap into the region. This section looks at some of the main developments and regulations governing investment in the sector.

125-128 Automotive Industry: Driving Manufacturing

The automotive sector has become a major driver of the economy for both sales and manufacturing. Poised to become the largest car market in the ASEAN, car manufacturers have stepped up their capacity and may see Indonesia positioned as a regional and global hub.

129-130 Overview of the Food & Beverage Sector

The food and beverage sector is one of the fastest growing subsectors in Indonesia's manufacturing industry due to increased consumer spending and changing lifestyles. This section looks at the interaction between local and multinational players as well as consumer habits.

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Mr Johan Tamsir, President Director of Trimitra Citrahasta.

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Ms Stacey Hermijanto and Mr Suresh Khurana, Managing Director and Chief Operational Officer of Shinta Group.

Overview of the Manufacturing Sector



*Contribution to GDP: 21% (2010, Non O&G)
Real Sector Growth: 4.6% (2009-2010)
Number Employed in the Sector: 14.4 million*

*Main areas: Automotive, Electronics, Textiles,
Footwear, Food & Beverage, Palm Oils, Metal
Products, Chemicals.*

Manufacturing was a key driver of the Indonesian economy from the 1980s up until the end of the 1990s. The sector continues to be a major source of employment for the country by employing 14.4 million people as per the end of 2010. Yet productivity and growth levels have not matched that of regional competitors in core industries such as textiles. Indonesia now faces a transformed global trading environment from its heyday; faced with fierce competition from free trade agreements across the ASEAN and China. Such competition has served to highlight the inadequacies in areas such as technology, infrastructure as well as the slow pace of reform in industry regulations to attract foreign investment. However a stable political and economic environment, the latter

having been largely fuelled by domestic consumption, is raising confidence in the manufacturing sector for both local and international investors. Moving up the value added chain in order to fully take advantage of the country's wealth of natural resources will be the next step to raise Indonesia's manufacturing competitiveness on the global stage. Indonesia's manufacturing sector is highly diverse and a reflection of the vast array of natural resources at the country's disposal. This ready availability of valuable commodities has been to the detriment of the development of value added manufacturing processes and products. Rampant natural resource extraction of products such as bauxite and Crude Palm Oil (CPO) are largely destined for export to be used in value added processes in markets such as

for aluminium in automotive production and in cosmetics for both products respectively. Indonesia has been losing out by being at the bottom of the value chain only. The percentage of value added for key manufacturing industries such as food, beverage and tobacco has hovered at around 30% for the past decade. The government is actively trying to address this issue through both carrot and stick measures. Export taxes are being levied on raw materials such as CPO by up to 25% while the Law on Mining and Minerals of 2009 determines that by 2014, all extracted materials must undergo value added processes before they can be exported. The government is promoting the numerous opportunities in the downstream sector to foreign investors. Proposals from the Ministry of Trade regarding revisions to the Negative Investment List that would increase foreign ownership in industries with large capital requirements are being discussed as per mid 2011. The construction of downstream facilities close to the sources of the raw materials will also serve to develop the regions outside of Java such as for cocoa processing in Sulawesi.

Indonesia's manufacturing sector is highly diverse and a reflection of the vast array of natural resources at the country's disposal

In terms of foreign direct investment, manufacturing does continue to be the



most popular sector in the economy. Investment in the sector rose over the course of 2010 by 12% from 2009 and the first half of 2011 has seen a growth of 5-6%. Government incentives are currently being prepared (as of April 2011) for foreign investors to establish manufacturing bases in Indonesia to boost exports, under the Coordinating Ministry for Economic Affairs. Such incentives will include tax holidays for investors in key sectors such as textiles and garments as well as raw material producers in areas where the country is lacking. Indeed, high production costs due to the myriad of import taxes that are imposed on the vast majority of raw materials needed for production is a major disadvantage for the manufacturing industry. More domestic production facilities of raw materials such as chemicals for the textile and pharmaceutical industry are a vital component for Indonesia to reach the Ministry of Industry target of 8% growth in manufacturing by 2014.

Incentives will certainly generate interest from investors seeking to find a production base in Asia and hedge their risk against rising wages in China, but it will take large steps in infrastructure development and bureaucratic reform to really revitalise the sector's ailing industries.

More domestic production facilities of raw materials such as chemicals for the textile and pharmaceutical industry are a vital component for Indonesia to reach the Ministry of Industry target of 8% growth in manufacturing by 2014.

The introduction of the ASEAN - China Free Trade Agreement (CAFTA) in January 2010 has had an overall negative impact on the country's manufacturing sector. The agreements presented a double edged sword in terms of providing tariff free access to China's raw materials, while allowing the market to be flooded with Chinese made goods. The rapid inflow of Chinese textiles, electronics, footwear, cosmetics, food and beverages has seen the trade deficit with China in non oil and gas trading widen by 44% to \$2.27 billion at the end of April 2011. In labour intensive industries, the CAFTA has

highlighted the challenges Indonesia faces in trying to take on China by price alone considering the latter's larger capacity and superior infrastructure that makes transportation an average of 5% of total production costs as opposed to 15% in Indonesia. However, while en masse production is where China and others hold a competitive advantage; Indonesia has the opportunity to position itself in terms of quality. In textiles for example, Indonesia's fabric and yarn producers saw an initial drop in sales to domestic garment producers in the aftermath of the CAFTA; yet this reversed with domestic sales up by 33% in Q1 2011 compared to Q1 2010. Other products such as footwear have seen a similar trend as the demand from local manufacturers for quality and reliability has trumped that of price in the wake of increased consumer spending and confidence. That is not to say that the challenge has been met, indeed imports of Chinese goods are still rising and Indonesia's labour intensive industries will have to play to their strengths to remain competitive.



Greater investment in research and development to generate innovation and move to more high technology industries is a necessity for the manufacturing industry. Compared with other major emerging markets such as Brazil, China and India which have seen growth in their exports of medium and high technology industries at an average of 25% over the past decade, Indonesia's have grown at only 15% (OECD). The Long Term Development Plan of the country to 2025 specifically addresses this issue and includes research, for which spending only accounts for 0.1% of GDP, as one of seven core pillars. A National Innovation Committee under Professor Zuhail of Al Azhar University who was formally the Minister of Research and Technology, was set up in 2010 to formulate policies to promote innovation in strategic industries for economic development.

While such efforts are a step in the right direction for attitudes towards the future of manufacturing; to be effective

they must be accompanied by financing. Banks have been reluctant to lend towards the manufacturing sector due to its low competitiveness and sluggish growth in labour intensive sectors. From 2009 to 2010, loans to the manufacturing sector decreased by 13.1% compared to an increase in over 40% for the mining sector according to Bank Indonesia. The lending rate to the sector has remained high at 12-15% compared to 5-6% for other countries.

For 2011, Bank Indonesia has placed manufacturing as one of the priority sectors for lending by the country's banks, although this does exclude timber and textile producers. Loan figures for Q1 2011 show that so far disbursement is 10% under target for the sector, while manufacturing loan requests accounted for only 2.7% of the total. The requests for loans is likely to pick up as the year progresses to above the 14% for 2010 as investment plans are consolidated in line with the announcement of expected government incentives and tax breaks.

% Share of Total FDI Inflows by Sector

	2008	2009	2010	Average
Agriculture & Forestry	2.1	-1.1	2.1	2.7
Fishing	-0.3	0.2	0.4	0.1
Mining	38.7	26.7	13.5	19.1
Manufacturing	24.9	32.3	36.2	37.9
Utilities	-0.6	1.1	1.6	0.4
Construction	0.3	0.1	-0.4	0.8
Wholesale & Retail	12.4	1.5	19.4	4.9
Hotels & Restaurants	0.2	0.0	0.4	0.0
Transport & Communication	1.4	36.9	18.7	13.3
Finance	20.7	3.1	3.2	13.9
Real Estate	-2.2	-0.5	0.2	-0.5
Other	2.3	0.3	5.1	7.4

Source: The World Bank, 2011

Overview of Fibre, Textiles & Garments



*Contribution to GDP : 21% (2010, Non O&G)
Real Sector Growth : 4.6% (2009-2010)
Employed in Manufacturing : 14.4 million*

*Average Employee Salary : 1,173,500 RP/month
Main Export Markets : China, Japan, USA,
India, Singapore, Malaysia, EU.*

The fibre, textile and garment (FTG) sector is one of Indonesia's oldest and most strategically significant industries. It employs an estimated 11% of the total industrial labour force or 1.34 million people in 2,853 companies and accounted for 8.9% of total exports in 2010. Historically, Indonesian textiles have fared well in international export markets by meeting high quality standards; particularly in developed markets such as the USA. Local producers have become suppliers for some of the world's largest apparel brands as well as for industrial fabrics. After a sharp curb in demand for exports during the economic crisis, FTG production and exports began to bounce back at the end of 2009, only to meet a new challenge in the form of the ASEAN China Free Trade Agreement (ACFTA)

in January 2010. After an initial shock caused by floods of cheap Chinese made fabrics and garments, manufacturers are once again finding their feet with both domestic and global textile consumption increasing. What lies ahead for the industry depends on how manufacturers position themselves to offer value added products as well as the pace of reform in regulations for investment and infrastructure.

With a ready supply of petrochemical derivatives such as purified terephthalic acid (PTA), Indonesia's synthetic fibre producers are well positioned to serve the global textile industry's appetite for materials such as polyester and rayon. As cotton prices nearly doubled over the course of 2010 hitting a 15 year high, garment producers around the world have shifted to using polyester and

cotton blended yarns as synthetic fibre prices increased less drastically by 43-77%. Global consumption of synthetic staple fibres rose by 6% in 2010 while synthetic filament fibres rose by 8% (European Manmade Fibres Association). Indonesian garment producers have followed the same trend; the Indonesia Synthetic Fibre Association states that domestic consumption of synthetic fibres reached 115 thousand MET in Q1 2011; a 4.5% year on year increase. Total sales reached 525,000 MET in 2010 with industry capacity at 90% and projections are set at 545,000 MET for 2011. Fibre products make up a substantial part of total sector exports at 16% of the total for 2010. From the 2009 figures, the proportion of exported rayon fibres grew by 46.7% and other yarn by 29.3%. The continuing trends in commodity prices will most likely see Indonesia's synthetic fibre export value further increase in 2011.

From the perspective of exports, Indonesia is in an ideal position to meet market demands given low wages in comparison to China as well as being politically stable

From the perspective of exports, Indonesia is in an ideal position to meet market demands given low wages in



comparison to China as well as being politically stable. Chinese textiles have been subject to a gradual decline in exports to markets such as the US and Europe from 2010 as the country has become mired in trade disputes. As these markets look for alternative sources, Indonesia is seeing a revival in exports but figures are not rising as fast as they are for countries such as Vietnam and Bangladesh. Indonesia's main weakness in expanding export market share in apparel is its relative slowness when it comes to adapting to new styles in the fashion industry. This is exacerbated by the poor transportation infrastructure which makes shipping times unreliable and the lengthy customs process involved that puts import clearance at an average of 27 days and exports at 20 days according to the World Bank Doing Business Report 2011. Such conditions are therefore unattractive to the fast paced movements in the fashion apparel industry.



Total export sales of the sector rose to \$11.32 billion USD in 2010, up from \$9.34 billion in 2009. Exports are targeted to increase over 2011 to \$15 billion USD as buyers seek cheaper alternatives to China. In 2010, 37.6% of garment exports went to the USA and 19.4% to the European Union, however such figures account for only 5.54% and 2.36% of total destination imports respectively. In addition the natural disasters that struck Japan at the beginning of 2011 hit exports as Japan is one of Indonesia's main textile markets. The announcement by Turkey that it will begin imposing an import tax as of July 2011 on finished garments and certain woven fabrics is also a potential dampener for target export figures.

Textile exports to ASEAN countries grew at an average of 12% annually for the past two years. It will be this market, as well as raising the export share in

advanced industrial markets such as the EU and USA, that are really the priority for 2011, according the National Textile Association. As an investment destination for textile producers, Indonesia holds a number of significant advantages. Low labour costs, political stability, availability of raw materials and cheap industrial land which are attracting investors who are seeking cheaper alternatives to China's rising wages. The average textile worker wage in China has risen to \$247 USD a month, in comparison to \$140 in Indonesia. It faces stiff competition from the likes of Vietnam and Cambodia who share many of the same attributes by being positioned within the ASEAN, but it appears that Indonesia is making headway in the competition. At the beginning of 2011, the Indonesian Textile Association announced the relocation of 15 Chinese textile firms to

At the beginning of 2011, the Indonesian Textile Association announced the relocation of 15 Chinese textile firms to the country with up to 100 companies expected to follow suit

the country with up to 100 companies expected to follow suit. Infrastructure issues, human resources and lack of energy supply are subjects that are still under discussion before the announced moves can come into fruition.

Challenges in Indonesia's FTG Industry



*Contribution to GDP : 21% (2010, Non O&G)
Real Sector Growth: : 4.6% (2009-2010)
Main Products : Synthetic Fibres, Denim,*

*Industrial Textiles, Sportswear, Apparel.
Main Export Markets : China, Japan, USA,
India, Singapore, Malaysia, EU.*

While being one of the country's oldest and most important industries in terms of employment, Indonesia's textile industry is facing immense challenges in modernising itself and thus finding its place among regional competitors. The volatility in exports to key markets such as the United States has made banks reluctant to lend and the state has had to take a leading role in bringing the sector into the 21st century and the era of intensified free trade.

Outdated machinery has long been an issue holding back productivity in textile exports with an estimated 70% of all machinery in use being classified as 'old' (10-25 years) according to the Ministry of Industry. The country's textile industry faces the tough choice of either heavily investing to measure up

with its global competitors or be left behind and see productivity as well as exports decline. In response to this, the government introduced a textile machinery restructuring program in 2007 that provides incentives for participants such as a 10% discount on machinery and a lower interest rate. Executed by the Directorate for Textiles and Various Industry under the Ministry of Industry, the program aims to distribute funds to the value of 177 billion RP to 200 companies in 2011. As a further measure for the industry, Ministry of Finance Decree No.80/2011 exempts textile machinery imports from custom duties.

The introduction of the China - ASEAN Free Trade Agreement (CAFTA) in January 2010 hit fibre, textile and garment (FTG) producers particularly

hard with a 70% surge of Chinese exports over the year. The domestic market share of imported textiles, particularly those from China, is increasing and reached 40% of the total in 2010. It is predicted to reach 50% in 2011 according to the Indonesian Textile Association. For garments specifically, the total value of imports in 2009 stood at \$99.9 million USD, acutely increasing to \$126.2 million in 2010. The figures from the Ministry of Trade show that China accounted for \$45.1 million of

Indonesia is making headway in both the local market and in China by competing as a high quality producer and will therefore see the benefits of the CAFTA

total garment imports followed by Hong Kong with \$23.9 million. However, while the trade balance has widened in the immediate short term; figures show that Chinese imports of Indonesian textiles grew by 30% and fibres by 65% over 2010. Indonesia is making headway in both the local market and in China by competing as a high quality producer and will therefore see the benefits of the CAFTA in the medium term as Chinese textile consumption is growing rapidly from 12kg per capita in 2009 to 18 kg per capita in 2010.

Price wise, Indonesian textile producers are finding it difficult to compete compared to China and regional

neighbours. The Ministry of Finance Decree No 241/2010 on the Setting of the Classification of Goods System and the Imposition of Import Duty on Imported Goods increased the import duty on textile raw materials such as MEG, and Caprolactam, by 5%. Textile producers have had to raise their prices in line with the import tariffs and the 18% rise in electricity costs thereby comparing unfavourably to imports at 10-15% dearer as finished garments can be imported tariff free. It is hoped that these tariffs will soon be overturned as the original regulation that covered some 2,165 products of various classes has been subject to a number of revisions due to the negative impact on many of the manufacturing sectors. New revisions regarding non food items including those related to the textile industry are yet to be signed into law by the Ministry of Finance as per June 2011. Improving Indonesia's stance in the global textile market will come from not only improvements to the regulatory environment and updating of machinery, but also from improving its position among its domestic market. Branding and marketing of Indonesian made textiles has been conducted poorly in the past and domestic brands have not taken a strong footing among Indonesian consumers. Foreign apparel brands have flourished in the upper end of the market as have the imports of cheap garments from China that are on trend. With a reorientation of the sector towards higher quality goods and greater focus being placed on innovation and creativity; Indonesia has a strong base for further developing its textile garment, textile and fibre industries.

