Cyber Security Export Market: Indonesia
2014

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George Mason University (School of Public Policy)

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EXECUTIVE SUMMARY

» Indonesia offers abundant demand for cyber security exports from defense firms in the United States (US). Although the country’s defense spending is relatively modest, totaling $8 billion, defense spending is expected to increase to 1.5 percent of Gross Domestic Product (GDP) by 2015.

» The increase in defense spending partnered with the estimated $10 billion in losses experienced by Indonesia due to cybercrime annually, translates into increased cyber security spending in future years.

» Projected to become one of the top ten largest economies by 2030, Indonesia’s economic growth is remarkable and sustaining. The country’s democratic regime is still relatively young, but continues to make strides towards establishing a market economy with western institutions and legal frameworks. Notwithstanding, historically negatively attitudes toward the military, embedded nationalism and the weak legal system make the business climate challenging to navigate for foreign firms.

» Although technological access is limited in Indonesia, the online environment is quickly expanding and faces increasingly hostile cyber security threats. In response, Indonesia has recognized the importance of cyber security but implemented patchwork solutions.

» The US has worked with the government to try to augment security and implement new strategies. This partnership will help US defense firms’ access the market. The US has also contributed to defense spending, appropriating more than $50 million to the Indonesian government for military equipment.

» Defense spending remains relatively low, but US defense firms could capitalize on the considerable resources allocated to information technology (IT). Furthermore, given the underdevelopment of Indonesia’s cyber defenses, there is an enormous opportunity to construct Indonesia’s infrastructure from scratch.

» Specifically, human resource training, infrastructure enhancement, data control, security management, and IT development are areas of demand in the Indonesian market.
Within its defense agenda, Indonesia has identified cyber security as a primary area of importance to ensure stable future development, both economically and within its military.\(^1\) Indonesia’s current and proposed cyber security framework is outlined in Figure C. Indonesia is yet to implement a comprehensive national strategy for cyber security; instead, the country has pursued a series of patchwork efforts. For instance, Indonesia has deployed a team of more than two-dozen IT professionals to reinforce and monitor government firewalls and prevent future attacks.\(^2\) Indonesia has also established a National Cyber Security Organization to manage the government’s response to cyber threats.\(^3\) Indonesia also plans to create a cyberdefense group.\(^4\) The cyber defense unit will monitor financial and military online systems.\(^5\) Indonesia’s cyber security agenda includes the passage of new regulations, enhanced Critical Infrastructure Protection (CIP), international cooperation, increased human capacity and the implementation of new security systems. These programs and organizations are still in their infancy indicating an emerging and growing market.

**US COLLABORATION**

The US has played a pivotal role in Indonesia’s cyber security policies. The two countries recently formed a partnership to address security issues. A key component of the US-Indonesia Comprehensive Partnership agreement is its Security Working Group.\(^6\) The Security Working Group covers issues on “defense, security, counter-terrorism, and non-traditional threats,” all of which encompass aspects of cyber security.\(^7\) Under the partnership, the US has guided and financed multiple efforts to modernize Indonesia’s defense infrastructure.\(^8\) In exchange, Indonesia has agreed to cooperate with the US regarding cyber space policies and engage in information sharing.\(^9\) The recognition of and dedication to the need for enhanced cyber security in Indonesia, coupled with the lack of meaningful tools, opens up an enormous opportunity for US defense firms seeking to build Indonesia’s online infrastructure from the ground up. Indonesia’s cyber security policies and partnership with the US is illustrated in Figure A.
Figure A: Cyber Security Policy Regime

Source: Department of State & Grevatt

CYBER ATTACKS

The scale of cyber-attacks in Indonesia also suggests that there is considerable market opportunity in Indonesia. Most alarmingly, Indonesia is the one of the world’s leading sources of cyber-attacks. In 2013, the country surpassed China, which held the top post in 2012, and is widely perceived as the gravest cyber security threat. Together, the two countries account for the majority, slightly more than 50 percent, of cyber-attacks around the world. Cyber-attacks in Indonesia are rapidly increasing. Each quarter, Indonesia’s cyber hacker traffic doubles. Cybercrime is estimated to cost Indonesia $10.7 billion each year. Cyberattacks have infiltrated over a dozen government websites in the past year. In total, there was a staggering estimated 36 million “incidents of hacking” in 2012 executed against the government. Evidence suggests that many of Indonesia’s cyber security threats may be originating from within its own borders. Approximately 80 percent of computers that accessed “Southeast Asian radical websites” were located in Indonesia. Unfortunately, Indonesia lacks the capability to identify, monitor and extinguish these threats - even domestically.

