EIBD
EU-INDONESIA BUSINESS DIALOGUE 2010

Position Paper

Cross-sectoral Working Group on
Emerging Issues for Growth

Prepared by:
Anthony Budiawan, Elmar Bouma, Micky Hehuwat

Date: October 25, 2010

EIBD
EU-INDONESIA BUSINESS DIALOGUE 2010

Table of Contents

1. Executive Summary

The Indonesian economy has been growing quite rapidly since 1970 with an average annual growth rate of 5.94% until 2008. However, the average annual growth was declining quite significantly in the second half of that period. The average annual growth was standing at 7.03% during 1970 - 1989, but it decreased to 4.87% during 1990 – 2008. In fact, the Indonesian economic performance was one of the lowest in the region, ASEAN-6 countries + China and South Korea, as shown in the table below:

	Country	Growth					
		1970 - 2008	#	1970 - 1989	#	1989 - 2008	#
1	Indonesia	5.94%	7	7.03%	6	4.87%	7
2	Malaysia	6.96%	3	7.59%	4	6.33%	4
3	Philippines	3.83%	8	3.82%	8	3.84%	8
4	Singapore	7.32%	2	8.10%	1	6.56%	3
5	Thailand	6.07%	5	7.10%	5	5.05%	6
6	Vietnam	6.04%	6	4.67%	7	7.43%	2
7	China	8.95%	1	7.95%	2	9.97%	1
8	South Korea	6.71%	4	7.92%	3	5.51%	5

Source: United Nations

While the world's economy was in the downturns in 2009 following the global financial crisis that started in the United States, Indonesia's economy could still grow by 4.8%, one of the three countries, together with India and China, whose economy were still growing positively. Growth expectation for this year, 2010, is 5.8%, and for 2011 is 6.3%. However, there is a common understanding that the Indonesian economy could even grow faster. Against this background the Indonesian Chamber of Commerce and Industry (KADIN) organizes together with its European partners a business dialogue, EU–Indonesia Business Dialogue (EIBD), to promote trade and investment, to stimulate growth for both parties. Therefore the Cross-sectoral Working Group on Emerging Issues for Growth is preparing a position paper in which we provide a framework for Indonesia's industrial economic development to achieve the desired objective: higher and sustainable growth, while providing investment opportunities to EU partners, leading to growth.

The framework of Indonesia's economic development is explained as follows. First, we indicate which industries are in the declining trend, or in the process of deindustrialization. Second, we indicate which industries have the highest potential impact to economic growth so that the development of these industries will result in a more rapid growth. Step two allows us to choose priority sectors to be developed: these sectors are the sectors with the potentially highest impact on economic growth. Last, but not least, we need the right investment promotion policies to ensure that the investment in the proposed sectors really happens.

In developing the above mentioned framework we are using an Input-Output industry analysis (I-O analysis) constructed by IIFEA (Indonesia Institute for Financial and Economic Advancement). The I-O analysis is derived from the Input-Output industrial transaction table (I-O table) created by Badan Pusat Statistik (BPS) Indonesia on a five years basis. The latest I-O table created was the one for 2005, including the 2005 industrial transactions. The next I-O table created will be the one for the 2010 industrial transaction data, which, of course, is not yet available as of now.

Determine Declining Industries: Production Inducement Coefficient

As mentioned above, we first have to indicate which industries are in the declining stage, which is shown in the decline of their production inducement (or multiplier) coefficient from time to time, in this case is from 1995 to 2005. The production inducement coefficients describe the impact on total domestic production as a result of an increase in final domestic demand. For example, a sector with a production inducement coefficient on final domestic demand of 2.00 means that the total domestic production will increase by Rp 200 billion as a result of an increase of Rp 100 billion in final domestic demand of that sector. The decline of production inducement coefficient of an industry sector indicates that the corresponding sector is weakening; or even in the process of de-industrialization. This means that the (increase of) domestic production cannot satisfy the increase of final domestic demand, therefore imports are needed. This is also reflected by an increase of import ratio.

The decline of production inducement coefficient is very critical to be observed because it causes negative impacts on the economy in two ways: It reduces the (potential of) economic growth as well as the foreign exchange reserves which will hurt the exchange rate, i.e. reducing the value of the local currency. There are two possible causes of this condition. The first cause is on the product level, in which case the domestic goods (industries) cannot compete with the foreign goods (industries). This can be caused by two factors, (1) productivity and (2) the difference in macroeconomic conditions such as interest rate, exchange rate, tax rate or even subsidies provided to certain industries, such as tax rebates on export or export credit.