Overview of the Pharmaceutical Sector



Total Sales : 4.4 billion USD (2010)
Real Sector Growth : 11% (2010)
Expected Sector Growth : 14% (2011)

Spending on Medicine per Capita : 17 USD
Number of Companies >200
Local Market Share : 75%

Indonesia's pharmaceutical sector has been growing steadily with double digit compound growth since 2009 and projections of 14% growth for 2011 according to the Indonesian Pharmaceutical Association. The high growth figures are a reflection of the rising disposable incomes of the population, but placed into context the value of the market itself is very small for a country of 240 million people. The lack of healthcare coverage, low quality of services on offer and the high cost of drugs relative to average wages has given rise to trends such as self medication and going abroad for treatment for those who can afford it. Considering the size of the market and changes in lifestyle, the sector is poised for considerable growth but manufacturers face a challenge in lack of local raw

material supply, increased competition in the generic drugs market, regulatory barriers holding back international investment and a lack of innovation that has marred the sector.

Indonesia is a highly attractive market for the pharmaceutical industry given its large population as the fourth most populous country in the world, but spending on healthcare is very low in comparison to neighbouring countries of similar GDP. Indonesians spend on average \$17 USD per capita on pharmaceuticals; 25% below that of the Philippines while total spending on healthcare is \$52 USD a year, compared to \$300 in Malaysia, according to the World Economic Forum (2010). In terms of consumer preferences, sales for over the counter drugs are growing faster than that of prescription drugs with

growth at 17.3% and 9.9% respectively for 2010, but the latter has the dominant market share at \$2.4 billion USD or 54.5% of total consumption for 2010 (Statistics Indonesia). Vitamin and nutritional supplements are also growing in popularity among more health conscious consumers. Total sales reached \$4.4 billion USD at the end of 2010 (out of \$700 billion globally), an increase of 11% from 2009. Yet more dramatic growth is expected with the increased awareness of the need for healthcare and eventual introduction of the National Social Security System that is scheduled to be implemented in 2015 under Law 40/2010.

Indonesia is a highly attractive market for the pharmaceutical industry given its large population as the fourth most populous country in the world, but spending on healthcare is very low in comparison to neighbouring countries

The sector is highly competitive and heavily fragmented among more than 200 companies, 35 of which are foreign owned including the world's largest producers such as Pfizer and GSK. The local producers are dominant in the market, making up 79% of total market



share. Of the top ten companies, 7 of them are local companies with Kalbe Pharma leading the pack at 14% of the market. The top three global drug producers namely Pfizer, Bayer and GSK collectively hold only 8% of the market. The sector is heavily concentrated among the top companies with around 20 companies accountable for 80% of total production and locally produced drugs making up 75% of total consumption. State Owned Enterprises play a key role in generics and vaccine production through Kimia Pharma, Indofarma and Bio Farma. The prospect of a merger in the future has been discussed to increase competitiveness in distribution and expertise.

The market illustrates an unusual trend in the small market share taken up by the multinationals. This is mainly due to the high cost associated with branded drugs that only the middle and upper income markets can afford. As awareness of health develops and incomes rise, consumers will begin

to demand the guarantees of quality and innovation that local drug companies have been slow to offer. The introduction of Good Manufacturing Practices (a set of policies from the World Health Organisation) as well as the ASEAN Common Technical Dossier and Requirements will also squeeze out local companies that are not meeting quality standards.

The real impact on the industry will come with the eventual introduction of a national social security system that will grant coverage to an estimated 50% of the population that is currently uninsured

Quality assurance in pharmaceuticals will therefore play an increasingly large role in the marketing strategies and consumer habits of Indonesians as pharmaceutical sales increase. The wide availability of counterfeit drugs is a major problem in Indonesia with the total amount in circulation estimated at 15-20% of the total drugs on the market according to the International Pharmaceutical Manufacturers Group. Poor regulation in the industry and lack of enforcement of intellectual property laws keep the industry rife with poor quality from the smaller producers. The Indonesian Pharmaceutical Association states that 95% of locally produced

drugs are being consumed domestically, with the remaining 5% exported. Yet, exports of Indonesia's pharmaceutical products have been growing over the past five years by an average of 15% from 2005-2010. State owned Bio Farma produces the world's cheapest polio vaccine and has recently seen a surge in exports, mainly to India where animal based vaccines cannot be produced due to religious reasons. Kalbe Pharma has been present in Africa for 15 years, beginning with Nigeria and since expanding into Zimbabwe, Mozambique and Ghana with production facilities in Nigeria from 2005. Overall, Indonesia's main pharmaceutical export destinations are South Korea, Japan and Thailand for generic drugs. Future export potential lies in the ASEAN market under the AFTA in which Indonesia can compete effectively if given the correct regulatory measures to encourage investment and expand production.

The outlook for the pharmaceutical sector is positive in terms of steady (albeit unremarkable) sales growth to 2014-15. The young demographics of the country, increasing life expectancy with improved living standards and rising incomes are all positive conditions for growth. The real impact on the industry will come with the eventual introduction of a national social security system that will grant coverage to an estimated 50% of the population that is currently uninsured. However, boosting the competitiveness of the pharmaceutical manufacturing sector is a necessity to keep drug prices down and within reach of the general population to avoid local producers losing out to imports from India and China.

Opportunities in the Pharmaceutical Sector



Total Sales : 4.4 billion USD (2010)
Real Sector Growth: : 11% (2010)
Exports as % Total Production : 5%

Number of Companies >200
Number of Foreign Companies : 29 (2010)
Spending on R&D : 2% (industry average)

Despite the immense size of the Indonesian market, low labour costs and the potential of the ASEAN as a whole for pharmaceutical sales; investors are still wary of the country. Recent changes in regulations have been viewed as protectionist and largely in favour of existing local companies which already dominate the market. The sector is in need of a major boost in order to best serve the population, particularly the poorest stratum that is being priced out of the market due to the myriad of taxes and duties that keep Indonesia's pharmaceutical prices among the highest in Asia, while being the least innovative. One of the major weaknesses in the sector is the lack of locally available raw materials that leaves producers at the mercy of fluctuating global prices. High

oil prices will maintain the country's high drug costs that already stand at 25-30% above average world prices, according to the Health Research and Development Agency. Like many of the industries that make up the manufacturing sector, pharmaceutical producers were hit hard by the industry electricity tariff increase in 2010 that raised prices by 18%. In addition, the import tax of 5% imposed on raw materials under Minister of Finance Regulation 240/2010 heavily impacts drug producers. It is estimated that between 90-98% of all pharmaceutical raw materials have to be imported mainly from China, and to a much smaller extent from America and India. The expensive price of drugs in the country is therefore easily explained considering that on average, raw materials and energy make up 35% of

the total selling price for drug companies. The Ministry of Industry has requested a removal of tariffs for 20 of the raw materials covered under the regulation while the pharmaceutical manufacturers through The Business Players Association request that 80 should be exempted. As of the beginning of 2011, the amendments to the regulation, No. 41/2010 have not been signed into law by the Ministry of Finance thus import duties still stand and some prices of generic medicines have gone up. The Ministry of Health is under pressure to keep drug prices low in the generic market (over which it has jurisdiction) and in line with the purchasing power of the country to provide greater access to pharmaceuticals, but manufacturers must react to the rising prices of materials for their

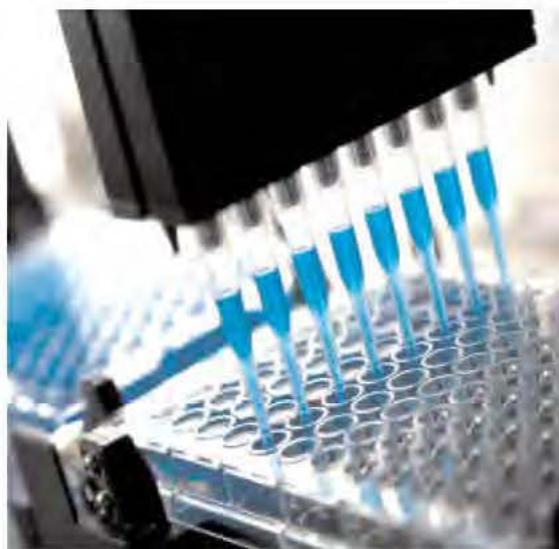
Research and Development has been largely neglected as part of local company practice and has led to a dependence on copying generic drugs in particular

bottom line. At the beginning of 2011, the 15 major drug producers put their prices up by 10-15% and then brought them down again at the end of the first quarter encouraged by the Ministry of Health and helped by a strengthened Rupiah. In order to keep prices low, the requested tariff removals are the first step in the short term but for the long

term, action must be taken to ensure the local supply of the raw materials. Research and Development has been largely neglected as part of local company practice and has led to a dependence on copying generic drugs in particular, but also prescription drugs and vitamin supplements. The high production costs and low selling prices of the Indonesian market squeeze profits, leaving very little for R&D. Bio Farma spends 10% of total revenues on R&D while Kalbe Pharma spent only 2.4% according to their Q1 2011 financial report with less than 2% as an average for the industry as a whole. This pales in comparison to the average of 20% of spending by companies throughout the world. Local players therefore act as retailers of generic products as opposed to innovators with spending concentrated on promotion and branding. This misses out on a great opportunity to make products tailored to Indonesia's diverse market and unique consumer profile that seeks a balance between the benefits of inorganic medicines and herbal remedies. A huge and unlikely shift in the attitude of the industry would have to take place for this to change and government incentives would be the only route to such a possibility. More likely, it will continue to be multinational pharmaceutical companies that carry out the research for the development of patented drugs, yet current regulations are not making Indonesia a country of choice as a research and production base.

As of 2008, foreign companies were required to open domestic manufacturing bases for pharmaceuticals in order to sell their products to the Indonesian

market. This impacted 13 of the 29 foreign companies present in the country that did not have production facilities in Indonesia in 2008. Ministry of Health Decree No.1010/2008 provided a 2 year grace period for companies to comply or else have their drug approval licenses from the National Agency for Drug and Food Control, revoked. This has been a less than attractive proposition for foreign investors considering the dependence on imports for materials, weak infrastructure and lack of intellectual property protection. Further regulations limit the amount of spending on promotions that is eligible for tax deductions to 2% of total sales. For new entrants into the market and indeed the launch of any new drugs, branding and promotional spending are essential to reach out to the population as a whole to educate on the benefits of the drug as well as justify the premium on branded drugs. Therefore, such measures have had a negative impact on investment with a compounded decline of 24% a year 2005-2010 (IFT estimate). Under the Negative Investment List of 2010 (see Understanding the Negative Investment List), foreign investors may own up to 75% of equity in pharmaceutical manufacturing and are therefore faced with the challenge of finding a local partner for the remaining 25% who can put up the necessary funds for such an investment. This was widely anticipated to be revised to 100% after the Minister of Health, Endang Rahayu Sedyaningsih voiced her support of the idea at the beginning of 2010. It is estimated by the Director General of Development of Pharmaceutical and Health Equipment under the Ministry of Health, that



allowing 100% ownership could increase investment in the sector by 60% up to \$800 million USD. More production facilities would have the welcome effect of bringing down the cost of drugs for the wider population.

The merits of the Indonesian market are hard to ignore as the largest economy in the ASEAN, the scope of future consumption and as a base for the ASEAN market. The government, through the Ministry of Health, is actively trying to create a level playing field for local and foreign companies to create a beneficial environment for both investors and the Indonesian public, which is currently underserved in all aspects of health care. It is widely anticipated that future revisions to the Negative Investment List will allow 100% foreign ownership as part of the gradual liberalisation of the health care sector that most recently loosened the restrictions on foreign capital for hospitals. The decline in investment may well be reversed in the short term as further changes in policy are expected and will return confidence in the market.

Automotive Industry: Driving Manufacturing



Total Car Sales : 764,710 (2010)
Car Imports : 76,520 (2010)
Main Brands : Toyota, Daihatsu, Mitsubishi,

Honda, Suzuki.
Total Motorcycle Sales : 7,369,249 (2010)
Main Brands : Honda, Yamaha.

The global economic crisis had a significant impact on Indonesia's automotive sector as demand for vehicles and motorcycles dropped marking the end to a period of recovery after the Asian crisis. In 2008 car sales stood at 603,800 and experienced a sharp drop to 486,100 in 2009 and then rebounded strongly in 2010 to 764,710. Such growth has been due to the availability of credit coupled with robust consumer confidence that has once again encouraged that 'essential purchase' be it for a motorcycle or car. Indonesia is due to become the largest car market (by units purchased) in the ASEAN overtaking Thailand in the coming years, as well as already being the world's third largest motorcycle market. While healthy growth in sales is expected to continue despite fears that

the removal of fuel subsidies will deter buyers; cementing the country's position as a production base for the region is the challenge ahead.

Both the Indonesian car and motorcycle market is dominated by foreign brands, particularly Japanese such as Toyota and Honda respectively. Through measures introduced in the 1980s, foreign brands were legally obliged to appoint a local company for both distribution and assembly (the latter was later revoked). Such companies are established as local subsidiaries and sole proprietors for the brand in question. The subsidiary companies, known as ATPM, are listed through their holding company as opposed to under the brand itself, on stock exchanges in Indonesia or abroad. The sector is dominated by PT Toyota Astra Motor and PT Astra

Motor and PT Astra Daihatsu Motor that are both under Astra International, the largest Indonesian conglomerate, which is in turn part of the Singaporean Jardine Group. Other key players include PT Indomobil Sukses International which represents Suzuki and PT Krama Yudha Tiga Berlian Motor which represents Mitsubishi. The Indonesian Automotive Association, GAIKINDO, puts the number of units sold in 2010 at 764,710 and Q1 2011 sales show an increase of 25.2% from the same period last year.

Indonesian Car Sales 2010	
Toyota/Daihatsu	399,453
Mitsubishi	106,483
Suzuki	71,210
Honda	61,336
Isuzu	24,012
Other	102,126
Total	764,710

Source: GAIKINDO

The motorcycle market is dominated by two brands, namely Honda and Yamaha each with around 46% market share that are represented by PT Astra Honda Motor and PT Yamaha Motor Kencana. Motorcycle sales stood at 7,369,249 in 2010, a 26% increase from 2009 and are projected to reach 8 million in 2011 according to the Indonesia Motorcycle Industry Association. Motorcycles are therefore the dominant mode of transport for Indonesians due to their ready availability through credit

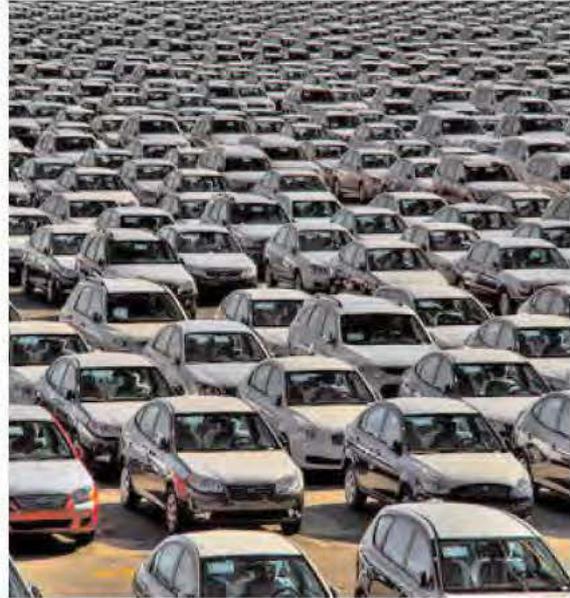
schemes that require low down payments as well as being cheap to run and a faster method of wading through Jakarta's gridlocked traffic.