10 (Akamai, 2013).
11 Ibid.
12 Ibid.
13 Ibid.
14 (Daka, 2013).
15 (Lamb, 2013).
16 Ibid.
17 (Murphy, 2010).
18 Ibid.
Despite limited Internet access, the population that does have access is considered “one of the world’s most media savvy.” An online group referred to as “Anonymous Indonesia,” is responsible for several socially motivated attacks, including the infiltration of the president’s website. Politically and socially motivated cyberattacks have given rise to online “hacktivism,” often equating to “online vandalism” or “digital graffiti.” Cyberattacks thus far have generally fallen on the lower end of the spectrum of sophistication and complexity.

Indonesia’s technical immaturity actually serves as a deterrent to cyberattacks. The Indonesian government stores a very limited amount of confidential information and data online and does not maintain an integrated digital network. The Bandung Institute of Technology asserts that the absence of digital infrastructure protects certain information from vulnerability to increased cyberattacks. As the country’s economy and democratic institutions advance, resources and data will need to be transitioned onto online storage, representing the emergence of new risks.

For more information on Indonesia’s cyber security strategy and its partnership with the US, please refer to the following resources:

» US-Indonesia Comprehensive Partnership

MARKET TRENDS

Technological access is limited to a small portion of the population in Indonesia, but market trends suggest a rapid expansion in the future. Only 15.4 percent of Indonesians had access to the Internet in 2012. Notably though, that portion increased 95 percent from 2008, when access was severely limited, to 2012. Despite the currently low levels, Internet access is expected to jump to 52.1 percent by 2017. Indonesia is also working to provide increased access to public services, information, and databases online. While expanded access may benefit Indonesian citizens, this increase may pose a serious threat to the Indonesian government, military and private sector. These sectors already fail to effectively monitor, avoid, and respond to cyber-attacks with a much smaller volume of Internet users.

MARKET ACCESS

IMPORT PARAMETERS

The import burdens in Indonesia are relatively modest, and the costs are low. This is particularly relevant to US defense firms seeking to export goods and services to the private sector in Indonesia. Indonesia’s general importing parameters are illustrated in Figure B. At a minimum, it takes 23 days to complete the documentation preparation, receive customs clearance and technical controls, process ports and terminal handling and inland transportation, costing $660 with a simple average applied most favored nation
(MFN) tariff of seven percent. Furthermore, the Indonesian customs process is rather nuanced; however, Indonesia has tried to implement some more uniform importation requirements. The standardization of certain aspects of the customs process should make it easier for US firms to export to Indonesia.

**Figure B: Import Parameters**

<table>
<thead>
<tr>
<th>General Importing Parameters</th>
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<tbody>
<tr>
<td>Minimum Days for Document Preparation</td>
<td>23 days</td>
</tr>
<tr>
<td>Minimum Cost</td>
<td>$600</td>
</tr>
<tr>
<td>Average MFN Tariff</td>
<td>7 %</td>
</tr>
</tbody>
</table>

**Source: The World Bank**

Components of the customs process may pose technical barriers to trade. Notably, “personal importation” of electronic devices, such as computers and cell phones, is prohibited. Other electronic products are restricted for import, including telecommunications devices, electronic parts, and photocopiers. Consumer information technology (IT) devices are also subject to new labeling regulations that were implemented in 2010, which require Indonesian language translations for documentation and packaging. US defense firms should take all of these importing restrictions into account when considering whether to enter the Indonesian market.

**TRADE AGREEMENTS**

Indonesia maintains several trade agreements, most of which are concentrated in Asia and the Eastern hemisphere. Indonesia is a member of the ASEAN Free Trade Agreement, the ASEAN-China Free Trade Agreement, and the ASEAN-Korea Free Trade Agreement. Indonesia also maintains a bilateral agreement with Japan, and is in negotiations with Australia and the European Union (EU). Indonesia has a Trade and Investment Framework Agreement (TIFA) with the US as well. The TIFA provides for further development of trade and the enhancement of IP rights. The TIFA established a council on Trade and Investment to remove trade barriers and navigate trade and investment. The TIFA helps to establish a framework for trade relationships, which may assist US defense firms entering the Indonesian market.