Productivity

Productivity can be improved by employing advanced technologies, improving labor skills (training) or increasing economies of scale. In this case, Indonesia needs to ensure that the continuous technological improvement and innovation occurs in an economy. This can be achieved by stimulating research and development in advanced technology fields, by encouraging investments in advanced-technology sectors, or by stimulating (giving incentives) to the use of advanced machineries or other capital goods in existing sectors (which is the essence of industry revitalization). Advanced technology equipment has to be operated by skilled labor: the higher the skills the higher the productivity attained. Therefore training is very critical for improvement of skills and productivity. It is one of the government's duties to ensure that these two critical elements of productivity, i.e. technological improvement and vocational training, occur at a continuous basis. But

active participation from the private sector is a necessity to accelerate this process. This can be achieved through providing fiscal incentives to the private sector being engaged in research and technological development as well as in vocational training. In this case, EU can also play a crucial role in helping the establishment of vocational training facility. Specifically, EU can provide some funds through its chambers of commerce, in cooperation with KADIN, to setup such facility, including the necessary curriculum and trainers.

Moreover, Corporate Social Responsibility (CSR) can also be directed to this initiative. In this way, CSR will provide direct benefit to Indonesia's future competitiveness leading to higher economic growth. Another element of productivity is economies of scale: increased economies of scale lead to higher productivity. The government should encourage investment with the purpose to achieve the desired economies of scale and productivity.

Macroeconomic Condition

The level of competitiveness of an industry can be influenced by different economic factors such as interest rate, exchange rate, tax rate or subsidies (provided to certain industries) such as tax rebates or export credits. Generally, Indonesia has a higher interest rate or a more volatile exchange rate than its neighboring countries. Indonesia does not provide any tax rebate or export credit to help exporters to become more competitive on international markets, while other countries may actively provide such facilities to their exporters.

The second possibility is on the country level in which case Indonesia cannot compete with other countries in attracting (foreign) investors to engage in Indonesia. This can be caused, for example, by insufficient infrastructure, high-cost economy (corruption, bribing), uncertainty of laws and regulations, or insufficient incentives (fiscal as well as non-fiscal) compared to other countries. This is one explanation for multinational corporations making investment decisions, esp. in manufacturing industries. We include in the position paper an example of production and international trade networks of multinational car producers in Southeast Asia. The figures clearly show that Thailand became a preferred country as a production base for multinational car producers in Southeast Asia. As a result, Indonesia imports more types of cars than it exports.

Determine Industries with the Highest Potential Impact on Economic Growth

We will indicate which industries have the highest potential impact on economic growth, which is shown as production inducement coefficient gap. This gap shows the potential increase of production inducement coefficient if all import components are substituted by domestic goods. The wider the gap the higher the potential growth that can be attained. The impact of this industrial development is incredible: (1) an increased production inducement coefficient leads to higher future growth, and (2) a reduced import ratio will positively impact foreign exchange reserves. A production inducement coefficient gap must be accompanied by trade balance (i.e. deficit) to determine the priority sectors.

To successfully develop these sectors we need to encourage (foreign direct) investment. First, we need to improve the country's attractiveness positioning Indonesia as a preferred investment destination country: improve infrastructure, increase certainty of law and regulation (law enforcement) and eliminate high-cost economies. This is a precondition, but it may be insufficient to encourage investment. Therefore, Indonesia has to impose a variety of investment incentive policies, like its neighboring countries. The level of incentives depends on the importance of the sectors for the Indonesian economy. The table on the next page shows a proposed strategic investment promotion matrix aiming to lead to a more rapid growth.

Sustainability and Corporate Social Responsibility (CSR)

Last but not least, Indonesia has to pay serious attention on increasingly important global issues: Sustainability and Corporate Social Responsibility (CSR).

Sustainability refers to the use of resources in a way that does not negatively affect the possibilities of future generations to use the same resources. The standards of sustainability are increasingly harmonized at an international level, both in cross sector standards as well as in sector specific standards. Short-term profits should not be pursued by applying substandard sustainability practices. At an international level, sustainability also addresses climate change issues. In fact, there are two major causes of climate change: (1) overuse of fossil fuels in industrial processes that happen in industrialized countries, and (2) overexploitation of industrial sectors such as mining and plantation causing deforestation or forest degradation, which mainly happens in developing countries, including Indonesia. We inspire developed countries, particularly European Union, to encourage their private sector to provide a more balance solution how to deal with deforestation and forest degradation issues. We also would prioritize dialogue-driven solutions instead of generalizing standards like in the case of rejecting Indonesia's palm oil products by some European multinationals. We encourage that the related climate change issues should not be applied to the existing economic conditions retroactively.