The Indonesian government has been keen to encourage local manufacturing in the automotive industry and introduced protective measures to encourage technology transfer.

The Indonesian government has been keen to encourage local manufacturing in the automotive industry and introduced protective measures to foster technology transfer. The import of completely built up units (CBU) was banned in 1973. In 1996 the National Car Program was introduced that was an extension of the 1993 Incentive System for locally made cars. The measures stipulate that for exemption from import duty, cars must be produced with 20%, 40% and 60% of local content in their first, second and third years of production respectively. In 1999 such measures were relaxed and allowed the import of CBUs; the desired effect of the measures to encourage a national car producing industry having failed to materialise. The new measures also saw many foreign brands take over the assembly from their sole brand holding agent.

Local component producers were heavily incentivised through the government scheme and established partnerships with many Japanese producers. In 2006, the Ministry of Industry announced the abolition of import tariffs on car components and spare parts for units destined for export. Faced with deep discontent from local companies, the Ministry of Finance passed a regulation in 2007 exempting raw materials for component production from import duties. Component sales have been following a similar trend to that of car sales; however exports have been hit heavily since 2008. The Ministry of Industry records component exports at \$2.01 billion USD in 2008, dropping to \$1.12 billion USD in 2009 and then declining further to \$45.2 million USD in 2010.

Component producers in Indonesia continue to produce less sophisticated items that lack value added processes and are therefore facing increased competition. Under the ASEAN free trade area and the ASEAN - China free trade agreement, import tariffs on auto components are set at zero. Japanese producers have maintained their own production of high technology components due to the weak enforcement of intellectual property law in production bases such as Indonesia to protect their core business. The high rate of investment needed to establish facilities capable of producing sophisticated components has also held back manufacturers from making the decisive shift to centralise all their production processes. Local component producers are therefore keen to establish financial and technology partnerships in



order to add value to the production process and boost future exports.

On the manufacturing and export side, Indonesia has not yet reached the productivity levels to meet its potential as a manufacturing hub. In car exports, numbers registered below 100,000 units a year, and less than 30,000 for motorcycles, for 2009 - 2010. According to GAIKINDO, imports of cars stood at 72,646 units in 2008 then dropping to 32,628 in 2009 but sharply increasing to 76,520 in 2010. Issues of red tape, lack of qualified human resources, high logistical costs from poor infrastructure and unreliable electricity supply have held car producers back in the past. This trend seems to be reversing with recent announcements from companies such as Hyundai and Toyota making large scale investment to increase capacity in the country, in light of the political turmoil in Thailand and the damage caused by the Japanese earthquake. Audi announced at the beginning of 2011 that it will be setting up a car assembly plant in Indonesia to produce 2,700 cars by 2015 for the Indonesian market. Suzuki also

stated its intentions to invest \$800 million in a new auto engine plant to double capacity at its existing facility. The domestic market has been the main attraction for car producers as well as the modest incentives such as the 2008 regulation that provides a 6 year income tax break on up to 5% of the total investment and exemption of import duties for certain raw materials. More will follow suit, such as European car makers, if the government goes ahead with incentives that will put Indonesia on par with those offered in Thailand as well as improving infrastructure.

The domestic market has been the main attraction for car producers as well as the modest incentives such as the 2008 regulation that provides a 6 year income tax break

Developing a domestic production base for environmentally friendly and low cost cars has been a key goal of the government through the Ministry of Industry. A program is being put together that will incentivise car makers to manufacture automobiles for the low income market at 40 million RP and 80 million RP for a 'green' hybrid car. Such cars would be locally made, with 80% of components being both engineered and produced in Indonesia. Fuel consumption would not exceed 22 km per litre and

would meet Euro 3 emission standards with a target of 400,000 units to be produced annually. Two Japanese car companies namely Daihatsu and Suzuki have already signed on to the program which could potentially carve out a highly profitable niche for Indonesia's auto manufacturing sector at a key time before the ASEAN single market. The test will really be at home, where Indonesian consumers themselves have been distrustful of locally made products, preferring to opt for foreign brands in most of their consumer habits. The industry confidence in rising sales of both motorcycles and cars appears justified when looking at growth figures in the past 2 years. Sales were not drastically affected despite the perceived threat from the removal of fuel subsidies and the introduction of the progressive car tax designed to deter people from buying more than one car per household. Prices of both items are also steadily rising due to production costs as well as the luxury tax levied on automotives. Consumer confidence can be easily dented by the threat of rising interest and inflation rates but the necessity of a car due to the poor and in many cases nonexistent public transport will maintain demand as long as economic growth remains on course. Boosting local manufacturing will be a greater challenge as Indonesia faces stiff competition from other ASEAN countries that offer better infrastructure as well as lower logistical and production costs. The size of the market will keep car producers in the market but more must be done to make them commit to Indonesia beyond the scope of the local market.

Overview of the Food & Beverage Sector



*Number of Companies : >6,000
Total Market Value : 194 billion USD (2010)
Output Growth :176.3 % 2000-9*

*Per Capital Spending on Food as % Income : 50.62
Main Areas : Noodles, Grain, Cereals, Meat,
Dairy, Tea, Juice, Soft Drinks.*

The food and beverage sector is where Indonesia's local companies have made a mark in value added products both domestically and worldwide. The growth of the sector has been fuelled by rising incomes and increased spending on food by the middle class that now make up a 30 million person market. Urban lifestyles are giving rise to a more varied diet which is supported by the development of retail infrastructure in the form of malls and hypermarkets. For the country as a whole, price fluctuations brought about by the increasing price of imported goods such as wheat and processed chocolate can have a significant impact on consumer behaviour. The challenge for the food and beverage industry is to get a handle on import reliance to keep prices down and to

strengthen branding for consumers in Indonesia as well as the rest of the ASEAN.

The Indonesian processed food market is dominated by several large local companies including Indofood Sukses Makmur, one of the world's largest instant noodle makers, Wings Group, Mayora and Garuda Food. Such companies have embarked on strategies to not only entice customers by price, but innovating to produce tailored, value added products that appeal to the Indonesian consumer's preference for traditional food in an instant form such as Mayora's instant congee. Foreign companies and brands are also well integrated into the market, including Nestle and Kraft Unilever, often in joint ventures with local companies to access distribution networks. Multinational

firms have been successful in appealing to the growing health consciousness of Indonesian middle class consumers. The sector as a whole is estimated to have over 6,000 companies; approximately 90% are classified as large and medium sized companies which are all mainly appealing to the price sensitive lower income customers.

Output of the sector grew by 176.3% over the period of 2000 to 2009 putting the industry as a whole at a value of \$194 billion USD at the end of 2010 according to the Indonesia Food and Beverage Business Association, GAPMMI. Both domestic consumption and spending on food and beverage, particularly processed foods, has been steadily increasing at a rate of 14.1% a year from 2006-2010, driven by rising incomes as well as inflation of food prices. Total sales for 2010 reached \$63.4 billion USD and are projected to grow by 13% to \$76.59 billion in 2011 according to GAPMMI. The processed food sector had previously been confined to the domestic market, but its contribution to exports has been increasing from \$3.7 billion in 2009 to \$5.7 billion in 2010. The Ministry of Industry has put targeted exports from the sector at around \$6 billion for 2011 and sector growth as a whole at 8.4% annually to 2013.

The ready availability of natural resources such as cocoa and palm oil as well as the size of the domestic market makes Indonesia an attractive production base for multinational companies. However, the sector still faces the challenge of being regionally and globally competitive. Imports of essential raw materials such as wheat,

milk and sugar make the sector far from self sufficient. Imports of processed foodstuffs such as seasonings make up substantial part of total sales and of the AFTA and CAFTA. In 2011, the amount of imports is set to increase to \$2.79 billion USD, up 15% from 2010 (GAPMMI). High logistical costs from poor infrastructure add to domestic operating costs as the country has only 6 ports that can be used for large scale importation of foodstuffs, while others for nationwide distribution are heavily congested. The rise in electricity tariffs and increasing inflation impacting raw material such as wheat and sugar are also placing pressure on operational costs for manufacturers. In a low income market such as Indonesia, consumers are highly sensitive to even the smallest increase in product prices given that an average of 50.62% of total per capita income is spent on food (Statistics Indonesia).

The World Economic Forum that took place in Jakarta in June 2011 saw the announcement of large scale investments by food & beverage manufacturers into the country including Coca Cola which plans to invest up to \$500 billion USD and Nestle that will set up a \$200 million USD new dairy plant in West Java. Such investments are a positive signal for the manufacturing sector as a whole, however new challenges in infrastructure will continue to be a major obstacle to increasing output and keeping prices competitive for the Indonesian consumer. The lack of availability of gas and electricity is a hindrance to the large scale production methods required by manufacturers in order to keep prices competitive for the market.

Global Business Guide talks to Johan Tamsir, President Director of Trimitra Citrahasta.

With Indonesia's automotive manufacturing sector rapidly growing, what new products or business areas are you looking to enter into to take advantage of this trend?

I am planning to find partners who have new products with more added value as the stamping that I do now has low added value. I am now in discussion with investors and companies from Malaysia, Japan and China.

I have confidence that we can compete and export on an international scale. One of my sister companies is doing machining products under the name PT Ultima and 80% of its output is exported to Europe, Asia and the UAE. We have also started to gain recognition in the USA which shows that Indonesia can offer international quality for export. Further development into export markets really requires foreign companies to open up to the prospects of Indonesian manufacturing.

You mentioned the importance that you place on the capacity of your human resources. How is Trimitras Citrahasta contributing to the development of Indonesia's labour force?

I am launching my new business in vocational education in 2012. I will start a training centre and vocational school. This would be open for our staff and other companies to train their staff. I am doing this with APMI of Switzerland which is a well known



Further development into export markets really requires foreign companies to open up to the prospects of Indonesian manufacturing

name in this field. APMI brought me to Switzerland to see how we can make the curriculum match the needs of the industries here.

How do you stay ahead with the latest technologies?

In this automotive market we know that we need the technology and we listen to what our customers need to guide our decisions. As a long term vision, I think one day I will need a strong relationship with foreign companies to work with me or to be my partner in a joint venture in order to offer more sophisticated component products.

Global Business Guide talks to Stacey Hermijanto, Managing Director of Shinta Group and Suresh Khurana, Chief Operational Officer.

Since being founded in the late 1960s, how has the company's strategy evolved in a context of increased global competition in the textile industry?

Mr Khurana : In the past decade, from 2000 onwards what we have done into is ventured into more and more R&D in house as well as hiring external consultants for that purpose to create innovative products that meet customer needs. Indonesia was one of the leaders [in the textile industry] until the 1990s and then China came in with a big bang. Since then what we have seen is that many of our clients have gone to China for commodity products but when it come to speciality products, developing long term partnerships or for specific products for their needs they look elsewhere. The reason is whether you are a volume producer or a quality producer; at Shinta Group we position ourselves as a boutique house and not as a supermarket. So that is how we distinguish ourselves, we are able to deliver products of specific specifications even in small volumes whether it is of our own development or to the customers requirement.

We therefore focus on R&D to create speciality products to move up the value chain

The ASEAN-China FTA has created further competition for Indonesian textile companies. What is your outlook on the impact of this agreement?

Ms Hermijanto: All FTAs pose challenges and opportunities. I can not deny that we were not concerned when CAFTA came into force. One of the immediate effects was an influx of Chinese made garments. While that does not affect us directly, many of the domestic fabric makers we supply to saw a drastic fall in their sales. Fortunately, that did not last for long. China faces challenges in labour costs, inflation and R&D. So the threat that China was was not realised in the long run although they continue to be very competitive as far as basic products that are mass produced.

On the flipside, the FTA has actually given us greater access to a large market, people tend to forget that China and India are huge markets for our products. We therefore focus on R&D to create speciality products to move up the value chain.

Shinta Group is currently exporting all over the world; what further partnerships are you planning for the future?

Our export markets span five continents and over 25 countries. Specifically in North America there is interest for exclusivity in distribution of our speciality products. There is also great interest from China in seeking access to our speciality product as a raw material. While we aim to maintain a global presence, one area that we are not that active in is the Middle East so we would be looking to increase coverage there.

Property

134-137 Property in Indonesia: Overview

An overview of Indonesia's real estate sector, looking at how the industry has fared during the downturns of both the Asian crisis and the global financial crisis of 2008. This section covers trends in real estate prices, rental yields as well as office and retail space demand.

138-140 Opportunities in Real Estate

Demand for housing at both ends of the spectrum continues to grow in line with urbanisation and rising incomes presenting ripe investment and joint venture opportunities. This section covers how foreign investors can access the sector.

141-142 Industrial Land and Property

A recent trend in increasing demand for industrial land is testament to Indonesia's attractiveness as a manufacturing and export base. This section looks at the industrial estates and facilities that the country has to offer to investors looking to tap into Indonesia as a regional production hub.

143-146 Law on Foreign Ownership

Changes to the law on foreign ownership of property have been long awaited by investors as Indonesia's property prices remain some of the lowest in the region. This section features information on what shape the upcoming changes will have and the opportunities to be found within it.

147-148 Land Acquisition Law

Accelerating much needed infrastructure projects has been held back by unclear regulations surrounding land acquisition procedures and compensation. This section looks at the upcoming changes currently being debated by law makers and the impact that they are likely to have.

149-151 Public Private Partnerships

With an estimated \$140 billion USD needed in infrastructure investment over the next 5 years, the government is keen to attract foreign investors for ambitious projects in roads, ports and power plants. This section looks at the main projects and the incentives for investors.

152-153 Challenges in the Construction Sector

Indonesia's construction sector faces limitations in terms of human resources, technology and capacity. This section looks at how the sector is faring and what is being done to develop the private sector of the industry to allow them to compete with state behemoths.

154-155 Interview

Mr Suharso Monoarfa, Minister of Public Housing of the Republic of Indonesia.

Property in Indonesia: Overview



*Average Condominium Price: 1,459,600 RP/sq ft
Q4 2010 (Prime Area)
Average Retail Space Rental Price: 597,900*

*RP/sq ft Q4 2010 (Greater Jakarta, Prime Area)
Average Office Space Rental Price: 185,827
RP/sq ft Q4 2010 (Jakarta)*

Indonesia's real estate sector has been experiencing a revival following the shocks of the Asian crisis and the global economic downturn. The global recovery and high commodity prices have created a prosperous environment in the urban centres. The growing wealth is swelling the ranks of the middle class which is raising demand for mid level and luxury property, resulting in numerous new projects springing up in Jakarta and secondary cities. Demand for low income housing has also increased giving rise to satellite cities outside of the capital. Inflation is a continuing source of concern in the residential market but is being kept in check by rising incomes and an expanding of housing credit by the banks, although lending rates remain high. A similar

trend is being seen for office and retail space as investors and retail service providers are keen to set up shop to tap the optimistic mood among businesses and consumers.

The Asian crisis took a lot of property developers out of the market due to the sharp drop in property prices and the collapse of the currency which saddled them with non performing loans. The Indonesian Bank Restructuring Agency took over property assets worth 70 trillion RP. The regulators and developers learnt their lesson from the property bubble and the latter have been kept in check by strict requirements on how projects can be financed. Bank Indonesia has prohibited lending to developers for land acquisition since 1997, so developers are forced to have the necessary funds to begin a project which is often done by

raising capital through the capital markets. Bank lending is therefore contributing very little to this sector as at the beginning of 2011, a Bank Indonesia survey confirmed bank loans make up only 28.41% of financing with the remainder from internal cash and presales funds. Strict controls makes raising money and acquiring land for projects a much greater challenge for smaller scale developers without the capacity for large public offerings, and thus maintains the dominance of the market by several large players.