**PROCUREMENT**

Indonesia is a member of the WTO and recently signed onto the plurilateral Agreement on Government Procurement (GPA) in late 2012. The GPA governs government procurement practices and supports transparency and fair treatment in such practices. In addition to joining the GPA, Indonesia has issued several Presidential Decrees in recent years to improve the procurement system. Reforms have

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30 Ibid.
31 (FedEx, 2013).
32 Ibid.
33 (Ing, Lili Yan, 2013).
34 Ibid.
35 (Trade Representative, Indonesia – TIFA).
36 Ibid.
37 Ibid.
38 (WTO, GPA2013).
39 Ibid.
40 (OECD, 2007).
improved systemic problems with corruption and compliance. 41 Indonesia established model tender documents and other forms, as well as dispute resolution procedures. 42 Under the current framework, contract information is published online. 43 Procurement may be offered as public tender, limited tender, direct selection or direct appointment. 44 Procurement processes are divided according to product type, between goods, services and consultancy. 45

Foreign firms seeking to engage the Indonesian government must partner with local companies, unless the contract is related to defense exports. 46 Notwithstanding recent improvements, Indonesia’s public procurement system is still complex, overlapping with regional requirements and lacking the capacity to manage high volumes. 47 Although it is not necessarily required, US defense firms should employ a local agent to enter the Indonesian market to assist with project setup. 48 Because of cultural norms, foreign firms are also advised to visit their target market and agent regularly. 49

For additional information on Indonesia’s trade agreements, participation in the WTO, and procurement, please refer to the following resources:

» OECD Public Procurement System Assessment
» TIFA Between the US and Indonesia
» WTO Member Profile of Indonesia
» Commercial Service Global Safety and Security Resource Guide

MARKET SIZE & GROWTH

DEFENSE SPENDING & INVESTMENT

Defense spending in Indonesia accounts for a minimal amount of GDP, but has grown in recent years. In 2012, total military expenditures reached $6.9 billion, up from $2.6 billion in 2006. 50 Over the six-year period of time, military spending grew 163 percent. 51 Military spending still accounts for less than one percent of total GDP. In 2006, 0.72 percent of GDP was furnished by military expenditures; in 2012, the figure rose slightly to 0.77 percent of GDP. 52 For 2013, Indonesia has allocated slightly more than $8 billion in defense spending. 53

More than half of Indonesia’s spending is estimated to fund military personnel and administrative costs, because little capital investment has been made to date. 54 Although the military has requested greater

41 (OECD).
42 Ibid.
43 Ibid.
44 (Christian Teo & Associates, ).
45 Ibid.
46 (OECD, 2007).
47 Ibid.
49 Ibid.
50 (SIPRI, 2013).
51 Ibid.
52 (SIPRI, 2013).
53 (Bergman, 2012).
54 Ibid.
funding, the central government has furnished less than requested amounts.\textsuperscript{55} To illustrate, in 2010 the military requested $16 billion, but received approximately $4 billion.\textsuperscript{56} The disparity in funding may be attributed to cultural attitudes toward the military as discussed earlier. Indonesia plans to scale up military spending in upcoming years though. By 2015, Indonesia plans to increase defense spending to 1.5 percent of GDP.\textsuperscript{57}

Despite relatively low defense spending, Indonesia does allocate considerable funding to IT and telecommunications, which provide US defense firms with another market entry opportunity. In 2012, Indonesia spent $13.1 billion on IT infrastructure.\textsuperscript{58} IT spending is forecasted to increase to $21.4 billion by 2017.\textsuperscript{59} Although telecommunications spending and revenue has recently experienced a dip, it is also expected to increase in the upcoming years.

**US AGENDA FOR INDONESIA**

The US maintains a good security relationship with Indonesia. In 2010, tepid relations between the US and Indonesia improved, when the countries signed the Defense Framework to establish defense collaboration and dialogue, to include issues related to security, defense spending and military procurement.\textsuperscript{60} The US has also helped fund Indonesia’s police force and counter-terrorism forces.\textsuperscript{61} In 2011, US funding to the domestic police force alone exceeded $6 million.\textsuperscript{62} Funding for military equipment, such as radar systems, has also been sizeable, totaling to $56 million from 2006 to 2009.\textsuperscript{63} The existing relationship and financial support from the US improves the viability of US defense firms engaging with Indonesia’s defense industry.