Strategic Investment Promotion Matrix

INCENTIVE	Primary	Secondary	Tertiary	
Aggressive Med to High	• Petrochemical • Renewable energy –Coal gasification, Biomass, Bio-fuel, Geothermal, Solar, Wind	• Machinery • Automotive • Transport equip. • Consumer goods • Chemical products • Pharmaceutical • Steel & basic metal	• Infrastructure • Construction • Real estate • Transportation	• Improve productivity • Converse energy • Reduce trade deficit - Increase multiplier effect
Develop Low to Med	• Agriculture, Plantation • (Renewable) timber & wooden products	• Textile • Pulp & paper • Mechanized furniture • Electronics and electrical products	• Wholesale • Retail • Hotel • Restaurant • Business Services	• Stimulate export • Increase domestic market share
Maintain None to Low	• Basic refinery, mining and quarrying	• Leather, footwear • Wearing apparel • Livestock & poultry	• Financial services	• Create employment • Strengthen (M)SME

ECONOMIC SECTOR

Corporate Social Responsibility (CSR) goes beyond generally accepted standards of sustainability. It implies a proactive engagement with communities, whereby a company takes responsibility for solving certain problems in its physical or social environment. At the same time, it can never be a substitute for

complying with generally accepted standards of sustainability, let alone for not complying with legal sustainability standards.

CSR has become an important topic for the management of companies. Indonesia has made CSR program mandatory for the majority of companies. The corporate sector however believes that CSR should remain as much as possible a voluntary undertaking, i. e. not being regulated. Otherwise it becomes a mere legal requirement or a tax. At the same time though, it is becoming clear to more and more companies that their license to operate increasingly depends on good CSR policies addressing the legitimate expectations of stakeholders. There is also more and more evidence that a good CSR policy is not a burden to a company, but it can improve its competitiveness and its market position. Companies in Indonesia and Europe are both in the early stages of utilizing the full benefits of good CSR policies. An active exchange of experiences should take place, and all companies should develop an effective CSR policy using specialized advice. Even more results can be achieved if companies work together to jointly addressing development issues. Technologies, expertise and distribution networks of companies can be used to further enhance general health-care and education. The expertise of companies can also be used to improve environment, and their buying power can help develop entrepreneurship and SME development. Business associations and non-governmental organizations can play an important facilitating role in this.

2. Introduction

As one of world's most populous countries, with a total population of around 240 million people, Indonesia plays an increasingly important role in the regional as well as world economic development. Since 2008 Indonesia is a member of G-20 (The Group of Twenty) that replaced the former Group of Eight (G-8) of industrialized countries. However, from an economic point of view, Indonesia is (far) behind the other member countries. Next to India, Indonesia has the lowest income (GDP) per capita and the highest number of people living below poverty line.

Despite of quite its impressive economic development performance since the 1970s, Indonesia's economic development remains a challenge for the future. Some of the country's industries have been declining steadily (i.e. deindustrialization), resulting in a lower growth rate, meaning the economy is functioning below its potential.

Indonesia's economy consists of various industries in agriculture, natural resources as well as labor-intensive with low-technology, which have relatively low growth rate characteristics. Indonesia's current economic development pays insufficient attention to capital-intensive industries with (modern) advanced technologies that have higher productivity leading to higher growth. In addition, Indonesia, and the world, are threatened by increasingly important issues such as climate change and global warming. There are two major reasons for climate change: (1) overuse of fossil fuels, and (2) exploitation of sectors leading to deforestation or forest degradation. The first cause

happens in industrialized countries that too much use of fossil energy to fuel their economic growth. The second cause is mainly occurred in developing countries, including Indonesia, exploiting excessively its natural resources (i.e. mining (coal, gold and other minerals), forestry (timber and wooden products), plantation (palm oil)) to fuel their economic growth, with a high probability of leading to deforestation or forest degradation due to the use of (rain-)forest land.

