

RESEARCHERS AT SINGAPORE'S *INSTITUTE OF SOUTHEAST ASIAN STUDIES* SHARE THEIR UNDERSTANDING OF CURRENT EVENTS

Singapore | 18 Apr 2013

Southeast Asia's Largest Economy Needs Vast Improvements in Infrastructure

By Francis Hutchinson

EXECUTIVE SUMMARY

- Indonesia's large domestic sector, high commodity prices, increasing productivity, and a demographic dividend mean that it is on course to become the world's seventh largest economy by 2030. This is good news for the region and for APEC.
 - However, unlike in the past where the country's economic 'weight' was concentrated in and around Jakarta, much of the growth over the next two decades will be more dispersed. Smaller urban centres, many off-Java, will be key drivers of growth and productivity.
 - This promising situation drives home the need for Indonesia to prioritize investment in transport infrastructure.
 - While the country's unique geographic features constitute a formidable barrier for 'connectivity', this has been accentuated by investment levels in infrastructure that have not recovered to their pre-1997 levels. As a result, travel times and logistical costs have spiralled, as the number of vehicles and the demand for goods have outpaced investment levels.
 - Beyond a quantitative increase in investment, Indonesia will also have to address related institutional and policy issues.
-

INTRODUCTION

Indonesia's economy is the largest in Southeast Asia and also one of the most rapidly growing. According to the Asian Development Bank, it grew by 6.3% in 2012, faster than any of the other major economies in Southeast Asia. Its USD 800 billion economy is currently the 16th largest in the world and is expected to be the 7th largest by 2030, according to McKinsey & Co (2012).

Beyond the quantitative expansion in the country's economy, there are a number of important qualitative aspects. Indonesia is urbanizing rapidly, and this, coupled with more aggregate wealth and a young population, constitutes an attractive end-market. It is no accident that two leading consulting firms, McKinsey and BCG, recently released reports on the country's structural changes and the marketing opportunities that this offers.¹ For example, according to the McKinsey report, Indonesia's 'consuming class' could expand from a current 45 million consumers to some 170 million by 2030.² These people, largely in urban centres, will constitute sources of demand for a range of goods and services, from agriculture to private education.

Besides the business opportunities that a richer Indonesia provides, it constitutes an important development for Southeast Asia and APEC. An invigorated Indonesia could provide a 'motor' for the region and the grouping. In addition, the country's domestically-oriented economy offers a source of demand operating on a different cycle to the EU, the United States, and Japan. While China and India may well be garnering media attention as *the* new growth centres, Indonesia's rise offers its neighbours new and interesting opportunities closer to home.

However, Indonesia holds quite a challenge for its policy-makers and for those seeking to enter its market. It is a country of more than 17,000 islands, stretching more than 5,000 kilometres from west to east. And, while it may have a burgeoning domestic market, recent research shows that it is growing fastest in smaller, more remote urban locations.

This logistical complexity is aggravated by the condition of Indonesia's transport infrastructure, which is mediocre at best. Infrastructure spending has not recovered to pre-1997 levels, and the roll-out of new infrastructure has not kept pace with the increasing number of vehicles or the growing demand for goods and services. Furthermore, much of the country's existing infrastructure is concentrated in Java and Sumatra, leaving the eastern part of the country relatively isolated. As a result, it is often cheaper to source goods from outside Indonesia than transport them internally. This lack of internal 'connectivity' also means that prices of basic goods

¹ BCG. *'Indonesia's Rising Middle-Class and Affluent Consumers: Asia's Next Big Opportunity'*. BCG Perspectives, 2013; McKinsey & Co. *'The archipelago economy: Unleashing Indonesia's potential'*. McKinsey Global Institute, 2013.

² This is defined as individuals with a net income above \$3,600 in constant US dollars.

can vary by a factor of 20 in different parts of the country.