**MARKET SECTORS & OPPORTUNITIES**

Given the underdevelopment of Indonesia’s cyber defense technology and capabilities, there is an opportunity to build out Indonesia’s infrastructure from scratch.\textsuperscript{64} Based on the enormous volume of cyberattacks, there is considerable demand for US defense firm support and expertise. According to one cyber analyst in Indonesia, “many government websites are not secure and an easy target for low-skilled hackers.”\textsuperscript{65} Since 2010, there have been nearly four million cyberattacks on Indonesia, with the highest concentration of attacks on government websites.\textsuperscript{66} Although many of these attacks are socially motivated, terrorism and transnational crime pose increasing threats to Indonesia.\textsuperscript{67} Eventually, Indonesia may experience cyber-attacks originating from these sources, which will likely be more sophisticated and harmful.

Based on Indonesia’s agenda some key areas for US defense firms to export products and services include the training of human resources, CIP enhancement, as well as the implementation of new cyber security technologies, such as data control and monitoring centers, network security management, and basic IT infrastructure development for shared government networks. According to the International

\begin{footnotesize}
\begin{itemize}
  \item \textsuperscript{55} Ibid.
  \item \textsuperscript{56} (Bergman, 2012).
  \item \textsuperscript{57} Ibid.
  \item \textsuperscript{58} (EIU, Data Tool, 2013).
  \item \textsuperscript{59} Ibid.
  \item \textsuperscript{60} (Murphy, 2010).
  \item \textsuperscript{61} Ibid.
  \item \textsuperscript{62} Ibid.
  \item \textsuperscript{63} (Murphy, 2010).
  \item \textsuperscript{64} Ibid.
  \item \textsuperscript{65} (Lamb, 2013).
  \item \textsuperscript{66} (Hasibaun, 2013).
  \item \textsuperscript{67} (Bergmann, 2012).
\end{itemize}
\end{footnotesize}
Trade Administration, opportunities for foreign firms in electronic access control systems outweigh market obstacles. Moreover, US defense firms will likely experience even more success with IT security, scanning equipment and article surveillance systems exports.

Given the low level of sophistication in cyberattacks, many of Indonesia's needs could be met by implementing basic cyber security technology. This sort of basic cyber security software already exists in a variety of forms and is commonplace in developed countries.

The government may also have a demand for consumer security products, anti-virus products, and awareness materials, as many attacks “prey on the lack of awareness among people.” The weak telecommunications infrastructure may also offer opportunities for US firms. Indonesia has made it a priority to improve IT infrastructure and has already appropriated $1.5 billion to Indonesian companies to develop a Fiber Optic cable infrastructure. New infrastructure must be carefully constructed with consideration to the growing risk of attacks on infrastructure networks. Infrastructure expansion will require integrated IT security defenses, which offers another sector for US defense firms to target.

For additional information on market opportunity, please refer to the following resource:


**LEGAL ISSUES**

Indonesia’s intellectual property (IP) legislative and regulatory frameworks are undeveloped and loosely enforced. The weak IP framework raises concerns for foreign firms and also exacerbates problems of data security and protection. Indonesia’s IP regime includes eight primary IP laws: (1) Law No. 19 of July 29, 2002 on Copyright; (2) Law No. 14 of August 1, 2001 regarding Patents; (3) Law No. 15 of August 1, 2001, regarding Marks; (4) Law No. 30 of December 20, 2000 regarding Trade Secret; (5) Law No. 31 of December 20, 2000 regarding Industrial Design; (6) Law No. 32 of December 20, 2000 regarding Layout Designs of Integrated Circuits; (7) Laws of Republic of Indonesia No. 29 of 2000 on Plant Variety Protection; and (8) Patent Law No. 13 of May 7, 1997 amending Patent Law No. 6 of November 1, 1989.

Aside from these foundational laws, the 2008 Information and Electronic Transaction Law was the most meaningful addition to Indonesia’s legislative landscape. The Information and Electronic Transaction Law adheres to the United Nation (UN) Commission’s standards for international trade law and addresses issues of cyber security. In addition to legal standards, the Information and Electronic Transaction Law promulgated meaningful regulations to protect personal data stored online. The law also establishes Electronic Systems Providers to manage electronic security systems. To the possible detriment of new market entrants, the law mandates that Electronic Systems Providers hire Indonesian citizens. Indonesia has been slow to implement new protections and applies the law inconsistently.