The recent case of Sinar Mas may act as showcase for the seriousness of the issue. Its palm oil product was rejected by some European multinationals because it was deemed to contribute to forest degradation. As Indonesia's industry structure consists of quite many sort of these industries (coal mining, forestry, pulp and paper, palm oil plantation) requiring large land areas, this increasingly important global issue would certainly bring Indonesia's future growth into uncertainty. However, please be reminded that this issue has not been taken care proportionally in the current global economy. For instance, there were no such embargoes on industrial products that use too much fossil energies in their production processes, hence, contributing seriously to climate change. For the sake of fairness, we therefore encourage developed countries to provide a more balanced solution, and should prioritize a dialogue, in dealing with such issue. Climate change issues should not be applied to on-going or established economic relations like in the case of Sinar Mas whose palm oil products are coming from established plantations. In other words, climate change issues should not be imposed retroactively.

Nevertheless, it is still very important for Indonesia to seek other industry sectors that are less sensitive to deforestation and forest degradation issues in its future economic development in order to attain, and secure, the required growth. Indonesia has to focus on sectors with high productivity. The characteristic of these sectors primarily is capital-intensity with applied advanced technology. Consequently, Indonesia needs to encourage (foreign direct) investments in these sectors, which successes depend on the attractiveness of its investment policies. In this case, Indonesia has to compete with neighboring countries, such as Malaysia, Thailand, Singapore, and even China, which are much earlier than Indonesia in developing these sectors. The fact that China plans to relocate some of its garment factories, i.e. low productivity sector, to Indonesia proves that Indonesia is still a preferred investment destination country for labor-intensive and low-tech sectors, unfortunately having only a limited impact on economic growth.

While the above mentioned issues, i.e. deindustrialization and climate change, are increasingly important for Indonesia's future economic development, Indonesia is still facing quite many challenges in reshaping its economic and industrial policies to attain rapid and sustainable growth.

In November 2010, the Indonesian Chamber of Commerce and Industry (KADIN) and its European partners organize the EU – Indonesia Business Dialogue (EIBD) to promote trade and investment, and stimulate growth for both parties. On this occasion, it is very critical for Indonesia to make this event as a turning point in its economic development to create

higher economic growth. In particular, Indonesia should be able to encourage investment from European countries in industries strengthening its industry structure and leading to higher growth. In this respect, the EIBD Working Group on Emerging Issues for Growth is preparing a position paper that contains the foundation for Indonesia's economic and industrial redirection to achieve the above objective.

In Chapter 3, we will show the progress of Indonesia's economic and industrial development from 1995 to 2005, by identifying those industries that have successfully developed, and which industries that have been declining (deindustrialization), and their impact on economic performance.

Chapter 4 will address necessary economic and industrial policies to promote investment in target industries which are critical for enhanced growth.

The last chapter, Chapter 5, highlights recommendations for Indonesia's industrial development to achieve the desired growth. These recommendations will lead to a Strategic Investment Promotion Matrix that pairs industry sectors with necessary investment policies.

3. Indonesia's Economic and Industrial Development 1995 – 2005

In this chapter we will show the progress of Indonesia's economic development from 1995 to 2005. We make use of the Input-Output table analysis (I-O analysis) studied by IIFEA (Indonesia Institute for Financial and Economic Advancement) to discuss the progress of Indonesia's industrial development and its impacts on economic performance. The I-O analysis is derived from the Input Output industrial transaction table created by BPS (Badan Pusat Statistik) on a five years basis. The latest I-O table created was the one for 2005, and, consequently, the next one will be published for 2010.

The I-O table has three sections as shown in figure 1 below. The first section depicts the inter-dependence of industries in an economy, showing the input-output relationship, i.e. supply and demand, among industries: the column represents the input (supply) structure of an industry and the corresponding row represents its output (demand) structure. Section 2 shows the value-added (salaries and wages, operating surplus, indirect taxes minus subsidies) of industries, adding to the Gross Domestic Product (GDP) of a country. Section 3 gives the final domestic demand (i.e. household consumption, government consumption and investment (gross fixed capital formation)) as well as net export (export – import) of industries.

INPUT-OUTPUT TABLE, N Industry x N Industry	Sector	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5	Sector 6	Sector 7			Sector n	Total Intermediate Demand	Private Consumption	Government Consumption	Gross Fixed Capital Formation	Change in Inventories	Final Domestic Demand	Total Exports	Total Final Demand	Total Demand	Import	Total Supply
Sector		1	2	3	4	5	6	7			N											
Sector 1	1	Section 1: Intermediate Demand (Industry Transaction)											Section 3: Final Domestic Demand and Import-Export									
Sector 2	2																					
Sector 3	3																					
Sector 4	4																					
Sector 5	5																					
Sector 6	6																					
Sector 7	7																					
Sector n	N																					
TOTAL INTERMEDIATE INPUT																						
Value - Added		Section 2: Industry Value-Added (GDP)																				
Compensation Of Employee																						
Operating Surplus																						
Indirect Taxes and subsidies																						
TOTAL OUTPUT																						

Figure 1: The Framework of Input-Output Table

The progress of Indonesia's economic development is represented by its Industry Structure change, i.e. the change in the degree of interdependence of industries, which is reflected by the change of the production inducement coefficient.