Efforts to 'connect' Indonesia will need to go beyond a quantitative increase in spending since efforts to attack this problem have to deal with multiple layers of government. Indonesia's 'big bang' decentralization process has devolved the responsibility for many aspects of infrastructure to local governments, many of which have modest capacity and other spending priorities.

The Government of Indonesia is conscious of these issues. As a result, recent policies have placed a premium on investing in physical infrastructure as well as the accompanying 'software' in the form of organizations and human capital. As Chairman of APEC for 2013, Indonesia has established connectivity as one of the three priorities for the grouping. Progress on this rubric will be discussed in depth at the APEC Economic Leaders' Meeting to be held in Bali in October.

In the following paragraphs, this Perspective will look at Indonesia's pattern of growth, in order to understand how structural changes in the economy are making investment in transport infrastructure a priority. It will then analyse the challenges Indonesia is facing in this area, and finally, review recent efforts by the government to improve its infrastructure.

PATTERN OF GROWTH

After a period of restructuring following the fallout from the Asian Financial Crisis, Indonesia has been growing quickly. For a range of reasons, growth rates have stayed consistently above 5% p.a. from 2000-2011 (World Bank, WDI Online). Key among these has been sustained demand for agricultural commodities such as palm oil and cocoa, as well as coal, tin, nickel, and bauxite. However, a significant portion of recent growth is also due to significant improvements in productivity. Furthermore, Indonesia is now set to enjoy a considerable demographic dividend, as the proportion of working adults to the overall population will be high over the next two decades. In addition, much of the economy is driven by domestic demand, rather than exports, which has offered the country a significant degree of protection from the Global Financial Crisis (McKinsey & Co, 2012).

However, the economy is now growing in a more geographically dispersed way with high demands being placed on infrastructure, and requiring a fundamental re-think on the part of policy-makers and businesses. According to McKinsey, over the next two decades, nine-tenths of the fastest-growing urban centres will be off Java. Yet, in 2012, 80% of local and foreign investment was for projects located on the island.

There are a number of reasons for the re-thinking. First, the demand for commodities has resulted in rapid growth in areas that are relatively far apart. In recent years, Kalimantan and Irian Jaya have benefited from this, with their economies

expanding particularly quickly. Second, the country is urbanizing rapidly. At present, urbanization rates are slightly above 50%. But, by 2025, the World Bank calculates that Indonesia will be almost 70% urban (World Bank, 2012b).

This means, of course, that while Jakarta and its satellite cities will grow significantly, much of the new growth will occur elsewhere. The country's second tier cities of Bandung, Medan, and Surabaya have grown most quickly over the last decade. And, unlike Greater Jakarta whose economic growth was largely due to its expanding population, growth in these cities was also driven by productivity. Furthermore, new cities will emerge and, it is actually smaller cities – those with a population of between 150,000 and 2 million – that currently constitute the largest percentage of GDP and will grow the most over the next two decades. Thus, the challenge will be for the government as well as businesses to connect smaller cities on islands off Java, such as Balikpapan and Pontianak in Borneo, Pekanbaru in Central Sumatra, and Makassar in Sulawesi (McKinsey & Co, 2012).

CONNECTIONS WITHIN INDONESIA

Doing business in Indonesia poses considerable logistical challenges. For example, the lack of internal connectivity means that cement is some 20 times more expensive in Irian Jaya than in Jakarta. And, supermarkets in Jakarta prefer to source their oranges from China rather than Kalimantan due to high shipping costs (Santee, 2011). According to the East Java Freight Forwarding Association, logistics costs represent almost 30% of retail prices in Indonesia, versus 7-10% globally (*Globe*, April 1, 2012).

In regional terms, Indonesia is lagging with regard to the quality of its infrastructure. According to the 2012-2013 Global Competitiveness Report, Singapore ranked second in the world for the quality of its infrastructure, with Malaysia and Thailand being placed 29th and 49th respectively. Indonesia, for its part, came 92nd out of a total of 144 countries. The quality of its ports was somewhat worse than its road or airport infrastructure, which was ranked 104th overall (World Economic Forum, 2012).