Analysts do not perceive interest rates as a deterrent to purchasers as the economic fundamentals remain strong

Some of the largest companies by capitalisation on the IDX include Lippo Karawaci, Bumi Serpong Damai, Ciputra Development, Summerancon Agung, Bakrieland, Jababeka and Pakuwon Jati (see Capital Markets Overview). Catering to the higher end of the market, developments range from serviced apartment towers and landed houses to cities within cities such as Bumi Serpong Damai's BSD City that covers an area half the size of Paris. Sales figures have been increasing year on year for the last 5 years, even during 2008. Residential sales at the beginning of 2011 show a continuation in this trend; Agung Podomoro reported a 21%

increase in sales for Q1 and Lippo Karawaci had a 32% increase. With fresh demand from the upper and middle classes, particularly from young, affluent Indonesians; property developers are increasing their land banks in anticipation of increased demand for the coming two years. Bumi Serpong Damai is planning capital expenditures for around 600 hectares of land while other developers plan to develop their pre 1998 land banks within the next few years.

The majority of Indonesian nationals face difficulties in owning their own property due to the high rate of lending offered by the banks that put the average age of outright ownership at 61 years (see Making the Banks Work for the Real Economy). Trends in financing property show that over 70% of consumers use mortgages for purchasing of property whereas less than 20% use the gradual cash payment system that many developers offer. The mortgage to GDP ratio is just 2% compared to 17% in Thailand and 31% in Malaysia as per 2010. While lending in this area is expected to increase by 25% during 2011, mortgage rates remain high at 8.75-12% for the first year despite interest rates remaining steady at 6.5% with a slight increase to 6.75% in February 2011. As the central bank ponders whether to raise interest rates again to tackle inflation during 2011, banks are poised to raise their mortgage rates in line with this. Analysts do not perceive interest rates as a deterrent to purchasers as the economic fundamentals remain strong and low prices keep domestic buyers bullish on property investments.

It is the lower income segment where the country faces a challenge; high rates for short terms keep financing out of reach. The lower income segment also faces an acute housing shortage with an estimated 8 million new living units needed according to the Minister of Public Housing, Suharso Monoarfa who met with GBG. To combat the financing issues, a 3.5 trillion RP liquidity facility was set up to subsidise the bank loans and provide a lower rate at 8-9% for a increasing the supply of low income housing is one of technology and maximising the use of land. To meet this challenge, Minister Monoarfa is reaching out to the international community to draw on their experiences; 'all over the world, to provide low cost you must deal with large scale technology and unfortunately in Indonesia we do not have this technology'. The ministry is already cooperating internationally on the matter with Singapore, Korea and Chinese state owned firms for low cost technology and soft loans. However, technology and financing aside, the Minister sees the limitation of land availability and the attitude of local governments as the overarching issue to improving supply. New property developments must be created alongside supportive infrastructure to be of any benefit to the housing problem.

Office Space

For office property, an improvement in the business climate has been reflected in demand from companies setting up or expanding. The global financial crisis saw the demand for office space drop



from both foreign and domestic businesses. Economic growth and resilience coupled with the revitalisation of expansion plans since the end of 2009 has pushed demand up again, particularly in the Central Business District of Jakarta. Demand for office space in Jakarta in 2009 was 160,000 square metres, increasing to 208,000 in 2010 with a projected increase of 7% in 2011 estimated by real estate consultants Coldwell Banker. Net take up increased by 64% in the first quarter which is an 87% increase from the same time last year. The average rental price of office space in the CBD at the end of 2010 was 145,300 RP per square metre according to real estate consultants Cushman and Wakefield, and rose by 3.3% in the first quarter of 2011. The price is set to continue to climb throughout 2011 as service charges are put up to compensate for utility price hikes and rising inflation.

Demand is expected to rise further throughout 2011 and outstrip supply as occupancy rates remain steady at an average of 85% and the majority of projects under construction do not complete until 2012. More projects are being constructed outside of the premium CBD area, particularly in South Jakarta which are gaining popularity due to the current improvements being made to transport links such as new flyovers and toll roads linking to the city centre. Pondok Indah and TB Simaputang are the most sought after areas outside of the CBD, with office lease rates averaging 97,338 RP at the beginning of 2011.

Strata title office sales have seen a significant increase within the CBD during the first quarter of 2011 which is illustrative of a growing confidence in the market as businesses choose to buy rather than rent

Strata title office sales have seen a significant increase within the CBD during the first quarter of 2011 which is illustrative of a growing confidence in the market as businesses choose to buy rather than rent their office space opportunity considering the rising rental yields at 8-10% per year in the CBD area and the payment options offered by developers that allow

instalments of similar value to monthly rental costs. New strata office titles and office space in general within mixed use developments that offer facilities such as malls and residential space will be in high demand as existing businesses upgrade to new facilities and new entrants to the market secure their space.

Retail Space

Retail space was another crisis hit area of the real estate market, demand dropped from 168,000 units in 2009 to 88,000 in 2010. Coldwell Banker is expecting a 5% increase in retail space supply in 2011 with the completion of new malls and the rebound of the country's retailers and international brands entering the market as incomes continue to rise. Jones Lang LaSalle sees further scope for more retail space as retail space density remains low in Jakarta compared to other Asian cities with a total of 1.7 million square metres catering to a population of over 10 million in comparison to 3.9 million square metres in Bangkok with just 6.3 million residents. Malls offer the most advantageous place for retail space as they are an integral part of daily life in the Indonesian capital and secondary cities, being focal points for not only shopping but also leisure and lifestyle such as restaurants, gyms and cinemas. Supply of retail space is increasing from years of stagnation in satellite cities around Jakarta such as Banten and Tangerang. A total of 226,175 square metres was added at the end of 2010 and real estate developers are targeting this area to increase the total amount to 95,000 square metres in the next 2 years.

Opportunities in Real Estate



*Average Condominium Price: 1,459,600 RP/sq ft
Q4 2010 (Prime Area)
Average Condominium Rental Yield : 11.4%*

*Relevant Law: Government Regulation No.
41/1996 on Housing or Residential Ownership
for Foreign Citizens Based in Indonesia.*

The combination of rising purchasing power, rising demand and increasing supply is conducive to improving the contribution of the real estate sector to the national economy which remains low. The property sector contributed just 2.7% to GDP in 2010, however with the population in line to grow to 285 million by 2030; this figure is bound to increase. This presents prime opportunities for foreign companies with expertise and technology to partner up and penetrate the market as medium sized companies face a challenge in finding financing to improve their capacity. For investors, low property prices are still producing impressive rental yields and changes in the laws on foreign ownership will make such investments profitable on the long term.

Property developers outside of the major players in the market are confident in the future demand for their sector. Many are keen to form investment partnerships and joint venture operations with international companies to take advantage of new technology and access cheaper financing that cannot be obtained through local channels. With demand for retail, office and residential space growing; medium sized property developers catering to the middle and lower income bracket are a prime opportunity to enter the sector.

Real estate is very much an industry that requires a local partner considering the layers of government that need to be contended with for land acquisition and construction permits. Member of Parliament and former head of Real

Estate Indonesia Enggartiasto Lukita spoke to GBG and reiterated the need for an established network for success in the industry; 'when choosing a partner it depends on credibility, knowhow and networking capacity; the local should have a good experience and good relationship with the government and the people.' Mr Lukita's company Supradina Karya Multijaya caters to the low middle income market and is confident of continuing strong demand from the sector. Within the same market segment, Nusuno Group's President Commissioner Cipto Sulistio sees both the potential and challenges for foreign investors in the sector and believes the obstacles do not outweigh the opportunities. 'Indonesia has a huge population and demand for housing is high, so the country is a spectacular investment opportunity. From this other sectors others will follow, for example retail space around the residential areas'. Companies such as Nusuno Group are keen to establish partnerships on a regional and international basis for both technology and financing of future projects to contribute to the demand for 8 million new houses.

Sophisticated construction materials that offer more in the way of cost effectiveness, energy efficiency and aesthetics are another entry point into the market. For the large scale technology needed for low cost housing construction, Minister Monoarfa told GBG that he sees foreign companies as having a key role to play as low income housing projects are being offered under the PPP scheme 'we want to incorporate the technology that will allow us to boost the cost, that is what we can tap

from foreign expertise ... I think the problem is the materials [that we do not have in Indonesia], this is a further opportunity for foreigners'. The rising demand for housing within the main urban centres is tempered by the country's pledge to move into being a low carbon economy and reduce greenhouse gas emissions by a minimum of 26% by 2020. For the low income sector this is particularly challenging as mass construction methods and materials cater to quantity over environmental concerns. However, the long term benefits of cheaper utility costs from technology such as solar panels is being taken into account in future regulations. Minister Monoarfa is planning on introducing incentives for environmentally friendly housing projects as well as encouraging local authorities of secondary cities to emulate the pioneering example of a garbage fuelled power plant in Bandung.

Environmental concerns and the potential reduction in running costs in the face of higher utility prices are influencing property developers from the public and private sector who are seeking out materials that conserve energy by keeping building cooler and reducing reliance on air conditioning units. Green building has been slowly entering the discourse of the property sector through the Green Building Council of Indonesia, although many have been deterred by initial high costs. Newly constructed state schools in Jakarta are using more 'green' and sustainable materials and technology while Ciputra Group's development in Kuningan will use heat resistant glass

and environmentally friendly paint. Pitoyo Suwanto of Eka Karya Konstruksi spoke with GBG about his plans to source materials for his projects that offer sustainable benefits; 'North America and particularly Canada have construction materials that we do not produce in the region that would be of great value in Indonesia'. Therefore, as the momentum of green building picks up, opportunities arise for manufacturers of technology such as solar panels, recycling equipment and smart home technology that can contribute to reducing energy consumption.

The rental market for residential apartments remains lucrative in Indonesia as bank lending for mortgages remains tight

For investors looking specifically at the opportunities for purchase of real estate within Indonesia, prices are still very attractive and the sector remains an unexploited resource. The passing of the law on foreign investment that would extend the leasehold to a full 70 years, as opposed to the current 25 years followed by subsequent renewals after 20 and 25 years, could have a far felt impact on the sector when it eventually comes into fruition. Minister Monoarfa predicts an inflow of \$3-6 billion every year as a result of further opening up the sector to foreign ownership from not only purchases, but other taxes and consumption spending. However this

will be dependent on investor sentiment towards the new law which is discussed on page 143.

While the alluring property prices are extremely competitive for the region, the subtext to this has been the distinct lack of foreign investment and finance facilities available to domestic buyers. The constricting regulations regarding "Right to Use" for foreigners can make it a less attractive investment compared to other countries in Asia, therefore properties that are purchased continue to be for inhabitation as opposed to investment.

The rental market for residential apartments remains lucrative in Indonesia as bank lending for mortgages remains tight and bureaucratic procedures for purchasing a property turn the lower and middle income segment to the rental market. Property prices are the lowest in Asia even compared to Vietnam. Global Property Guide places the average apartment price in Jakarta at \$1,381 USD per square metre; 89% lower than Singapore as per 2010. For the upper middle income segment, purchasing apartments to rent is a sound investment with average apartment rental yields at 11.4%. The taxes on income gained by rental remain quite high at 20% as well as a withholding tax at a further 20% for non residents and 10% VAT. For foreign investors seeking to enter the rental market, the proposed law on foreign investment limits ownership to the high end condominiums priced at \$150,000 – \$200,000 USD which accounts for only 7-10% of the total supply in Jakarta. Rental yields on such properties are also impressive at an average of 12.84%.

Industrial Land & Property



Contribution to GDP : 3% (2010)
GDP/Mortgage Ratio : 2% (2010)
Available Industrial Land : 9,700 ha (2010)

Average Industrial Land Rental Price : 800,000
RP/sq ft Q1 2011
Projected Price Increase : 20-30% (2011)

With continued economic growth, political stability and relatively low labour costs; Indonesia is becoming an attractive destination for manufacturing. A number of multinational companies have recently set up facilities in the country in light of rising wages in China's coastal provinces, such as Panasonic, L'Oreal, Nestle and Yamaha. This has had a knock on effect on the demand for industrial property around the Greater Jakarta area and industrial land prices have increased dramatically last year.

Indonesia's position as a manufacturing base lost its lustre after 1998 when the country came to be seen as too risky for the large scale of investments needed to set up. The rise of China and even Vietnam as an alternative base in Asia

overshadowed Indonesia in the competition to attract foreign companies. The rise in income per capita to \$4,300 at PPP and a growing recognition of the scale of the domestic market has led companies to think again on the merits of Indonesia for not only a hub to deliver to the region, but also having close proximity to 250 million people.

The demand for industrial land from both domestic and international investors has increased, reflected in the sales of developers and land prices for the main industrial areas. Industrial land and estates are in short supply with the need for adequate supporting infrastructure such as electricity and being close to transport links such as roads and ports.

The price of land is closely connected to their proximity to existing and future

infrastructure projects such as toll roads. A report from property consultants Cushman and Wakefield showed that industrial land prices for Greater Jakarta and West Java rose by 11.1% in the first quarter of 2011 from the previous quarter, reaching an average of 800,000 RP per square metre. This jump is a result of the lack of supply in the face of high demand; 322 hectares were purchased in Q1 but only 70 hectares were added. This brings the total amount of nationwide land available to 9,700 hectares up from 7,900 in 2000. Availability of land for industrial purposes is not growing fast enough due to stalling on land acquisition reforms, which is in turn holding back infrastructure projects that would make more land suitable for industrial use.

The price of industrial land has been on a steady rise, Cushman and Wakefield's report states that 2010 was the best year for the past 5 years. Jones Lang LaSalle research shows a 162.5% increase in realisation of industrial areas for 2010, with a total of 420 hectares mainly taken up by automotive, foodstuff and consumer goods manufacturers.

Indonesia still remains globally and regionally competitive for the price of industrial land, being third globally behind Ecuador and Vietnam despite of China's recent efforts to cut the cost of their land by 30%. The sharp rise in demand could see land prices rise by 20-30% by the end of 2011 as a market correction considering prices were probably kept low by developers to attract investors following the global crisis.

While land is still cheap on paper, the costs of setting up and the development

of infrastructure are issues that must be factored into the price. Power plants for electricity and reliability of supply are still an issue for the manufacturing sector and indeed the country as a whole; large scale manufacturers have actually chosen to build their own power plants to ensure reliability of supply. Other logistical infrastructure including transport pushes up the price of production, Indonesia has some of the highest logistical costs in the region at 25% of total GDP compared to 16% for Thailand and came 75th out of 155 countries in the World Bank Logistics Performance Index. Obtaining the necessary permits and other bureaucracy is a further issue to contend with.

The sharp rise in demand could see land prices rise by 20-30%

The sharp rise in demand for industrial land is indicative of how desirable Indonesia has become as a manufacturing hub. While prices remain low, more multinationals are expected to come into the market and prices will continue to rise in line with increasing demand. To keep the country attractive for manufacturers, the government must speed up on proposed infrastructure projects that are vital for companies to produce and distribute their goods. The stage of development on the various infrastructure projects around the plot of land in questions must therefore be carefully looked into by those seeking to purchase industrial land.

Law on Foreign Ownership



Contribution to GDP : 3% (2010)
GDP/Mortgage Ratio : 2% (2010)
Housing backlog : 8 million (estimated)

Average Condominium Price : 1,459,600 RP/sq ft
*Q4 2010 (Prime Area)**
Relevant Law: Regulation No.41 / 1996

Indonesia's real estate market is incredibly attractive to foreign investors given the competitive prices and future scope of the country as an economic hub and political centre of the ASEAN. The subject of foreign ownership is a contentious one in Indonesia considering the challenges Indonesian national face in securing property rights and within the context of the property bubbles that the global crisis exposed in places such as Dubai. The change in the law on foreign property ownership that would extend the leasehold period to a full 70 years as opposed to 25 years followed by subsequent renewals was expected at the end of 2010 but is yet to be passed in the House of Representatives. While the passing of this law will give some greater advantages on the current

system by which foreigners can own property, investors will still find it coming up short when compared with the regulations in other countries in the region such as Malaysia and Singapore.