The table in Appendix 1 illustrates twenty industries with the highest production inducement (i.e. multiplier) coefficient on final domestic demand in 1995 and 2005. The table in Appendix 2 shows twenty industries with the lowest production inducement coefficient on final domestic demand in both years. The production inducement coefficients on final domestic demand describe the impact on total domestic production as a result of an increase in final domestic demand. For example, a sector with a production inducement coefficient on final domestic demand of 2.00 means that the total domestic production will increase by Rp 200 billion as a result of an increase of Rp 100 billion in final domestic demand of that sector. Therefore, it is highly desirable to have high production inducement coefficient for each sector within an industry structure. The level of production inducement coefficient is determined by the degree of interdependence of domestic industry structure: the more interdependency within the industries, i.e., the more goods are produced domestically and the higher the production inducement coefficient.

From Appendix 1 we can see that the level of production inducement coefficients has not changed significantly from 1995 to 2005. The highest production inducement coefficient in both years was around 2.00, which shows that Indonesia's industry structure in both periods was not too strong (read efficient). Moreover, in 1995, as well as in 2005, the sectors with relatively high production inducement coefficient were dominated by labor-intensive and agricultural-based sectors (apparel, wood-based, and (basic) food-related sectors), while the sectors that produce industrial goods, such as machinery, chemicals,

electronics and electrical goods, had a relatively low production inducement coefficient in both years (see Appendix 1 for details).

Although some sectors were facing some improvement, several other sectors have been performing diametrically (i.e. declining, tending to deindustrialization), as shown in Appendix 3 and Appendix 4 respectively. Appendix 3 shows sectors that have been developing quite well, such as Machinery, Electronics, Electrical Household Appliances, and Pulp. Those successes are reflected in an increase of production inducement coefficient of those sectors, as a result of an increase in total domestic production share to total demand, which is also mirrored by the decrease of import ratio of the corresponding sectors. The import ratio is defined as the ratio of total import to total domestic requirements (demand), i.e. industry (or intermediate) demand plus final domestic demand). Appendix 4 depicts sectors with the most decreased production inducement coefficient from 1995 to 2005, such as Processing and preserving of meat, Sugar, Dairy products, Soybeans, Paper and paper products, and Ceramics, which means that the increased total domestic demand (for industries and final domestic consumptions) could not sufficiently be fulfilled by the increased total domestic production. This condition is also reflected by the increase of import ratio.

In summary, Indonesia's overall economic development from 1995 to 2005 has not significantly improved nor worsened: the average annual increase of total domestic demand has just been matched by the average annual increase of total domestic production. In other words, it is *stagnant*.

Industry Development Direction for Growth Optimization

In the previous section we have seen that some sectors have made some improvement in 2005 while several others were performing contrarily. So, the economic growth remains below its potential, which means that Indonesia's economic growth from 1995 to 2005 was not in its optimum condition due to less-effective developments in some sectors which caused the decrease of production inducement coefficient: the increase of total domestic demand cannot be fulfilled by domestic production, it is, instead, fulfilled by foreign production (import) that increased the import ratio. This in itself is not a problem and it will not be possible nor necessary nor even desirable to try to reduce imports in all sectors, but Indonesia will have to ensure that it remains competitive in a number of sectors. Each country has to develop competitive advantages in a number of sectors in which it has the best potential.

To achieve a significant (high) growth, we need to strengthen the domestic industry structure by performing a backward as well as forward integration, which would increase the production inducement coefficient. The potential increase of production inducement coefficient is given as the production-inducement-coefficient gap, which shows the potential increase of production inducement coefficient if all imports in that sector were substituted by domestic production: the wider the production-inducement-effect gap, the

higher the potential growth that can be achieved (as a result of an increase of final domestic demand).