This is, in part, reflective of spending levels which have never recovered from the Asian Financial Crisis. In 1995, investment on infrastructure was more than 7% of GDP. This declined to around 3% in the late 1990s and, at present, is approximately 4% of GDP. Of particular note, this is substantially below the levels of China, Thailand, and Vietnam, all of whom spend more than 7% of GDP on infrastructure (World Bank 2012b). Officials in Jakarta estimate that total required spending on infrastructure over the next 20 years amounts to some USD 932 billion (*The Edge Singapore*, July 25, 2011).

Roads constitute the predominant form of transport in Indonesia, comprising some 70% of freight and 80% of passenger movements. However, the existing stock of roads cannot keep up with the growth of passenger vehicles. In 2000-2004, Indonesia's road network expanded by 12%, but the number of vehicles per 1,000 people increased by 80% (World Bank, 2012b).

At present, Indonesia has the lowest road density and the longest trip times in the region. While national roads, which are managed by the central government, are quite good, they are increasingly congested – in part because roads maintained by other levels of government are sub-standard. At present, provincial and district governments are responsible for some 90% of Indonesia's road network. While all national roads are paved, the corresponding figures for provincial and district roads are 80% and 55% respectively (World Bank, 2012b).

In addition, there are serious issues with regard to maintenance. Much of sub-national government spending focuses on the construction of new roads, rather than the less glamorous task of maintenance. However, many agencies responsible for road construction at the sub-national level lack technical capacity, particularly for needs assessments (World Bank, 2012a). According to the Asia Foundation, the average time to repair damaged roads is 76 days. However, in some parts of the country, this can reach some four months (KKOPD, 2011).

The situation regarding ports is similarly grave. Indonesia's four key ports at Jakarta, Surabaya, Medan and Makassar are under pressure. Common problems include insufficient equipment to quickly offload containers, frequent delays in following procedures, and congested roads leading to the ports themselves. Comparisons with ports in Malaysia and Singapore also show lower levels of productivity (ADB, 2009).

Other aspects of its infrastructural base are also problematic. For example, only a minority of its airports have sufficiently long runways for international flights. And, the three largest airports – in Jakarta, Medan, and Denpasar – are operating beyond their capacity. Beyond the need for transporting passengers, this also makes logistics more complicated. This can be problematic for transporting high-end components or even high-value perishable commodities, such as cut flowers. Looking ahead, the Ministry of Transportation estimates that airport infrastructure needs to grow by more than 30% a year (Joko, 2012).

In relative terms, Indonesia's rail infrastructure is not too bad. In the Global Competitiveness ranking, the country places 51st out of 144 (World Economic Forum, 2012). This is quite an asset, as while rail is a particularly efficient and economic means of transport, it is a 'lumpy' investment, requiring large amounts of capital up front. However, at present, Indonesia's rail infrastructure is concentrated on Java and, to a lesser extent, Sumatra. While the second island has a number of railway services, they are, at present, not connected.

Simply ramping up spending on infrastructure will not automatically have results. Following Indonesia's 'big bang' decentralization, more than 500 local governments have become important actors with an influence on the overall business context. They are responsible for many aspects of land acquisition (a vital responsibility for new infrastructure projects) as well as the construction and maintenance of basic infrastructure. Local level histories, current priorities, and state-business relations have an important effect on the ability of these governments to attend to pressing commercial and infrastructural issues (Patunru, McCulloch, and von Luebke, 2012).

This is particularly an issue for larger population centres that span several jurisdictions, requiring additional coordination. At present, both Jakarta and Surabaya, the two largest cities, are suffering from diseconomies of scale, such as congestion, insufficient infrastructure, and pollution (World Bank, 2012b). Effective action is further complicated by the need to coordinate multiple actors and reconcile different political priorities across municipal jurisdictions.