Current Regulations

Current rules governing foreign ownership of property in Indonesia are laid out in Government Regulation Number 41 Year 1996 on Housing or Residential Ownership for Foreign Citizens Based in Indonesia. This is now under discussion to be redrafted as part of Law 1/2011 regarding Housing and Residential Areas. As of June 2011 the current law is still in place stipulating that foreigners who maintain a 'presence' in Indonesia be it through regular visits, residency or business interests are allowed to own a leasehold on a property in Indonesia for

up to 70 years. This 70 year period is subject to renewal after an initial tenure of 25 years, then 20 years and then another 25 years. Non Indonesian nationals may not own a freehold Hak Milik, but rather leasehold under the land title Right of Use Hak Pakai. This means that land under the more advantageous land titles of Right to Build (*Hak Guna Bangunan* and *Hak Milik*) that are often in the most sought after areas are off limits to foreign buyers.

The subject of foreign ownership is a contentious one in Indonesia considering the challenges Indonesian national face in securing property rights and within the context of the property bubbles that the global crisis exposed in places such as Dubai.

The Vertical Housing Bill is also currently under discussion for being redrafted, this is concerned with apartments as opposed to landed houses. In the purchase of apartments the attitude is quite different towards foreign ownership as the land itself remains under Indonesian ownership. The change in this law to allow outright foreign ownership is expected to be passed smoothly as it does not involve

the changing of the Basic Agrarian Law Act (1960) which regards foreign land ownership as unconstitutional. The passing of the Vertical Housing Bill will therefore clarify the regulations on the land tenure related to vertical housing and the rights to ownership of 'space' thereby facilitating foreign ownership. This will be an important step for international investors to gain confidence in the Indonesian housing market.

Non Indonesian nationals are currently able to buy a property in the following ways:

The purchase of a piece of land that is state owned or freehold (*Hak Milik*) that has an existing residential structure or to construct one on it, which has Right of Use (*Hak Pakai*) land title.

Purchase of an apartment with strata title within an apartment block that is on state land with Right of Use (*Hak Pakai*). Purchase of a house on freehold land by written consent from the landowner. This is for 25 years and extendable to a further 25 years.

Purchase of a freehold property by a nominee Indonesian national who would own the freehold title but signs over power of attorney and other legal rights.

A PMA can own a freehold plot of land and the building under a right to build HGB (*Hak Guna Bangunan*) land title not *Hak Milik*. The property is owned in the name of the company and therefore must pay the applicable taxes and IUT fixed operation license are subject to renewal after 30 years. This is the most advisable method as it avoids entering into unsecured partnerships with Indonesian nationals that can be high risk.

Future Regulations

Minister of Public Housing, Suharso Monoarfa has been supportive of the move towards allowing improved terms of ownership for foreign investors. He is however keen to learn from the mistakes of other countries that saw their property prices soar and created a property bubble; such an occurrence in Indonesia would price Indonesian nationals out of the market: 'the land is limited and foreigners have a greater opportunity to purchase a good property over the low income people of Indonesia'. When asked about the progress of the new regulations on foreign investment, the Minister confirmed that the basis of the upcoming regulations will allow leasehold ownership for a full 70 year period adding that 'of course the government will have the opportunity to evaluate the property such as the change of use from a house to an office for example.' What is still under discussion is the type of property that foreigners would be allowed to purchase. Current proposals being discussed are for properties of 1.5 billion RP while the government is more inclined to 2 billion RP and up, to protect the lower income property segment. Where the purchases will be permitted will most likely remain in the largest cities and most popular tourist destinations such as Jakarta, Bandung, Yogyakarta and Bali as well as the special economic zones in Batam.

The extension of the leasehold to 70 years is certainly more attractive to foreign investors as banks will be far more willing to finance a longer term lease. The term of 70 years; while an improvement on the process of 25 years

followed by subsequent renewals, is still short of the 90 years that foreign investors are permitted in Singapore and Malaysia. When the law will actually be passed is a further area of uncertainty with several of the proposed deadlines having not been met.

Such changes will therefore be beneficial to those with interests in Indonesia be it for business, tourism or retirement; but do little in the way of creating a valuable investment instrument as the laws are designed to avoid any speculation on future land prices and use. Foreigners would only be allowed to purchase property that is built on land with the Right to Use which is still in short supply in Indonesia. Most strata title properties are not built on this type of land as well as the weaker legal strength of the type of ownership which makes obtaining bank financing difficult. Property ownership rights for both foreigners and nationals are poorly enforced in Indonesia; for property rights, the country was ranked 84th out of 139 countries in the World Economic Competitiveness Report 2010-2011.

The delay on the passing of the law and the unremarkable changes that the passing of the law will bring with it may have less impact on the property sector than the country's developers had hoped for. While the stable economic growth will sustain the country's attractiveness for investment, property investors will shop around for where the highest margins can be found in the region which may well see Indonesia overlooked. The estimates of the law's contribution to raising the contribution of property to 10% of GDP will therefore take much longer to be reached.

Glossary:

Hak Milik - freehold title that can be bought, sold, mortgaged and inherited and is only available for Indonesia nationals and Indonesian corporations. International corporations cannot hold a freehold title.

Hak Guna Bagunan - the right to construct a building on a plot of land by a corporation (both domestic and foreign) or individual for a period of 20-30 years that is subject to renewal by applying to the National Land Agency. The purpose of the purchase must be executed in order for the land title to be secured in that the land may not be left idle.

Hak Sewa Bagunan - the right to rent land for building purposes by a determined amount of time by the two parties. This is an informal agreement in that it is not certified or registered with the land authorities and the legal protection of those engaging in it is therefore unclear. It can be held by a foreigner that is residing in Indonesia or the Indonesian branch of a foreign company. The agreed use of the land must be maintained throughout the lease period.

Hak Pakai - the right to use land for a specific and pre agreed purpose for a defined amount of time. This can be held by an Indonesian national, foreigners domiciled in Indonesia, foreign investment companies (PMA) and representative offices.

Hak Guna Usaha - the right of exploitation, applicable for state owned land to be used for agricultural and aquaculture purposes for a period of up to 35 years with a 25 year extension by applying to the National Land Agency. The land must be used for the purpose that it was leased for and may not be left idle.

Strata Title - the deed or right of use of an apartment can be purchased by a foreigner who resides in or has a regular 'presence' in Indonesia, as it is considered to be vertical space as opposed to land.

Land Acquisition Law



Infrastructure Index Score : 3.6/7 (2011)
Main project areas under PPP : Transport, Power Generation, Water supply & Waste management.

Related Regulations : Law No 41/2004 on Waqf and Law No 41/1999 on public and private development projects that transverse protected forest.

The laws surrounding land acquisition have held back the progression of much needed infrastructure projects around the country. The lack of clear rules on acquiring land for public use and the provision of fair compensation for land owners have stopped projects from being realised by causing delays as negotiations are carried out. This issue is currently being addressed in the form of new legislation that was submitted to parliament in February 2010. The new law would overhaul the stifling procedures for obtaining ownership of land that is required for public purposes by streamlining the process and drastically reducing the time taken to acquire the land. When passed, this law will give a much needed boost to

Indonesia's infrastructure roadmap that is vital in raising the \$140 billion USD needed in investment over the next 5 years and meeting the connectivity requirements of the ASEAN economic community in 2015.

Acquiring land for infrastructure projects is a burdensome process considering the numerous government bodies needed to be consulted and a long history of informal land ownership that gives rise to any number of individuals or families claiming rights over the land. An example is Law No 41/2004 on Waqf that requires the Ministry of Religious Affairs' approval to ensure that the land in question has not been reserved for religious purposes. The Ministry of Forestry also has a say over the land should it contravene laws

on protected forest. The coordination of the various ministries, central and local governmental bodies as well as the process of placating the communities around which the project will be built has delayed the land acquisition process by over 5 years in various cases. To address the poor coordination between the various levels of government and resolve conflicts restraining infrastructure projects, President Yudhoyono set up a Presidential Delivery Unit in 2009 with the authority to cut through bureaucracy.

Finalising this law is vital to advancing Indonesia's long term development needs and commitments in the form of the ASEAN Connectivity Master Plan 2015

While coordination on the public side may be improving, the lack of formalised compensation for individual landowners has led to the practice of holding on to their land for as long as possible while the project progresses to let the value appreciate and thus demand a higher price making the project untenable. The result is that swathes of transport projects have a fraction of the land they need to complete; the 617 km Trans Java toll road had only 38% of the necessary land by March 2011 which is due for completion by 2014 and the Ulujami - Kebon Jeruk Toll Road had only 40% by

January 2011 with construction due to start in the second half of 2011.

The new law being discussed would speed up the negotiation process from 4 to a maximum of 2 months to avoid discussions being dragged out. It would mark a significant shift in the national attitude towards land by prioritising needs of the public over an individual or community for infrastructure projects by giving the government the right to take it over. The public interest will relate to infrastructure projects such as toll roads and ports as well as utility projects such as geothermal power plants. The new law is also drafted to include measures that halt the practice of purchasing land for speculative purposes however it will not cover formalisation of compensation for landowners.

The new law is being eagerly awaited by investors but the issue of when it will pass is still undetermined. The law was expected by the first quarter of 2011 but failed to materialise, the most recent pledge was by July 2011. Finalising this law is vital to advancing Indonesia's long term development needs and commitments in the form of the ASEAN Connectivity Master Plan that will become felt more acutely after 2015. Infrastructure has been a persistent hurdle in improving economic efficiency in the country as well as holding back foreign direct investment. While the new law will not solve all the issues surrounding land acquisition or how the measures will be implemented, it will be a significant step forward that will in turn regenerate interest in the Public Private Partnership projects that the country has to offer.

Public Private Partnerships



*Average Government Spending on Infrastructure :
2.9% GDP (2009), 3.42% GDP 2011 (estimated)
Investment Required: \$ 140 billion USD (2010-2014)*

*Infrastructure Index Score : 3.6/7 (2011)
Main project areas under PPP : Transport, Power
Generation, Water supply & Waste management.*

The Asian financial crisis caused all infrastructure development to grind to a halt with funding being rapidly withdrawn, particularly from foreign sources. Since economic growth returned and sped up, the bottlenecks caused by the lack of infrastructure have become increasingly apparent.

Infrastructure development was a central theme of President Yudhoyono's electoral campaign in 2009 with a pledge of \$140 billion USD to be spent on it over 5 years. Realising the 100 infrastructure projects proposed by the Ministry of Public Works for 2010-2014 will require not only investment from the state and the private sector and effective coordination on PPP (Private Public Partnerships) projects, but regulations surrounding land acquisition and taxes to make the much needed projects a

reality.

Infrastructure spending has been neglected by the government with less than 5% of GDP being spent annually on it in the past decade and 3.42% estimated for 2011. The estimated \$140 billion needed will largely come from the private sector with the state contributing around 30% or \$51 billion USD. The Indonesian government is keen to involve private investors into much needed infrastructure projects through the PPP scheme. In order to entice investors and create a strong legal framework for the projects, the Indonesia Infrastructure Guarantee Fund was set up in May 2010 alongside the World Bank. The AAA rated guarantee fund is designed to mitigate against particular risk for the sector concerned such as contractual and political

risk. The stalling on changes to the land acquisition law makes this guarantee fund all the more necessary. The World Bank is providing a \$30 million USD loan as well as a \$480 million USD guarantee facility. The fund will provide Partial Risk Guarantees to the private sector on a subproject basis as well as facilitating project financing.

Other bodies that support infrastructure development are the State Investment and Multi-Infrastructural Facility Centre that allocate funds and conduct feasibility studies. The state has also provided up to \$2 billion USD in funds for land acquisition and exploratory risk mitigation. Tax holidays for certain categories of PPP are another measure aimed at encouraging investors to engage in the initiative. The tax breaks will apply to infrastructure projects deemed high risk such as geothermal power plants. The exact details of the tax breaks are yet to be announced by the Ministry of Finance but they will be a welcome addition for investors and will help to intensify lagging infrastructure projects.

Simplifying the process of accessing infrastructure projects has been a further step forward in realising PPP projects. The Investment Coordinating Board, BKPM, will now act as a single window for infrastructure investments following the signing of an MOU with BAPPENAS thereby centralising the process for PPP projects throughout the regions. This will aim to overcome the difficulties associated with dealing with numerous ministries as well as local and regional governments. BKPM has taken up five PPP projects to date including

toll roads and a railway project connecting the main airport in Jakarta to the city centre. The streamlining has attracted more investors such as India's Reliance Industries that are investing \$5-10 billion USD. Yet, attracting investors is only part of the process as obstacles to realisation such as land acquisition must be tackled at the same time and BKPM is not positioned to do so.

The types of infrastructure needed vary widely across the country with sanitation and water supply high priorities for less developed regions and transportation infrastructure in demand for urban and industrial centres. Social infrastructure projects that provide low and long terms returns for investors are to be undertaken by the state. PPPs are focused on several key areas with potentially high returns in light of the size of the population and economic climate. Over the next 5 years, these include 20,000 km of new roads and toll roads, ports, railways, 14 new airports as well as 15,000 MW of power plants. These projects require private sector investors with the technology and expertise as well as access to financing. Here, foreign contractors and investors have a vital role to play in being able to supply financing. Indonesian banks' high lending rates and unwillingness to wholly finance most infrastructure projects open up an opportunity for foreign investors and financial institutions to combine their financing with that of local funds.

Opportunities in PPP

The head of the infrastructure division at BAPPENAS, the National Development

Planning Agency announced in May 2011 that 79 projects will be offered through the PPP scheme.

Note - power plants below 10 MW are reserved for small and medium local companies.

Based on the Negative Investment List, foreign companies have varying levels of ownership in PPP schemes and are required to take on a local partner for construction and execution:

Transmission and Distribution of Electricity - up to 95% foreign ownership.

Toll Roads - up to 95% foreign ownership.

Water Supply - up to 95% foreign ownership.

Power Plants - up to 95% foreign ownership.

Ports - up to 49% foreign ownership.

PPP Infrastructure Projects for 2011:

JAVA

Mass Rapid Transportation System in Jakarta - \$1.81 billion USD

Soekarno Hatta Airport Rail Link - \$735 million USD

South Banten Airport - \$85 million USD

Waste Conversion Plant in Bandung - \$86 million USD

PT PLN Coal Powered Power Plant - \$3 billion USD

Geothermal Steam Power Plant in Central Java - \$3 billion USD

Waste Conversion Plant in Solo - \$7.4 million USD

BALI

Marina at Tanah Ampo - \$24 million USD

SUMATRA

Medan - Kuala Namu Airport Toll Road - \$475.5 million USD

SULAWESI

Maros Clean Water Plant in South Sulawesi - \$12.9 million USD

KALIMANTAN

Coal Railway in Central Kalimantan - \$2.1 billion USD

Source : BAPPENAS

Challenges in the Construction Sector



*Number of companies : < 58,000
Contribution to GDP : 10% (2010)
Number Employed in the Sector : 5.4 million*

Standardised Qualification: ASEAN Chartered Professional Engineer certificate and the National Construction Services Development Board certificate.

The construction sector in Indonesia grew at 7% in 2010 and up to 10% predicted for 2011 in real growth, fuelled by high demand for residential projects and infrastructure. Being largely labour intensive and heavily sensitive to changes in the prices of raw materials for construction and fuel has made the sector vulnerable to shocks and rising inflation. Improving levels of expertise among the private sector contractors has been a challenge in improving competition, as the state owned companies (SOEs) continue to be the main players. This makes finding a local partner to execute PPP projects as well as locating qualified human resources an obstacle for foreign companies operating in Indonesia. The gap between the rates of nominal growth of the construction sector which

stood at 32% for 2009 and real growth at 7% is a reflection of the high costs the sector must contend with. The fast rate of expansion has fuelled inflation which has also been impacted by the sharp rise in oil prices. This increased the price of construction materials such as asphalt, glass plates and cement by up to 20% at the end of 2010. Global price rises in steel and iron bars have also hit the sector as when coupled with Indonesia's persistently high logistics costs, it cuts deeply into potential profits. The China ASEAN Free Trade Agreement enacted in January 2010 removed tariffs for many types of construction materials, however often the quality of products such a cement has often failed to meet national industry standards. Other factors influencing the high prices are that inter-island transportation can be

more expensive than that of international. Therefore, until the infrastructure and logistical improvements start to make an impact, costs for constructions materials will continue to increase.