Appendix 5 provides sectors with the widest production-inducement-coefficient gap for the 2005 Indonesia's industry structure. The production-inducement-coefficient gaps were dominated by manufacturing sectors in industrial goods including components, for example Machinery and equipment, steel, Chemicals, Automotive, and Pulp. From the Appendix we can see that the potential growth of Indonesia's economy is incredible as the gaps are very wide and in the multiplication of the current level. Obviously, these sectors could serve as an engine for future growth. This potential growth is based on the current level of domestic demand of each sector, which means that the growth can be stimulated by increasing the extent of industry interdependence through backward and forward integration rather than by increasing the final domestic demand. In other words, even if final domestic demand does not rise, growth can still be realized because of increased domestic production. In the case where the production-inducement-coefficient gap is insignificant, the growth can only be stimulated by an increase in total demand (domestic as well as export).

To paint a more complete picture of Indonesia's effective industrial development, we later on will provide sectors (Appendix 6) that have the highest trade deficits in 2005 and their corresponding production-inducement-coefficient gaps, which can serve as the foundation for the growth-oriented strategic industrial development plan of Indonesia. These sectors should be prioritized in Indonesia's economic development plan: reducing trade deficit while accelerating growth. It is important to note that the development of these sectors does not mean that the development of other sectors which are not listed in the table, such as apparel and textiles, is ignored. In fact, all sectors are important to be developed, as can be seen in the next Chapter.

4. Economic Policies for Successful Industrial Development

The previous Chapter explained the framework for a sustainable industrial development strategy leading to (sufficiently) higher economic growth and improved prosperity.

However, the success of industrial development depends on the effectiveness (and attractiveness) of the government investment policies on the target sectors. Considering that there are quite many deficiencies in Indonesia's current economic and political condition, i.e. lack of efficient infrastructure, high-cost economy due to corruption or bribing, in- (or less-) effective public policies (uncertainty in law and regulation), such investments policies must be sufficiently attractive to encourage (foreign direct) investments.

The core question is whether (foreign) investors are willing to invest in Indonesia more than in Malaysia, Thailand, Vietnam, Singapore, or even China, which are performing better than Indonesia in many respects. For example, from a bureaucracy point of view,

according to PERC's (Political and Economic Risk Consultancy) survey of 12 Asian countries, Indonesia is the second least-efficient bureaucracies in Asia, just above India, as shown in the table below. From the ease-of-doing-business point of view, according to the World Bank, Indonesia is listed as the third most-unease country for doing business among those 12 countries (with a total rank of 122).

Rank of Bureaucracy Efficiency for 12 Asian Countries *)			**Ease of Doing Business Index 2010 (World Bank)**		
No.	Country	Score	No.	Country	Rank
1	Singapore	2.53	1	Singapore	1
2	Hong Kong	3.49	2	Hong Kong	3
3	Thailand	5.53	3	Thailand	12
4	South Korea	6.13	4	Japan	15
5	Japan	6.57	5	South Korea	19
6	Taiwan	6.60	6	Malaysia	23
7	Malaysia	6.97	7	Taiwan	46
8	China	7.93	8	China	89
9	Vietnam	8.13	9	Vietnam	93
10	Philippines	8.37	10	Indonesia	122
11	Indonesia	8.59	11	India	133
12	India	9.41	12	Philippines	144

Considering these facts, Indonesia, therefore, has to work systematically on a better investment climate. Also, Indonesia has to offer more attractive investment policies to encourage investment flowing into the country. To make such policies become more effective we need, first of all, to understand the policies enforced by other neighboring countries in relation to their investment promotion activities. Below we will give the example of how Thailand performed quite successful in encouraging foreign direct investment (FDI) flowing into the country and, consequently, succeeded in enhancing industrial development. Thailand became one of the most preferred Asian investment destinations, especially for Japanese, American, British and German investors, targeting sectors such as automotive, electronics, electrical appliances, just to name a few. Thailand has aggressively implemented an investment promotion program, attracting investment in their targeted sectors in which investors will receive various tax as well as non-tax incentives. The eligible sectors are as follow:

- Agriculture and Agricultural Products
- Mining, Ceramics and Base Metals
- Light Industry
- Metal Products, Machinery and Transport Equipment
- Electronic Industry and Electric Appliances
- Chemicals, Paper and Plastics
- Services and Public Utilities.

Tax Incentives:

- Import duty reductions or exemptions on machinery and raw materials

- Corporate income tax holidays up to 8 years
- Additional 50% reductions for 5 years
- Double deduction of public utility costs
- Deductions for construction/installation costs infrastructure.

Non-tax Incentives:

- 100% ownership land rights for foreign investors
- Permission to bring in foreign experts and technicians
- Work permit and Visa facilitation.