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69 Ibid.
70 (Daka, 2013).
71 (Research and Markets: Indonesia, 2012).
73 (Robinson, 2012).
74 Ibid.
75 Ibid.
76 (EIU, Indonesia Economy Forecasts, 2013).
The US has recognized the problems with Indonesia’s IP framework and general business protections. In 2013, Indonesia was on the Special 301 Report’s Priority Watch List. The US cited concerns with “gaps” in Indonesian IP laws related to copyright, protection and enforcement. The US also characterized Indonesia’s IP enforcement as ineffective. The weak legislative framework has contributed to widespread piracy of online content. However, Indonesia has demonstrated some improvement using efforts to increase awareness about IP rights. Continued commitment to IP protection and reform of legal institutions may eventually lead to a more effective legislative regime.

In the absence of judicial reform, foreign firms should be aware of the boundaries of Indonesia’s legal system. The weak, inconsistent and opaque legal system has limited the effective implementation of laws and regulations and appears to favor domestic parties in cases involving foreign firms. It is difficult for foreign companies to resolve contractual disputes under Indonesia’s legal system. Furthermore, adherence to commercial and bankruptcy codes during dispute settlement is inconsistent. Although it is not enforced consistently, foreign firms do technically have access to the arbitration rights provided under the Convention on the Settlement of Investment Disputes between States and Nationals of Other States (ICSID) and the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards. Other than arbitration rights, the legal system is not conducive to attracting foreign business and investment.

For more information on Indonesia’s IP and cyber security-related laws, refer to the following resources:

» Law on Electronic Information and Transactions
» Law on Copyright
» Law Regarding Patents
» Law Regarding Marks
» Law Regarding Trade Secrets
» Law Regarding Industrial Designs
» Law Regarding Layout Designs of Integrated Circuits
» Patent Laws

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77 (Trade Representative, 2013).
78 Ibid.
79 Ibid.
80 Ibid.
81 Ibid.
82 (Department of State, 2012).
83 (Department of State, 2012).
84 Ibid.
POLITICAL ENVIRONMENT

The political system in Indonesia is relatively young, and still gaining stability. After Suharto’s overthrow in 1998, Indonesia pursued meaningful democratic reforms and has worked to create new democratic institutions, boding well for foreign firms seeking to enter the market. The stability of Indonesia’s political system is supported by the United States (US), which has helped to fund elections and train officials. Pending the results of the upcoming political elections, Indonesia has demonstrated a 15-year track record of relative political stability. Similarly, safety and security are trending towards stability, but still experience flare-ups. Following a series of terrorist attacks in the early 2000s, Indonesia augmented its enforcement measures. Furthermore, civil unrest and political protests remain common in major cities.

US defense firms can take solace in the progressing relations between Indonesia and the US. The cultivated relationship offers a better business climate for US defense firms seeking to establish business engagements in Indonesia. The US and Indonesia have already collaborated over strategies to combat terrorism. In addition, the US seems to have made continued cooperation with Indonesia a high priority given that the country is poised for dramatic economic growth.

Indonesia is engaged with other international parties that also address cyber security issues. Indonesia is a member of 64 International Organizations, including the G-20 and the World Trade Organization (WTO). Indonesia is the only ASEAN country that is a member of the G-20. Participation in these cooperatives may influence Indonesia’s future cyber security policies.

For more information on Indonesia’s political environment, refer to the following resources:

» CIA World Factbook Assessment of Indonesia
» Congressional Research Service Report on Indonesia’s Domestic Politics
» Economist Intelligence Unit’s Summary of Indonesian Political Structure
» Department of State’s Indonesian Travel Information

ECONOMIC ENVIRONMENT

Since the overthrow of President Suharto, Indonesia has developed a free market economy with much success and immense potential. Indonesia is one of the most promising economies in Asia with robust economic growth projections. Last year, in 2012, gross domestic product (GDP) reached $878 billion, up from $846.8 billion in 2011. Furthermore, real GDP grew at an impressive rate of 5.9 percent from 85 (Murphy, 2010). 86 Ibid. 87 (Department of State, Threats to Safety and Security2012). 88 Ibid. 89 (Murphy, 2010). 90 Ibid. 91 (CIA, “Indonesia”). 92 (Chongkittavorn, 2011). 93 (EIU, Fact Sheet, 2013). 94 (WTO, 2013).
2008 to 2012. By 2030, Indonesia’s economy is projected to be the seventh largest in the world. Notably, Indonesia’s trade accounts for a major portion of its economy at 47.2 percent of GDP, and is likely to continue to support the country’s growth.