According to the Business Competition Supervisory Commission, KPPU, the construction sector is unhealthy; lacking competitiveness as well as expertise among the smaller contractors to compete with state owned companies. The largest companies in the sector are SOEs such as PT Adhi Karya Tbk (Persero) and PT Wijaya Karya Tbk (Persero) which are far more successful in being awarded state contracts than private competitors. Being state owned brings obvious advantages to the government as they have a stake in it and have the facilities to purchase the necessary technology but is unsustainable over the long term. Over 80% of Indonesia's 58,000 registered contractors are small companies that cannot take on large scale projects, with only 1% of those being considered 'large' and 12% being 'medium'. The Presidential Decree No 54/2010 on Governmental Goods/Services Procurement is being considered for revision so that it may give smaller companies a fairer chance in tender proceedings by partnering with state owned companies for knowledge transfer.

Indonesian contractors face limitations in the expertise and technology required for infrastructure projects under the PPP scheme and are being outdone by foreign contractors. Of the construction projects offered by the state in 2010, Indonesian contractors only won 40% of

them. Foreign companies are better positioned to secure tenders and have come to dominate the sector in the country by having 60% of the construction market, mainly from Japan. The 2010 government regulation guarantees local contractors a right in projects over 100 billion RP, meaning that foreign contractors are required to take on a local manpower and engineers. As the majority of contractors are small companies, they lack experience in managing and executing projects of such scope. Qualified human resources are in short supply with a small percentage of Indonesian engineers holding the mandatory ASEAN Chartered Professional Engineer certificate. Foreign companies seeking a local partner must consider factors outside of just skill and size; local contractors who have the political connections needed for state funded construction projects are the most advantageous category of partner to take advantage of the 140 trillion RP to be spent on infrastructure projects over the next 5 years.

The construction sector in Indonesia is predicted to grow at an average of 6.8% a year to 2014 according to Business Monitor International, driven by the boom in residential and commercial developments as well as state infrastructure projects. Construction material costs in some areas will be brought down by the expanding of domestic capacity in manufacturing materials such as cement and steel. Remaining reliant on imports will restrain real growth and therefore presents opportunities for manufacturers to fill the demand.

Global Business Guide meets with Minister of Public Housing, Suharso Monoarfa.

What are the priorities for the Ministry of Housing for the coming years?

When I was appointed minister, I faced a huge problem with the housing in Indonesia, starting with a big backlog. Every year the need for houses increased by around 710,000. I tried to look at this problem with the big picture, I found in the market approach that there is always demand. As you know, this backlog goes to low income people and of course the state or the government should exist to serve these low income people. At first their purchasing power was very low, but at the same time the market was against them in obtaining a low rate for credit. So there was a fundamental mismatch in the market; the low income people need financing that is fixed and cheap but it is not available in the market. The banks are offering a high rate and only for the short term. So I created a fiscal policy to provide a liquidity facility that goes to the banks for long term financing with a fixed low rate. As you know the rate in the market now is 14-18% so it is not affordable to the people that need it. With this fiscal policy we can serve these people with an 8-9% rate for a 15 years fixed period.

The second policy is how to deal with the supply of low cost housing. All over the world, to provide low cost housing you must deal with large scale technology and unfortunately as yet, in Indonesia we do not have this technology. For high rises and luxury buildings we



To provide low cost housing you must deal with large scale technology and unfortunately as yet, in Indonesia we do not have this technology

have the materials but for low cost we face a problem.

I looked to our friends in China, India and even the USA, and I found that the problem is not the construction but the land. So I encouraged the local authorities (*kabupaten*) to buy their local land so that they can build their own infrastructure. Again I set up a fiscal policy to buy land and then construct infrastructure so that it may be used for low cost housing.

We are also addressing the issue of urban development and city planning.

The changes to the law regarding foreign ownership of property in Indonesia has been long awaited. What can you tell us about the shape the new regulations will take?

In this era of globalisation, people are seeing the world and living in cities outside their home country. Of course, in Indonesia there is still a big backlog, and the land is limited; also foreigners have a greater opportunity to purchase a good property over the low income people of Indonesia. So, for the foreigners, why do they want to buy property in Indonesia? For a second house, for retirement or for an investment.

For investment, of course we should be careful because we learned from the Dubai phenomenon, Singapore, USA, Hong Kong etc. So of course we try to not follow their story. We welcome foreigners to have a property here, prices here are still low even compared to Vietnam.

Then coming to the regulation; there are two types of policy one is freehold and the second is leasehold. In Indonesia, we choose leasehold with limitations. Now we are discussing with the parliament to fix it to 70 years at once, of course the government will have the opportunity to evaluate the property such as the change of use from a house to an office for example.

What opportunities are there for foreign companies within Indonesia's real estate sector?

Firstly on the supply side of how to deal with large scale, low cost housing. Some people have come to me from Finland,

the Netherlands and Australia showing me technology on how to erect a house in one day or 30 houses in one week. We want to incorporate this technology that would allow us to boost the cost. That is what we can tap from foreign expertise and companies who are interested in coming to the country. I think the problem is the materials [that we do not have in Indonesia] and this is a further opportunity for foreign companies.

With President Yudhoyono's ambitions to cut Indonesia's greenhouse gas emissions by 26% for 2020, how is the Ministry incorporating these targets into urban planning?

I have been in discussion with Indonesia's major property tycoons to understand their methods of minimising energy usage.

In Finland I saw the widespread use of solar panels. In Indonesia, we have sunshine all year round so we can take advantage of this. As part of my future policy, I will create incentives for this to make houses more environmentally friendly. I will also be speaking to the government about measures for high rise buildings as I have seen in Singapore the use of open space to absorb the sun. I have also been speaking with some of the local authorities on how to capitalise on the huge amount of garbage for use in waste power plants, such as in Bekasi. Now in Bandung a waste power plant has been set up and in Surabaya they also have tried it. We have incorporated these plants into the urban planning by putting them at the heart of the city to generate energy.

Services

157-159 Transport in Indonesia: Roads and Railways

Indonesia's land transport takes the bulk of both passengers and cargo, yet it is under strain and in need of a major overhaul under the National Long Term Transport Sector Plan. This section covers some of the planned projects including the MRT in Jakarta.

160-161 Indonesia's Commercial Airline Industry

As the 12th largest aviation market in the world to date, Indonesia's commercial airline industry has an exciting future ahead of it. This section looks at some of the challenges faced by the sector as it braces itself for increased competition from the ASEAN Open Skies Policy in 2015.

162-164 Indonesia's Shipping Sector

This section provides an overview of the developments in Indonesia's shipping industry and reforms that are underway to improve efficiency in the logistics sector following the introduction of cabotage and the liberalisation of port management as of 2011.

165-167 The Rise of Modern Retail Outlets

Indonesia is gaining recognition as a major consumer market considering that domestic consumption accounts for over 60% of GDP. This section looks at how modern retail outlets such as hypermarkets and malls are gaining market share among Indonesian consumers.

168-169 Indonesia's Creative Industries

Indonesia's rich cultural diversity has given rise to a rapidly growing creative industry that is set to have an even more prominent role in the future as the country transitions to a knowledge based economy. This section looks at how the government is supporting innovation in this sector.

170-172 Opportunities and Challenges in the Creative Industry

Indonesia's large and youthful domestic market is highly adaptive to new trends and technology. This section looks at some of the opportunities in the sector given the revision of the Negative Investment List and the challenges for new entrepreneurs in protecting their intellectual property.

173-176 Tourism: Untapping the Potential

Long known for the idyllic beaches of Bali; the rest of the Archipelago has yet to attract the tourism numbers that it deserves. This section looks at some of the obstacles holding back the tourism sector to date and reforms being undertaken to improve logistics and human resources.

177 Interview

Mr Suresh Vembu, Company Director of AKR Corporindo.

Transport in Indonesia: Roads & Railways



Contribution to GDP: 6% (2010)
Existing Road Network: 476,337 km (2009)
Existing Railway Network: 4,800 km

Government Bodies: Ministry of Transport, BAPPENAS, Ministry of Public Works & the Indonesian Toll Road Authority.

Indonesia's vast size stretching over 5,000 kilometers across the equator and being made up of over 17,000 islands has made the development of an efficient national transport network a challenge. Java, as the most populated island faces huge congestion around its sea ports with the need for expansion and modernisation, while the road network has failed to keep pace with car purchases in the main urban centres pressing the need for public transportation. The more recently developed economic activity on islands such as Sulawesi and Kalimantan bring with a very different set of challenges. Overall, the overburdened existing transport facilities for sea and land are contributing to high logistical costs, bottlenecks and making the country uncompetitive. Investment to expand and upgrade existing infrastructure

as well as establish new facilities to promote more even national development is how the government is proceeding under the National Long Term Transport Sector Plan. The achievement of these goals will require extensive private sector input within the Public Private Partnership (PPP) scheme and major efforts on behalf of the government to clear the way on issues such as land acquisition.

The development of the transport network is being carried out in several phases under the National Long Term Transport Sector Plan (RPJP) 2005-2025 as well as being part of the Master Plan for ASEAN Connectivity to 2015. The second phase from 2010-2014 is currently underway which focuses on infrastructure development and expanding road capacity. The third

phase from 2015-2019 will see greater integration of infrastructure around the country while the final phase will complete the incorporation of transport networks for regional connectivity including remote regions. Balancing the immediate needs of provinces and regions in terms of funding and facilitating coordination between local governments that determine their own spatial planning is a major challenge to achieving the nationwide vision.

The failure to keep up with this growth is most apparent in Jakarta where gridlocked traffic jams at all hours of the day cost the economy \$5.2 billion USD in 2010 according to the Jakarta Transportation Agency

Roads

Indonesia's road network takes on the bulk for land transportation of both people and goods, at 90% and 70% respectively making it the main focus of transport budget spending. The length of the national road network has grown from 391,009 km in 2005 to 476,337 km in 2009 (Statistics Indonesia). While the length of state, district, provincial and toll roads have been increasing, it has failed to keep up with the number of automobiles on the road. From 2001 to

2009, road length increased by an average of around 2% while private vehicle ownership has increased by 11-13% (University of Gadjah Mada). The failure to keep up with this growth is most apparent in Jakarta where gridlocked traffic jams at all hours of the day cost the economy \$5.2 billion USD in 2010 according to the Jakarta Transportation Agency. It has been estimated by Jakarta's traffic police that the city will grind to a halt by 2014 at the current pace of road expansion. A similar story will be seen throughout the country's urban centres as incomes continue to rise and the need for private vehicles increases with the lack of public transport. Increasing spending on not only new roads but the upkeep of existing roads is vital to ease the bottlenecks that are potentially hampering further economic growth. Damaged roads as a result of heavy rainfall and flooding are a major concern as overburdened and unmaintained highways have collapsed causing injury and further adding to the congestion. Budget constraints have made funding inadequate to achieve both maintenance and expansion therefore increasing the need to push forward with privately funded toll roads and alternative transport methods.

Indonesia opened its first toll road route in 1978 from Jakarta to Bogor and currently has over 700 km of toll roads in operation (Ministry of Public Works). Toll roads became open to competition from the private sector in 2004 under Law No. 38/2004 when SOE Jasa Marga shifted from regulator to operator and went public in 2007. The company

remains the dominant player in the sector, operating 14 toll roads and with plans to acquire a further 200 km of road up to 2014. Various toll roads are being offered under the PPP scheme as part of the government plan to construct over 800 km of new toll roads by 2014 with Trans-Java connectivity as a priority. Of the 27 priority infrastructure projects under PPP, 18 of these are toll roads. Many of these projects are facing issues with land acquisition that are placing them well behind target. The long awaited changes to the law on land acquisition is needed for these projects to progress. The success of existing toll roads will continue in light of the slow development of state funded roads and thus remains an attractive investment opportunity despite the lengthy process in terms of construction and payback.

Railways

Indonesia's railways are operated under SOEs PT Kereta Api Indonesia (PT KAI) which previously held the monopoly over the sector until 2007. Law No. 23/2007 signalled a shift in attitude towards the nation's railways to be part of national development by making the sector more competitive in terms of service and pricing. The railway tracks themselves remain under state ownership with state and private companies paying a fee to use the rail lines. PT KAI Commuter Jabodetabek, a subsidiary of PT KAI, operates transport routes and executive trains for passenger routes around the Greater Jakarta area. For industry, around 90% of manufactured goods and natural resources such as coal are transported on the railways in Java and Sumatra.

Currently, only these two islands have railway links for both cargo and passenger transport while the Ministry of Transport has plans to develop lines over Kalimantan and Sulawesi.

To help reduce the burden on roads, further development of the nationwide railway network must be a priority in order to provide affordable public transportation as well as facilitate the efficient movement of goods. The growth has been slower compared to that of toll roads which is the opposite trend to what has been witnessed in other emerging markets such as China that have invested heavily in high speed rail links. Under the National Railway Masterplan, 2010-2030, Indonesia's railways will gradually be moved towards greater commercialisation.

There are currently nine railway projects being offered as PPP projects by BAPPENAS, including the rail link from Soekarno Hatta International Airport to Jakarta and the coal railway line in Kalimantan. The Ministry of Transport is also moving ahead with ways to attract investors into specialised industrial railways such as for CPO transport by preparing to speed up approvals through e-licensing.

A much needed Mass Rapid Transportation system for Jakarta has been in discussion since the 1990s but has failed to materialise. The cause has once again been revived in 2011 with the agreement of a loan from the Japanese International Cooperation Agency and a tender issued for the estimated \$1.8 billion USD scheme. Made up of two lines, it will be 110 km in total length to be completed in 2 phases beginning construction in 2012.

Indonesia's Commercial Airline Industry



Transport Contribution to GDP : 6% (2010)
Number of Airports : 187 (local and international)
Planned Airports : 14

Number of Commercial Airlines : > 15
Total International Passengers : 9.7 million (2010)
Total Domestic Passengers : 43.5 million (2010)

Long known for poor standards of safety and frequent accidents; Indonesia's Commercial Airline Industry has turned over a new leaf. Airlines such as national carrier Garuda have been removed from the European aviation blacklist resuming international flights. Stricter measures from the Ministry of Transport have also consolidated the market renewing confidence in the industry among consumers. This comes at the ideal time as incomes increase and the numbers of domestic passengers are growing, giving rise to an expansion of the sector. Indonesia is now the world's 12th largest aviation market with plenty of scope for future growth. Domestic passenger numbers increased by 22.77% from 2009 to 2010 with figures for Q1 2011 showing a 17.96% increase for the

same time last year (Statistics Indonesia). Domestic routes are dominated by PT Lion Mentari Air with just under 40% of market share followed by Garuda Indonesia and Sriwijaya Air. International flights are mainly undertaken by the Indonesian arm of Malaysia based airline Air Asia that holds over 40% of the market. The main international routes are to Singapore and Malaysia while destinations in China are becoming more popular with more routes to the country being planned by all major airlines. In spite of the growing passenger numbers, the airline industry is facing difficulties in boosting profits due to high fuel costs. The first half of 2011 saw oil price spikes with the volatility in the Middle East with a knock on effect for jet fuel. In the past, in order to combat

price rises airlines had applied a fuel surcharge however a continuation of levies even after the price had dropped led to an investigation and the payout of millions of dollars in compensation. The resulting legislation, Transport Ministry Regulation No. 26/2010 stipulates that fuel surcharges may only be imposed in the event of operational costs increase by 20% for three successive months. Airlines are thus facing a difficult climate in which to undertake their expansion. Charging higher prices for tickets are therefore an inevitable consequence, yet it seems unlikely to dent passenger numbers due to lack of alternative transport methods for long distance journeys.