In addition, Thailand provides additional incentives for STI (Skill, Technology & Innovation). Privileges will be based on the project's total investment in STI expenditures in any of the following STI categories:

- Research and development or design
- Advanced technology training
- Support for educational and research institutes
- Contribution to the Science and Technology Fund.

Moreover, Thailand has imposed the following new polices for 2010 to encourage "Investment for Sustainable Development":

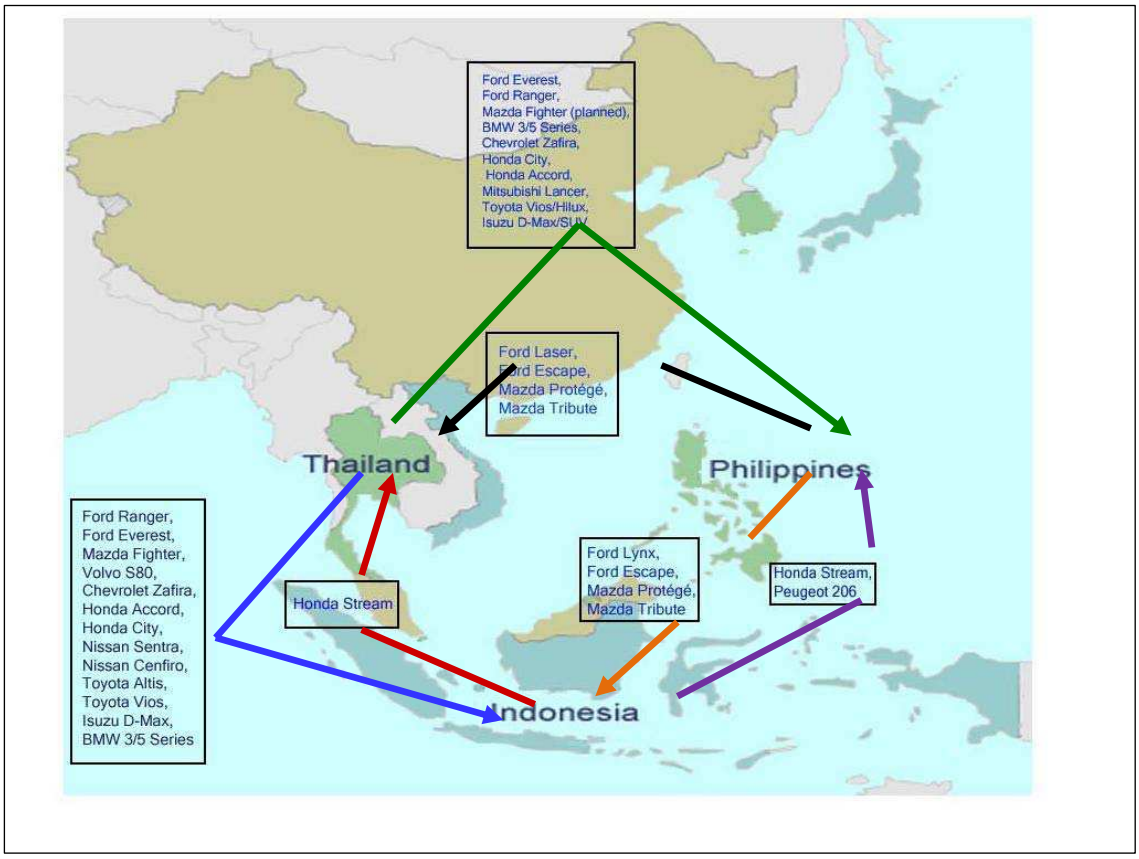
(1) Maximum incentives for targeted activities considered useful for sustainable development
(2) HRD measures necessary for a knowledge-based economy
(3) Measures to strengthen Science & Technology (S&T) development
(4) Environment and community friendly investment promotion policies: measures such as eco-town and eco-industrial estate
(5) Measures to support creative industries and healthcare industries

Eligible Sectors are:

- Activities related to manufacturing of eco-friendly materials and products, e.g. 'bioplastics'
- Energy saving and alternative energy generation
- Activities that involve high technology, e.g. automotive electronics, biotech, nano-tech, Functional textiles.

Incentives:

- Exemption of import duties on machinery
- 8-year exemption of corporate income tax with no cap
- 50% reduction of corporate income tax on net profit for 5 years
- Double deduction of transportation, electricity and water supply costs for 10 years



- Deduction from net profit of 25% of investment in infrastructure installation and construction costs in addition to normal capital depreciation.