RECENT PLANS

Of course, the Indonesian government is acutely aware of these issues and has rolled out a number of initiatives in recent years. Furthermore, it has sought to promote the idea of connectivity at the regional level, through, for example, its Chairing of APEC in 2013. While connectivity also embraces institutional reform and the greater movement of people, the concept also centres on physical infrastructure as a means of improving the functional integration of economies in the region.

For Indonesia domestically, of particular note is the Master Plan for the Acceleration and Expansion of Economic Development of Indonesia (known as MP3EI). The Plan is a comprehensive one that foresees investments of some USD 460 billion in infrastructure and connectivity for 2011-2025 (*Jakarta Post*, September 21, 2011). Echoing Malaysia's Economic Transformation Programme, MP3EI uses the concept of Economic Corridors, which are to spark growth in specific centres, which will then generate demand from surrounding areas. The corridors largely overlap with the major island groups, namely: Sumatra; Java; Kalimantan; Sulawesi; Bali-Nusa Tenggara; and Papua-Maluku. The MP3EI targets eight programmes across 22 priority economic areas, ranging from palm oil and rubber to shipping, steel, and ICT. Other strategic components of the Master Plan include improving national connectivity and investing in human resources, particularly for science and technology (MP3EI 2011).

As part of the Master Plan, the government has a number of significant projects underway. Tanjung Priok port in Jakarta will be expanded to improve its cargo handling capacity. And, a number of upgrading and expansion projects in Banjarmasin on Borneo, Pekanbaru in Sumatra, and Tanjung Pinang near Singapore will be

undertaken. Denpasar Airport in Bali is currently being upgraded, with a lengthened runway to accommodate more international flights. A double train-track connecting Jakarta with Surabaya will be ready by the end of 2013, linking the country's two largest cities.

Given the scale of financing required, it is expected that a significant part of this will come from the private sector, in the form of public-private partnerships for large-ticket items such as toll roads and ports. There are some notable investments currently underway. Hutchison Whampoa has invested in expanding the port terminals in both Jakarta and Surabaya. And, a Saudi company, Rak Minerals, is investing USD 1.5 billion in a railway project in East Kalimantan (*Globe*, April 1, 2012). The China Railway group has won a USD 4.8 billion contract to construct and maintain a 300 km railway in southern Sumatra connecting the country's largest coal deposit to a new port (*Reuters News*, January 20, 2012).

In addition, there have been a number of important institutional reforms in recent years that may make sustained investment and implementation more feasible. A land acquisition law was passed by Parliament and the President in 2011 and 2012, respectively. This legislation provides legal clarity regarding compensation by the government for land acquisition and also lays out a time limit on compensation settlements. Furthermore, an Infrastructure Fund and Infrastructure Guarantee Fund have been established in cooperation with international organizations. The first fund, worth some USD 800 million, provides financing for key infrastructure projects, and the second is to vet proposed PPP projects and also guarantee investments made by private operators. This is also complemented by a Land Acquisition Fund to secure key tracts of real estate (*Jakarta Post*, 10 June, 2011). And, foreign ownership stakes in certain types of infrastructure such as ports are now permitted (Economist Intelligence Unit, 2012).

These structural reforms will, hopefully, catalyse both public and private investment in infrastructure. That said, financing for infrastructure will remain stretched for some time to come. And, public-private partnerships, while a very useful mechanism for securing financing, are not a magical solution in and of themselves. Governments still need to spend considerable sums on cost-benefit analysis and needs assessments to establish which projects are viable and desirable. And, land acquisition, in particular, is often under the control of sub-national governments, requiring considerable lobbying during project formulation and, often, during project implementation.

THE YEARS AHEAD

Indonesia rising is a welcome story for Southeast Asia and for APEC. Its locally-oriented and rapidly-growing economy offers an important counter-balance to the broader upswings and downturns of the global economy. However, in order for

Indonesia – as well as international and regional investors, and partner economies – to reap the full potential of its growth, investment in physical infrastructure needs to be ramped up. Capital spending has not kept pace with demand, and the new dynamics of urbanization that Indonesia is showing mean that growth will be more dispersed than ever before.