The burgeoning population in Indonesia will play a key role in facilitating economic growth. The population of younger, educated and productive workers in Indonesia currently sits at 240 million, but is expected to expand considerably. The emergence of a strong middle class and the further stabilization of Indonesia’s trade regime will ensure that the country remains on its current trajectory for extraordinary growth through 2030.

For more information on Indonesia’s economy, refer to the following links:

» Economist Intelligence Unit’s Long-Term Economic Outlook
» McKinsey Global Institute Analysis of Indonesian Economy
» WTO Member Profile of Indonesia

SOCIO-CULTURAL ENVIRONMENT

Foreign firms seeking to access Indonesia’s defense market should be aware of the historical role of the military as well as negative biases towards foreign businesses. Over time these attitudes have softened, and they are likely to diminish further; nonetheless, businesses must navigate this environment. Additionally, Indonesia’s business standards and laws may be misleading to foreign firms. Although Indonesia has passed western labor standards and limited liability corporation (LLC) formation laws, firms are not ensured dependable and consistent market access because of low enforcement rates and moderate levels of corruption.

ATTITUDES TOWARD THE MILITARY

During President Suharto’s New Order rule, the military was integral in implementing and enforcing the commands of the authoritarian regime. The military’s legacy produced social aversion and negative associations with a strong military following the country’s transition to democracy. These perceptions have retarded the growth and resources of the military over the past 15 years. Currently the military suffers from disorganization, a lack of transparency, finance problems and low accountability. Accordingly, defense firms may be more successful contracting directly with the government as opposed to the military.

95 (EIU, Fact Sheet, 2013; EIU, Long-term Outlook, 2013).
96 (EIU, Long-term Outlook, 2013).
97 (McKinsey Global Institute, 2012).
98 (WTO, 2013).
100 (Deloitte, 2011).
101 (SIPRI, 2013).
102 (SIPRI, 2013).
103 Ibid.
NATIONALISM

Restrictions on foreign ownership of companies in Indonesia also pose hurdles for foreign firms. Indonesia’s Negative List, published in 2010, outlines new constraints on foreign direct investment (FDI) and foreign ownership.\textsuperscript{104} In the wake of new domestic ownership requirements, Indonesia specified that most existing foreign owned firms would be grandfathered into the requirements. However, Indonesia excluded security firms from the grandfather clause. Therefore, foreign owned defense firms saw the expiration of their business licenses.\textsuperscript{105} Furthermore, in 2012, Indonesia reduced the provision of new permits to telecommunications providers and security firms, making it difficult for new foreign firms to access the market.\textsuperscript{106}

Indonesian nationalism has manifested itself in the country’s legal system, legislative history and business market. For example, it is difficult for foreign firms to enter or engage the national resource markets and financial sectors in Indonesia.\textsuperscript{107} In legal disputes involving foreign firms, the courts side overwhelmingly with domestic parties.\textsuperscript{108} Moreover, general business requirements are more stringent for foreign companies.\textsuperscript{109} Foreign firms can expect that domestic competitors will receive more favorable treatment and preference during the procurement process and throughout the life of a business. Foreign firms may seek to limit the impact of these trends by partnering with local businesses and establishing relationships with the Indonesian government.

WEAK ENFORCEMENT

Weak enforcement of business and contract law and restrictions on foreign firms provide for a somewhat challenging business climate in Indonesia. Foreign firms must be knowledgeable of these limitations. Foreign firms should also be conscientious of the relationship between the government and the military in addition to some restrictions on the media, as their companies will need to manage these nuances.

Indonesia has made some strides to improve the business climate for both foreign and domestic firms by reducing corruption and improving the conditions for productivity.\textsuperscript{110} Indonesia’s relative performance in global indicators is illustrated in Figure C.