In preparation for increased air passenger numbers, the country's airports are undergoing a much needed renovation while further airports are being added to the network.

The Ministry of Transport aims to build 14 new airports by 2030. A fund from the 2011 budget has been set up for the construction and renovation of 118 airports throughout the country. Projects are currently underway; Soekarno Hatta Airport in Jakarta has recently expanded capacity with a new third terminal and two further terminals planned by 2020.

The construction of an additional airport in the capital city is also being considered in order to accommodate future volume of travellers. In addition, the main airport in Bali, Ngurah Rai, is being renovated in a \$182 million USD revamp while a further airport is planned in the North of the island. New airports are also expected in Lombok,

Medan and Yogyakarta while 14 new airstrips for smaller aircraft are planned for islands including Papua and Kalimantan.

Private and international investors are being actively invited by the Ministry of Transport to participate in both new airport and the management of those that will be newly renovated. Since 2010, 7 airports have been offered under the PPP scheme with more expected in the near future.

The ASEAN Open Skies Policy is due to come into effect by 2015 following the agreement of member states in December 2008. The ambitious plan would see the removal of regional flying restrictions for member countries and liberalisation of the aviation sector for both cargo and passenger transport. It would allow unlimited flights between ASEAN countries, making the sector more competitive and bringing down ticket prices for passengers. While Indonesia had signed on to the policy, it is facing challenges in being able to fully comply by 2015. Rather, only 5 main airports will be subject to the policy in key cities such as Jakarta and Bali with a gradual phasing in of the policy over time.

The scheme has mixed perceptions among the industry with many local players in Indonesia and other countries such as the Philippines being afraid that they will be crowded out by more established counterparts such as Singapore Airlines just as the domestic industry is beginning to take off. Yet, in the long term the policy will bring about benefits for both consumers and airlines themselves as they get to tap into further markets.

Indonesia's Shipping Sector



Transport Contribution to GDP : 6% (2010)
Existing Road Network : 476,337 km (2009)
Existing Railway Network : 4,800 km

Number of Airports : 187 (local and international)
Total Sea Ports : 1,700
Number of Commercial Sea Ports : 111

Sea transportation is a vital aspect of Indonesia's trading infrastructure carrying over 90% of internationally traded goods. Yet existing infrastructure is inadequate to meet the current volumes of trade being carried out. This has given rise to high logistical costs for both domestic, local and international transport due to congestion at current ports that make turnaround times considerably high. Construction of new facilities are being undertaken by the government as well as increasingly by the private sector in order to prepare for the growth in activity as the ASEAN one market approaches in 2015.

Indonesia has hundreds of small ports throughout the islands making up a total of 1,700. Of these, 111 of these are commercial ports while only 11 are container ports. The shortage of large

scale ports capable of receiving trans-oceanic vessels and the overcapacity of current ports has given rise to a highly inefficient system. As a result, much of Indonesia's cargo has to go through Malaysia and Singapore. Existing facilities are being overloaded with the main port in Jakarta, Tanjung Priok handling 70% of Indonesia's total import and export flow. The port is due to exceed its capacity of 5 million TEU limit in 2011. The congestion and resulting bottlenecks have made shipping costs in Indonesia the highest in the ASEAN making up 15% of the final price of goods (KADIN). Such conditions make the price of inter island transport more expensive than that of international; the price of shipping a standard container from West Sumatra to Jakarta is over three times the cost of Jakarta to Singapore.

The high logistical costs are burdensome for competitiveness and are reflected in international rankings on the business environment. The World Economic Forum's Global Competitiveness Report 2010-2011 where Indonesia ranked 44th overall, put the country at 90th for infrastructure and 96th for port efficiency. Similarly, the World Bank Logistics Performance Index places Indonesia at 75th out of 155 countries. While conditions have been improving from five years ago, as illustrated in the World Bank Doing Business Report, it is not improving fast enough compared to regional counterparts.

Ports are managed by four state owned companies PT Pelindo I, II, III and IV while the sector has been recently opened up to private sector and foreign involvement in 2011 under the 2008 Shipping Law. The need to radically upgrade facilities is recognised by the government and a new drive is underway as part of the national infrastructure development master plan. New ports are being planned to relieve some of the congestion. In North Jakarta, Kalibaru Container Port is due to begin construction at the end of 2011 to ease off some of the pressure from the main Tanjung Priok Port that has been stagnating in terms of capacity. It will accommodate 6.5 million TEUs as well as host an oil and gas terminal. Further upgrade plans under the SOEs PT Pelindo I, II, III & IV are underway to expand the capacity of Tanjung Priok by 1.7 million TEUs as well as the construction of new ports at Ancol, North Jakarta and Lamong Bay in Surabaya.

Private companies have also moved in



to fill the gap by constructing their own ports and terminal facilities such as AKR Corporindo and property developer Jababeka's dry port in Cikarang. With the break of PT Pelindo's monopoly on port management under the 2008 Shipping Law thus opening up the sector to private players in 2011, this should see greater competition as well as improved efficiency. Increased private sector involvement will bring a much needed boost to improve both turnaround times and high costs. This move is necessitated by the upcoming ASEAN single window in 2012 and the single market in 2015 which will see further intensification of regional trade.

The introduction of cabotage through Presidential Instruction No. 5/2005 and Law No. 17/2008 signalled a shift by the government towards actively supporting the development of the domestic shipping industry. The measure, which became effective at the beginning of 2011, stipulates that domestic shipping routes can only be undertaken by Indonesian vessels or by international vessels only with a fully Indonesian crew on board. Otherwise, foreign vessels may only enter international ports and must transfer their cargo for domestic shipping. This has since been revised for specialised oil and gas vessels following protests from energy

The liberalisation of port management and the much needed opening of new facilities will also see improved productivity and efficiency, to bring the industry up to the level of its regional counterparts

companies, including state owned Pertamina, that local providers did not have adequate facilities for deep water drilling. The lead up to the introduction of the measure has witnessed a revival in the local shipping industry that had previously come to be dominated by foreign operators.

Frost and Sullivan, a consultancy firm,

estimates that the application of the law will reap up to \$3.2 billion USD for the Indonesian shipping companies in 2011 alone. The share of both domestic and international freight being carried out by such companies stood at 55.5% and 5% respectively in 2005 and is projected to reach 97% and 10.4% in 2011.

Indonesia's domestic shipping industry has a bright future ahead under the cabotage principle which will see it benefit from the recovery in regional and global trade. The liberalisation of port management and the much needed opening of new facilities will also see improved productivity and efficiency, to bring the industry up to the level of its regional counterparts. Securing and attracting investment to upgrade local company's facilities and vessels is a challenge that lays ahead in order for the industry to fully meet the needs of the domestic energy and mining sector. This also brings with it the need for qualified human resources in the areas of port management, vessel and cargo handling to ensure that the sector can remain competitive.



The Rise of Modern Retail Outlets



Retail Sales : \$292.4 billion USD (2010)
Real Sector Growth : 12%
Number Employed : >20 million

Modern Retail Market Share : ±40%
Main Areas : Hypermarkets, Supermarkets,
Department Stores, Mini Markets.

Indonesia's retail sector has been growing at a rapid pace since 2005 in line with the growth of the middle class. After sluggish growth of 5% in 2009, 2010 saw sector growth of 12% with 15-20% expected for 2011. Traditional retail habits that saw local markets as the centre of activity have been quickly replaced by that of malls and hypermarkets that offer convenience as well as entertainment. Partnerships among banks and the retail sector to offer incentives and consumer credit is also fuelling spending. Existing local and foreign companies are entering into ambitious expansion plans to gain a stronger foothold in secondary cities and developing regions throughout the country. Thus, competition in the sector is getting more intense as foreign companies seek to move in on the

country's huge retail potential and low penetration rate.

Since 1998, foreign companies were allowed into Indonesia's retail sector which saw the entrance of the French multinational, Carrefour in the same year that has 64 hypermarket outlets to date (2011). Other players followed suit such as South Korea's Lottemart and Japan's Sogo in department stores. Foreign companies exist alongside large scale local retailers such as Matahari which is Indonesia's largest retailer by market value, Indomarco Prismatama and Hero Supermarkets. Hypermarkets have gained popularity in the modern retail sector since their introduction in 2003 and are now accounting for over 40% of the sector's sales. Carrefour holds the leading market share at 40% for 2010 followed by Matahari's

'Hypermarket' chain that has 52 outlets and Hero's Giant chain. Changing lifestyles will see their dominance continue to gain strength as they offer a combination of convenience and low prices that appeal to Indonesian consumers.

Traditional markets still account for around 60% of total retail spending throughout the country as modern retail facilities are heavily concentrated in Java. This is expected to gradually decrease in line with the expansion plans of retailers and retail property developers to go into the regions outside of the main urban centres of Java and beyond. Carrefour announced plans in 2011 to open an additional 20 stores a year for the coming years. Matahari, following its decision to not sell its hypermarket business at the beginning of 2011, has announced plans of 17 new Hypermart stores with focus on provinces in Eastern Indonesia such as Papua. Lotte Mart, which came into the market by acquiring local retailer Makro Indonesia in 2008, is planning on opening 30 new hypermarkets by 2015. Mini market and convenience store chains also have ambitious targets to ride the retail wave. Sumber Alfaria Trijaya's Alfamart chain that has 4,853 stores across the archipelago plans on adding a further 800 outlets while main rival Indomaret is targeting 800 new stores for 2011 to bring their total franchise portfolio to 5,755 stores.

Government regulations to protect traditional retailers can create a somewhat restrictive environment for retailers to operate in. Regional Regulation No. 2/2002 requires that

modern retail outlets can only be set up a certain distance from existing traditional markets. The distance is determined by the size of the modern retail space, although the implementation of this measure varies according to the local regency in question that distributes the permits. In addition, as of Presidential Decree 111/2008, foreign companies may only operate in retail spaces that exceed 1,200 square meters and department stores of 2,000 square meters or more. Other regulations include Presidential Decree No. 112/2007 and Ministry of Industry Decree No. 53/2008 which stipulates that hypermarkets can only be established on arterial roads or roads that can be covered over a high speed.

Government regulations to protect traditional retailers can create a somewhat restrictive environment for retailers to operate in

Supermarket and department stores are restricted to roads that can be travelled at a low speed or for short distances. Such restrictions are an unattractive prospect for investors given the slow rate of infrastructure and transport development. This is particularly true of areas outside of Java where the most interesting retail opportunities lay. This will require extensive coordination



between retailer, local government and investors in Public Private Partnership projects such as freeways and toll roads to make future ventures viable.

The involvement of the Indonesian Business Competition Supervisory Committee, KPPU, in recent cases of retailer expansion to ensure that they do not encroach of local zoning regulations is a reflection of the overlapping and sometimes confusing regulations. This has impacted on expansion plans for companies such as Indomaret and seen an ongoing investigation in Carrefour after it purchased a stake in Alfamart. Clearer regulations for the future are therefore needed to incentivise both local and foreign retailers to expand into less developed regions of the country where there is need for the logistics and distribution network that large scale retailers bring with them.

As retail sales figures continue to soar to an estimated \$513 billion USD by 2015 (EIU), the banking sector has been quick

to tap into the potential benefits. In order to build filiality among customers in the face of intensified competition, retailers have partnered with banks to offer loyalty rewards and other perks. Carrefour established a partnership with Bank Mega while Matahari's Hypermart offers a credit card with Bank Mandiri. Such cards offer regular discounts as well as financing on large purchases such as electronics and white goods. This is serving to fuel the boom in consumer credit with plenty of space for further growth given the estimated 4.5% penetration of credit cards (Bank Indonesia). The convenience that such cards offer will serve to accelerate the growth in use of modern retail outlets among the population.

Indonesia's modern retail sector holds huge potential for future growth, particularly in the hypermarket sector as well as department stores and speciality outlets. Competition in the sector will continue to heat up as expansion plans of major retailers get underway albeit at a lesser pace than they may have hoped due to government regulations. More foreign players are also expected to come into the sector such as Germany's Metro which has announced its plans to enter the market in 2012. However, success is not guaranteed and many foreign companies have come and gone in the past after having failed to capture the local market. It is however certain that the modern retail outlet is very much here to stay in Indonesia and will continue to grab market share from that of traditional markets as incomes rise and heighten the demand for convenience.

Indonesia's Creative Industries



Creative Industries Contribution to GDP : 7.2% (2010)
Contribution to Exports : 9% (2010)
Employed in the Sector : ± 7.5 million (2010)

Main Areas: Fashion, Crafts, Advertising, Design, Architecture, Broadcasting, Publishing, Music, Software Development.

Home to the art form of batik, varying musical and performance styles; Indonesia's rich cultural diversity and heritage provide fertile ground for a thriving creative industry. Long time cottage industries of art and crafts have the scope to become internationally sought after commodities, illustrated by the sudden growth in Indonesia's contemporary art market. Such creativity is extending into other industries such as advertising, fashion, music production and publishing contributing a total of 7.2% of GDP and 9% of export value in 2010. The potential of the creative industry is a core priority of the government through the Ministry of Trade, with the target of 8% of GDP for 2011 as well as increasing total export value to 12% by 2015.

The creative industry is highly diverse

split broadly over 14 industry categories including advertising, fashion, design, music and software development. Fashion remains the dominant subsector of the creative industry in Indonesia in terms of contribution to GDP at 63.3% for 2010 followed by crafts at 33.2%. The sector is made up of thousands of SMEs at an estimated 6.74% of total companies in Indonesia and is a major source of new entrepreneurship among the country's youth. Contribution to exports increased by over 35% from 2006 to 2010 (Ministry of Trade) which is impressive considering its relative novelty as a commercial subsector. The government has been notably active in promoting Indonesia's creative talents and export potential. Under the Ministry of Trade, 2009 was designated as the 'Year of the Creative Industry' with the organisation

of exhibitions throughout the country and abroad to showcase local companies and products. Such enthusiasm was also reflected in concrete action under Presidential Instruction No. 6/2009 requiring 24 governmental bodies to formulate programs for developing the sector. For 2011, the trend continues with 50 billion RP allocated by the Ministry of Trade for promotion and overseas skills training. State owned banks are also being directed to lend

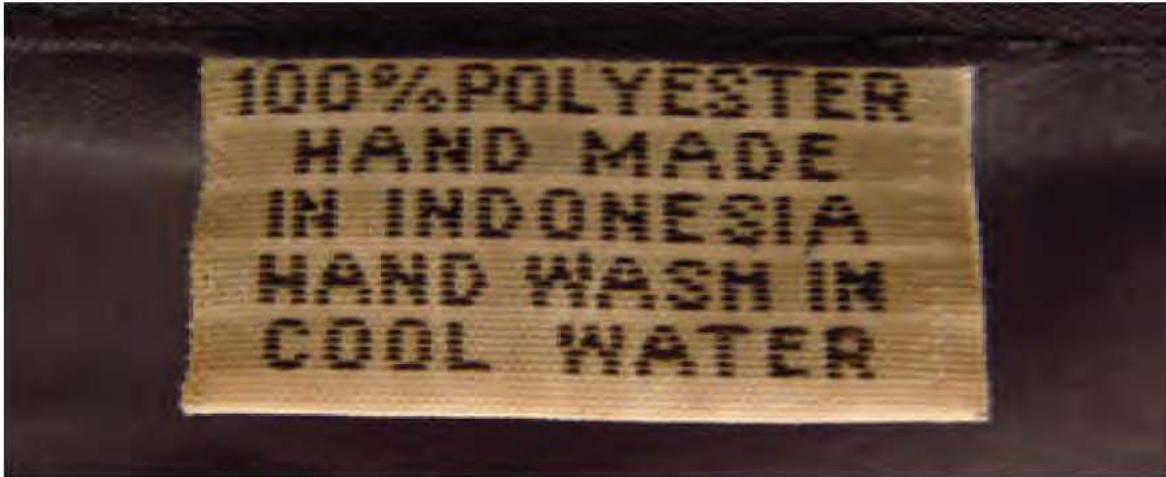
The coming years will see greater personalisation in the digital market to meet consumer as well as business needs as internet penetration increases rapidly

more to entrepreneurs in the creative fields. The future development of 'creative cities' that would create clusters in specific creative subsectors is a further move by the Ministry to develop Indonesia's human resource potential. Such cities are being created alongside the British Arts Council and are expected by 2014 as part of the Creative Economy Blueprint and will be found initially in Bandung, Semarang, Yogyakarta and Bali. They will play a key role in facilitating the transition from being hubs for heavy industry to that of knowledge based economies of scale.