The Government has invested political and financial capital in the issue, and its Master Plan clearly lays out the priorities for the near future, and addresses some of the key institutional challenges that had been hindrances in the past. And, as Chair of APEC, Indonesia is advocating large-scale investments in infrastructure.

That said, financing will remain an issue for some time to come, not least because of the country's rate of growth and, consequently, increasing demand for physical infrastructure. In addition, the country's multi-levelled governance system means more actors are involved, requiring ever more effort in 'soft' infrastructure to ensure that 'hard' infrastructure is delivered.

Francis E. Hutchinson is an ISEAS Fellow.

ISEAS Perspective is published electronically by the Institute of Southeast Asian Studies, Singapore.

© Copyright is held by the author or authors of each article.

ISEAS accepts no responsibility for facts presented and views expressed. Responsibility rests exclusively with the individual author or authors. No part of this publication may be reproduced in any form without permission.

Comments are welcomed and may be sent to the author(s).

Editor: Ooi Kee Beng

Institute of Southeast Asian Studies
30, Heng Mui Keng Terrace
Pasir Panjang,
Singapore 119614
Main Tel: (65) 6778 0955
Main Fax: (65) 6778 1735

Homepage: www.iseas.edu.sg

References

- Coordinating Ministry for Foreign Affairs. *Masterplan for Acceleration and Expansion of Indonesia Economic Development (MP3EI)*. Jakarta: Coordinating Ministry for Foreign Affairs. 2011.
- Globe. "\$50 billion to connect Indonesia". April 1, 2012.
- Joko Tirto Raharjo. "Indonesia's Connectivity". Indonesia Research Institute, Japan. 2012.
- McKinsey & Co. *The archipelago economy: Unleashing Indonesia's potential*. McKinsey Global Institute. 2012.
- Patunru, A. McCulloch N., and C von Luebke. "A Tale of Two Cities: the Political Economy of Local Investment Climates in Indonesia". *The Journal of Development Studies*. 48:7, 2012.
- Regional Autonomy Implementation Monitoring Committee (KPPOD) and The Asia Foundation. *Local Economic Governance: A Survey of Business Operators in 245 Districts/Municipalities in Indonesia*. Jakarta, 2011.
- Reuters News. "Infrastructure the missing BRIC in Indonesia's Wall". 20 January, 2012.
- Sandee, H. "Promoting Regional Development in Indonesia through Better Connectivity."
<http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/EASTASIAPACIFICEXT/INDONESIAEXTN/0,,contentMDK:22856500~menuPK:224605~pagePK:2865066~piPK:2865079~theSitePK:226309,00.html>, accessed April 8, 2013.
- The Economist Intelligence Unit. "Indonesia: Investment Regulations". London: Economist Intelligence Unit. 2012.
- The Edge Singapore. "Will Indonesia's Boom Keep Going?" July 25, 2011.
- The Jakarta Post. "Boost to Infrastructure". December 19, 2011.
- The Jakarta Post. "Government Offering \$53.4 Billion PPP Projects This Year". 10 June, 2011.
- Trace, K, Frielink, B., and D. Hew. 2009. *Maritime Connectivity in Archipelagic Southeast Asia: An Overview*. Southeast Asia Working Paper Series. Manila: Asian Development Bank.
- World Bank. *Indonesia – The Rise of Metropolitan Regions: Towards Inclusive and Sustainable Regional Development*. Washington DC: World Bank, 2012a.
- World Bank. *Investing in Indonesia's Roads: Improving Efficiency and Closing the Financing Gap*. Washington DC: World Bank, 2012b.
- World Bank. World Development Indicators Online. <http://databank.worldbank.org/data/home.aspx>, accessed 1 April, 2013.
- World Economic Forum. *The Global Competitiveness Report 2012-2013*. Geneva: World Economic Forum, 2012.