\textbf{Figure C: Indonesian Indicators}

<table>
<thead>
<tr>
<th>Country Indicators</th>
<th>Rank</th>
<th>Out Of X Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economist – Political Instability Index</td>
<td>52</td>
<td>165</td>
</tr>
<tr>
<td>Press Freedom Index</td>
<td>139</td>
<td>179</td>
</tr>
<tr>
<td>World Bank Economic Forum – Global Competitiveness Index</td>
<td>44</td>
<td>139</td>
</tr>
<tr>
<td>World Bank – Doing Business Indicator</td>
<td>128</td>
<td>185</td>
</tr>
</tbody>
</table>

Source: World Bank & The Economist

\textsuperscript{104} (Department of State, 2012).
\textsuperscript{105} Ibid.
\textsuperscript{106} Ibid.
\textsuperscript{107} (EIU, Highlights, 2013).
\textsuperscript{108} (Vaughn, 2011).
\textsuperscript{109} (Deloitte, 2011).
\textsuperscript{110} (EIU, Long-term Outlook, 2013).
THE LABOR MARKET

The labor market is moderately favorable for foreign firms. Indonesia’s labor force is relatively productive and low-cost. There are also restrictions on the use of contract workers.\(^{111}\) Aside from these considerations, government corruption can be challenging in the labor market.\(^{112}\) However, Indonesia established the Anti-Corruption Commission to investigate corrupt public officials to address the problem.\(^{113}\) Foreign firms should thoroughly understand the procedural and cultural challenges in Indonesia before entering the market.

For more information on Indonesia’s business climate, please refer to the following resource:

» World Bank Ease of Doing Business Assessment for Indonesia
» Stockholm International Peace Research Institute’s Military Spending Data

DEMAND FROM PRIVATE SECTOR

Because Indonesia is still considered a developing country with an unusual private sector made up of many State Owned Enterprises (SOEs) and former SOEs, the private sector does not appear to be a major target for cyber-attacks.\(^{114}\) Instead, cyber espionage and attacks against the private sector tend to be highly concentrated in developed countries with advanced economies.\(^{115}\) Moreover, eight out of the ten largest corporations in Indonesia are headquartered in the country, and are therefore likely not accustomed to the data protections and standards that other companies expect in business environments in developed countries.\(^{116}\) Philip Morris International is the only multinational corporation occupying a position on the list of the ten largest businesses.\(^{117}\) Notwithstanding its business profile, Indonesia is projected to become a developed nation by 2025.\(^{118}\) US defense firms entering the market today, could potentially enjoy sustained business growth through the next decade as cyber security demands evolve.\(^{119}\) The degree of readiness among the existing businesses in Indonesia, further suggests the need for future cyber security products and services.

The Indonesian government also engages in public private partnerships (PPP) to advance infrastructure development; therefore, US defense firms could market to the companies contracted by the government.\(^{120}\) This strategy may prove effective in serving the demand for IT infrastructure development.

\(^{111}\) (Department of State, 2012).
\(^{112}\) (EIU, Highlights 2013).
\(^{113}\) Ibid.
\(^{114}\) (DAKA, 2013).
\(^{115}\) (DAKA, 2013).
\(^{116}\) (Globe Asian, 2013).
\(^{117}\) Ibid.
\(^{118}\) (DAKA, 2013).
\(^{119}\) Ibid.
\(^{120}\) Ibid.
Table 1: Indonesia’s Cyber Security Market at a Glance

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Fast growing economy</td>
<td>• Small defense budget</td>
</tr>
<tr>
<td>• Online environment expanding rapidly</td>
<td>• Challenging business climate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Demand for infrastructure enhancement,</td>
<td>• Significant competition from other domestic</td>
</tr>
<tr>
<td>human resource training, data control, other</td>
<td>and foreign companies</td>
</tr>
<tr>
<td>information technology</td>
<td></td>
</tr>
<tr>
<td>• Defense spending expected to increase in</td>
<td></td>
</tr>
<tr>
<td>future</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX: USEFUL LINKS

- CIA World Factbook Assessment of Indonesia
- Commercial Service Global Safety and Security Resource Guide
- Congressional Research Service Report on Indonesia’s Domestic Politics
- Department of State’s Indonesian Travel Information
- Economist Intelligence Unit’s Long-Term Economic Outlook
- Economist Intelligence Unit’s Summary of Indonesian Political Structure
- Law on Copyright
- Law on Electronic Information and Transactions
- Law on Plant Variety Protection
- Law Regarding Industrial Designs
- Law Regarding Layout Designs of Integrated Circuits
- Law Regarding Marks
- Law Regarding Patents
- Law Regarding Trade Secrets
- McKinsey Global Institute Analysis of Indonesian Economy
- OECD Public Procurement System Assessment
- Patent Laws
- Stockholm International Peace Research Institute’s Military Spending Data
- TIFA Between the US and Indonesia
- US-Indonesia Comprehensive Partnership
- World Bank Ease of Doing Business Assessment for Indonesia
- WTO Member Profile of Indonesia
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