Indonesia's creative industries hold great potential and government initiatives are building strong foundations for the sector. Immediate strengths lie in traditional areas of production such as batik which is reflected in the fashion industry as well as furniture such as rattan and teak. Yet, the rise of the digital age in areas such as advertising, music and software is seeing a gradual shift in the dominance of subsectors within the industry. The coming years will see greater personalisation in the digital market to meet consumer as well as business needs as internet penetration increases rapidly. The next steps will be to make the creative industry sustainable and will require a substantial shift on the part of the government in intellectual property rights to protect its entrepreneurs.



Challenges and Opportunities in the Creative Industry



Creative Industries Contribution to GDP : 7.2% (2010)
Contribution to Exports : 9% (2010)
Employed in the Sector : ± 7.5 million (2010)

Relevant Law: Presidential Instruction No. 6/2009 and Indonesia Creative Economy Blueprint 2009-2025.

Indonesia's creative industries offer both challenges and opportunities for new entrepreneurs and foreign companies coming to the sector. The large domestic market and rapid rate of new technology uptake reflected in the widespread success of social media make it ripe for innovative products in the digital arena. The growing diversity and sophistication of consumers is also impacting tastes in entertainment at a key time when the film sector has been opened up to foreign investment.

Local Indonesian brands are gaining international recognition such as Bagteria, a boutique bag producer using traditional craft and embroidery techniques. Founder, Nancy Go's creations have been seen on celebrities and are sold in stores throughout Asia, the Middle East and in Europe. The

brand reflects the potential for international success of other Indonesian designers many of which are already making headway in areas such as Muslim fashion and batik. Further exposure abroad and events such as the Jakarta Fashion Week held annually that encourages collaboration with western designers will help in carving out an image for Indonesian brands. The push by the government is also proving a success in generating awareness of goods for export; Sweden has undertaken partnerships with Indonesian companies for the export of furniture, crafts and other goods. This has seen the opening of the Swedish Trade Council in Indonesia and a steady increase in bilateral trade over the first half of 2011. The sector presents opportunities for investment and partnership to access the

domestic market. Indonesian consumers represent a large, youthful and highly adaptive market. The uptake of technology takes place at high speed with Indonesia being Facebook's second largest market and Twitter's third largest worldwide. The success of smart phones such as Blackberry which counted 3 million users at the end of 2010 (Ministry of Information and Communications) is giving rise to third party applications, tailored advertising solutions and software.

The sector presents opportunities for investment and partnership to access the domestic market. Indonesian consumers represent a large, youthful and highly adaptive market. The uptake of technology takes place at high speed with Indonesia being Facebook's second largest market and Twitter's third largest worldwide. The success of smart phones such as Blackberry which counted 3 million users at the end of 2010 (Ministry of Information and Communications) is giving rise to third party applications, tailored advertising solutions and software. Digital music downloads is a further trend in the technology sphere. Managing Director of E-Motion, a music label, Florine Lismasnax told GBG about the acceleration in consumption of digital music that she has witnessed over the past few years. 'One of our bands reached 12 million downloads, other labels have seen 30 million downloads which is just the beginning of the potential and I do not think you would see that in any other country'. The unique nature of the market is reflected in the popularity of ring back tones which account for 95% of the total digital

music market but have weak popularity throughout the rest of the region. According to the main telecom providers, users change their tones at least once every three months illustrating the scope of such products that allow personalisation within technology and communication.

The film industry in Indonesia has had relatively recent beginnings following decades of censorship under the Suharto regime. From 2001-2002 only 6 films were released, a revival began to take place from 2005 and in 2008 there were 87 Indonesian films. The Ministry of Culture and Tourism has been supportive of the industry and has high hopes for the future with a target of 200 films a year being released by 2014 by up to 2,000 film producers and directors. Currently the quality of films being produced is still low with cinema goers preferring to see what Hollywood has to offer; a blockbuster Indonesian film will only sell up to 1 million tickets.

There is potential for far more within the industry and the country possesses many talented film makers. Hard hitting documentaries such as 'Conspiracy of Silence' that highlighted medical malpractice serves as an example of the current generation who are seeking to challenge Indonesian audiences. The popularity of film is unquestionable with the industry making an estimated \$100 million USD in 2010 and reflected in the success of the country's film festival such as the Jakarta International Film Festival.

The recent opening up of the sector to foreign investment will provide the room for greater collaboration in this promising industry and support for

budding producers. Previously closed to foreign investors, foreign ownership is now permitted up to 49%.

One of the major challenges faced by the industry is the lack of protection of intellectual property. Intellectual property as a concept has been slow to take hold in the country with counterfeit DVDs for films, music and software openly sold by vendors despite copyright law No. 19/2002. Consumer attitudes are more geared towards the purchase of cheaper replicas over the original with quality not being a major consideration. For producers of pirated goods, the lack of enforcement of the laws and low rate of prosecution for such cases keeps the industry going. The government, through the Directorate General of Intellectual Property under the Ministry of Justice, has set goals to tackle this. The policy is aimed at reducing software piracy to 30% by the end of 2011 from the 88% that is currently in circulation. An investigatory team will be set up for prosecution as well as the directorate working closely with software developers.

Winita Kusnandar of Kusnandar & Co law firm, who has extensive experience in intellectual property law in Indonesia, spoke to GBG and confirmed that the climate has improved. 'Many of the issues have been solved but problems still exist, new [foreign] companies should register their trademarks and patents immediately as there have been cases of Indonesian nationals registering the brand name before the company has entered the market'. Undergoing registration is therefore a necessity for any company

prior to operating in the country, despite the weak enforcement of law in commercial disputes. In addition, under the law on patents No.14/2001, inventors must produce the product or conduct the value added process in Indonesia to be eligible for patent registration. Crucial to success in the creative industry for both local and international companies is therefore the development of products with high intellectual and cultural added value that are difficult to replicate in content and quality.

Intellectual property rights will remain a major challenge

The creative industry is seen as a vital part of moving the country towards a more innovative and knowledge based economy, therefore encouragement of the sector will continue with the aim of it infiltrating the practices in other industries. The large domestic market and natural artistic disposition of the culture makes the country ideal for partnerships in this area for both export and tapping the consumer market. Intellectual property rights will remain a major challenge for entrepreneurs to contend with and will require greater will on the part of the government to set an example by strict enforcement against those that infringe it. In the meantime, new local brands must concentrate on developing affinity with consumers and continue to innovate to meet the demands of the fast paced consumer environment.

Tourism: Untapping the Potential



Contribution to GDP : 3.2% (Direct)
Number Employed : 8.9 million (Direct & Indirect)
Number of Foreign Tourists : 7 million (2010)

Domestic Tourists : 122 million (2010)
Competitiveness Score : 3.96/6 (WEF, 2011)
Regional Rank : 13/26 (WED, 2011)

Indonesia's tourism industry remains one of the country's most underexploited natural resources. Despite having the potential to cater to a broad range of tourist tastes from luxury beach holidays seekers to cultural and eco-tourists; tourism numbers have showed limp growth while neighbours have seen numbers soar. Bali remains the jewel in the country's tourism crown having rebounded after the 2002 Bali nightclub bombings which saw tourism number plummet. However, tourists are not venturing beyond Bali and the country as a whole has failed to build a magnetic brand. The scope for being a major tourism hub is there; the country is home to some of the world's best diving and cultural heritage sites as well as natural wonders. Yet, there is some way

to go in developing human resource capacity and transportation infrastructure that would allow the country to meet its full potential.

Indonesia was ranked 81st out 133 countries in the World Economic Forum Tourism Competitiveness Report for 2009, it has since risen to 74th place in 2011 yet has the scope to be far higher. The country has faced various obstacles in getting its tourism industry going such as the Bali bombings in 2002 followed by bombings in Jakarta in 2005 and 2009 as well as natural disasters. With many Western countries still posting travel warnings for Indonesia, it has been a challenge to get a positive message across. Effectively marketing the country on the global stage has failed to take hold thus far as few are familiar with international representations

of the country, such as known brands. Still, the sector has shown resilience in tourism numbers despite these hurdles which is testament to the natural attributes the archipelagic country has. The 2010 revival of the national airline, Garuda, which had previously been grounded for its poor safety record and mismanagement, will play a role in promoting Indonesia's image in the immediate future while expanding the number of long haul routes.

Transport is by far the greatest hurdle for the tourism sector to overcome. As a nation made up of over 17,000 islands, comfortable and convenient air as well as sea transportation is a necessity

Indonesia's main source of tourists comes from the ASEAN, being the fourth largest receiver in the region. Trends have remained relatively unchanged for the past 5 years with Singapore, Malaysia and Japan followed by Australia being the main sources. Numbers of Chinese tourists have been increasing significantly by 19.54% from 2008 to 2009 and numbers to Bali in particular were up by 175% in 2010 from the previous year. India is another emerging tourism source while the

United Kingdom remains the main long haul tourism source followed by France and the Netherlands. The main destinations within Indonesia include Bali, which received 2.576 million tourists in 2010 or nearly 37% of total arrivals and maintains strong hotel occupancy rates throughout the year at an average of 59%. This is followed by Jakarta for both business and leisure travel as well as other secondary cities in Java such as Yogyakarta which is the 'spiritual centre' of the island. Other popular destinations include Kalimantan, although the majority of the existing tourism numbers are accounted for by business travellers to date.

Tourism numbers have been growing from 5.51 million in 2007 to 5.3 million in 2009 and 7 million in 2010 according to Statistics Indonesia. These figures have been called into question considering that they count arrivals of foreign residents and business travellers under one single category making reliable figures difficult to come by. That being said, tourism numbers are increasing in line with increased government efforts under the Ministry of Tourism & Culture's various 'Visit Indonesia' campaigns. Yet these numbers pale in comparison to that of Malaysia that received 24.5 million tourists in 2010 as well as Singapore that received 11.6 million during the same period (ASEAN Tourism). The Ministry is aiming to increase tourism numbers to 7.7 million for 2011 under the new 'Wonderful Indonesia' campaign, however building up the brand and competing with the likes of Malaysia will require significant investment. Spending on tourism

promotion has increased drastically from \$15 million USD in 2009 to \$47 million in 2010 (State Budget 2010) yet it appears as though the message is still not being received effectively. Indonesia still has to strengthen its internal capacity in terms of infrastructure to start building a strong and identifiable brand.

Appealing to high end tourists that spend more in the way of revenue will be an important priority, besides raising the tourist numbers themselves. The Minister of Tourism and Culture, Jero Wacik has stated his projections of 2011's 7.7 million tourists that he predicts will bring \$8.4 billion USD in revenues. Currently, tourists in Indonesia spend significantly less per day at \$129 USD compared to other countries in the region while lengths of stay are also on average shorter at 8.4 days compared to 9.5 for Thailand (Ministry of Tourism, 2010). Boosting foreign exchange income as well as domestic tourism spending will come from developing high end leisure and entertainment facilities alongside well kept heritage sites and transportation infrastructure. Maintenance of cultural heritage sites has been low on the priority list when it comes to funding; while having 7,400 registered sites according to the Ministry of Tourism and Culture only 20% of those are well maintained and funded appropriately. Organisation and presentation of historical information, artifacts and art has a lot to be improved upon, while the cultural vibrancy of the country gives solid foundations on which to start. Improvements in this area will keep more Indonesians in the



country for their vacations while attracting more high spending tourists from the USA, Japan, Europe, Russia and the Middle East.

Transport is by far the greatest hurdle for the tourism sector to overcome. As a nation made up of over 17,000 islands, comfortable and convenient air as well as sea transportation is a necessity. Indonesia has long had a poor record when it comes to air safety although this is being gradually repaired with the rise of airlines such as Air Asia and Lion Air as well as Garuda's revival. The country's international airports are also getting an overhaul in order to meet future tourism capacity. Investment projects are being offered to local and international investors under the PPP scheme such as South Banten, Bali and West Kalimantan. A high speed rail link from the international airport to Jakarta city centre and a marina in Bali to receive commercial passenger vessels

for marine tourism are also being offered under the scheme. The improvement in transportation of infrastructure around the main tourism areas is part of the Bali - Nusa Tenggara economic corridor, as part of the national master plan to 2025. This corridor would see Bali remaining as the tourism hub while offering more direct flights from the island to other tourism clusters in Java and East Indonesia.

Developing human resources in the tourism sector to offer higher standards of service as well as improving language

The country has plenty to offer to differentiate itself from other countries in the region such as having the world's longest coast line giving rise to marine and eco tourism that is as yet unexploited

capacity is underway. The Ministry of Tourism and Culture issued Tourism Law No.10/2009 and began a program in 2010 to ensure industry wide certification of tourism professionals. This is to bring Indonesia into line with the ASEAN Common Competency Standards Framework for Tourism Professionals. The goals of the program are to certify 60,000 professionals by 2014. This will give tourists the tools they need to be able to select among the

thousands of hotels and tourism facilities around the country. Standardised competency in areas such as water sports, marine tourism and diving will also help in developing these areas where Indonesia has unparalleled advantages to the rest of the region but require stringent safety standards.

The national target of 20 million tourists every year by 2025 seems ambitious in comparison to the numbers of 2010. However, it is achievable with improvements in the main areas of transportation, leisure facilities and human resources which will all contribute to building Indonesia's global image that has long been subject to misconceptions. The country has plenty to offer to differentiate itself from other countries in the region such as having the world's longest coast line giving rise to marine and eco tourism that is as yet unexploited. The inherent cultural diversity of the population coupled with a natural disposition for hospitality are fundamentals that are bound to bring in increasingly greater numbers of tourists from every part of the world in the future.



Global Business Guide meets with Suresh Vembu, Company Director at AKR Corporindo.

AKR Corporindo was the first private company to distribute refined petroleum products in Indonesia. With the eventual removal of Pertamina's subsidised fuel and the growing demand for transport fuel, what is your outlook for this sector?

This is an area of huge growth for the country and a big contributor to our growth as a company. Oil production is decreasing so imports are increasing as we do not have new investors for the onshore production sector; infrastructure for imports is therefore a key area. The speed of growth for demand in petroleum products is very fast, especially for non subsidised fuel which grew from 20,000 kiloliters several years ago to about 1.4 million kiloliters today and we are seeing 30-40% growth every year. The transport and infrastructure needed to deliver this fuel require investors, but it is again a long term investment.

Petrol stations are a very interesting area for investors; Java has many but if you go outside to the regions there are very few which is not convenient for driving.

The company has been very active in the Chinese market, what can you tell us about your projects there?

We have been in cooperation with China for more than 30 years; we have been importing chemicals from China since 1995. In 2006, when the Chinese government allowed the private sector to participate in port construction, we



Petrol stations are a very interesting area for investors; Java has many but if you go outside to the regions there are very few

were the first company that invested there and now we have 5 ports that handle coal, mining products, and cargo. This was really a window of opportunity and we decided to seize it. Today we handle more than 200,000 containers, 8 million tons of coal, and about 3 million tons of general cargo at our ports there.

We see a lot of future potential in China as there is a big demand for Indonesian coal due to its high calorific content and low sulphur levels while Chinese coal is high sulphur and low calorie.



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