Thai government also provides additional incentives for investment in environment-friendly technologies that

(1) Reduce energy consumption,
(2) Use alternative energies,
(3) Reduce negative impacts on environment.

Incentives

- Exemption of import duty on machinery
- Exemption of corporate income tax for 3 years totaling 70% of investment.

Regional Operating Headquarter (ROH) established in Thailand will also receive the following incentives:

- 15 years corporate income tax exemption for income earned outside Thailand and only 10 percent corporate income tax on income earned domestically
    - Eligible services and transactions include R&D, business management and administration, marketing and sales promotion, advisory services and HR training.
- Reduced personal income tax rate of 15 percent for expatriates for 8 years.

Source: Thailand Board of Investment

The above mentioned investment promotion program helped Thailand to become a significant producer of automotive vehicles, especially pick-up trucks and electronics goods, such as hard disk drives (HDD). In 2010, Thailand's production of pick-up trucks and cars will reach 1.6 million units, with half of it, or around 800,000 units, being for exports. The figure below describes production and international trade networks in Southeast Asia of major multinational car producers, which clearly shows that Indonesia imports more cars than it exports, whereas Thailand is exactly the opposite.

It now becomes obvious that Indonesia needs to offer, at least, similar investment policies, if not better, to become a preferred investment destination country in Asia.

5. Recommendations for Economic Development Redirection

Chapter 3 explained which industries need to be developed to attain higher economic growth, and Chapter 4 explained the importance of investment policies for successful development of those sectors. In this Chapter we will provide a strategic economic development framework for Indonesia, leading to higher and sustainable growth. This framework will be given in the so-called Strategic Investment Promotion Matrix that pairs industry sectors and incentive policies.

Following macroeconomic theory, industries can be divided into three categories: Primary Sector, Secondary Sector, and Tertiary Sector. Each category needs an appropriate incentive policy to encourage investment in those sectors. Incentive policies are divided into three approaches: Aggressive, Develop, and Maintain, which may help the government to set priorities in its supporting policy.

<u>"Aggressive" Incentive Policy</u>
An "Aggressive" incentive policy is imposed on sectors that are critical for Indonesia's economic development to get higher and sustainable growth:

- Productivity improvement and building on competitive advantage: e.g. infrastructure, transportation and transport equipment, (advanced) machinery, sectors with advanced technologies;
- Energy conservation and sustainable development: e.g. renewable energies (such as geothermal, wind power, solar power), energy-saving machinery & equipment and vehicles (i.e. hybrid car), to ensure that Indonesia fully reaps the benefits from technology development, efficiency improvements follows developing world standards;
- Increase production inducement coefficients through backward and/or forward integration: e.g. petrochemical and chemical products, machinery, consumer goods, pharmaceuticals, and steel.
- Investing in research, research co-operation between public and private sectors, co-operation between public and private sector in vocational training by

establishment of private sector-run training institutes, providing fiscal stimulus for research and training.

Tax incentive policy:

- Corporate tax holiday for 5 – 8 years, no cap
- Double tax deduction on research and technological development, training, and CSR expenses (particularly meant for infrastructure development and productivity improvement)
- Import duty exemption on machinery and raw materials.

Non-tax incentive policy:

- Increase foreign ownership to 100%
- Allow foreign ownership of land rights
- Sufficient number of expatriates.

Most of these sectors, if not all, are the sectors in which EU has the strengths. We, therefore, encourage both governments, the EU and Indonesia, to capitalize this EIBD forum to attract EU investments in these sectors to stimulate the future Indonesia's economic growth while providing EU with beneficial investment opportunities.

<u>"Develop" Incentive Policy</u>

"Develop" incentive policy is imposed on sectors that are gradually declining. The main objective of this incentive policy is to stimulate exports as well as to increase the market shares of domestic production (industry revitalization):

- Stimulate exports: e.g. apparel and textiles, footwear
- Increase domestic market shares: e.g. Textile, Pulp & paper, modern (mechanized) furniture, Electronics and Electrical appliances.

Tax incentive policy:

- Corporate tax holiday up to 5 years, cap to the investment amount
- Double tax deduction on research and technological development, training, and CSR expenses (particularly meant for infrastructure development and productivity improvement)
- Import duty exemption on machinery and raw material
- Reduced corporate tax on export income deposited in domestic banks (similar to tax rebate).

Non-tax incentive policy:

- Increase foreign ownership to 100%
- Allow foreign ownership of land rights
- Sufficient number of expatriates

<u>"Maintain" Incentive Policy</u>

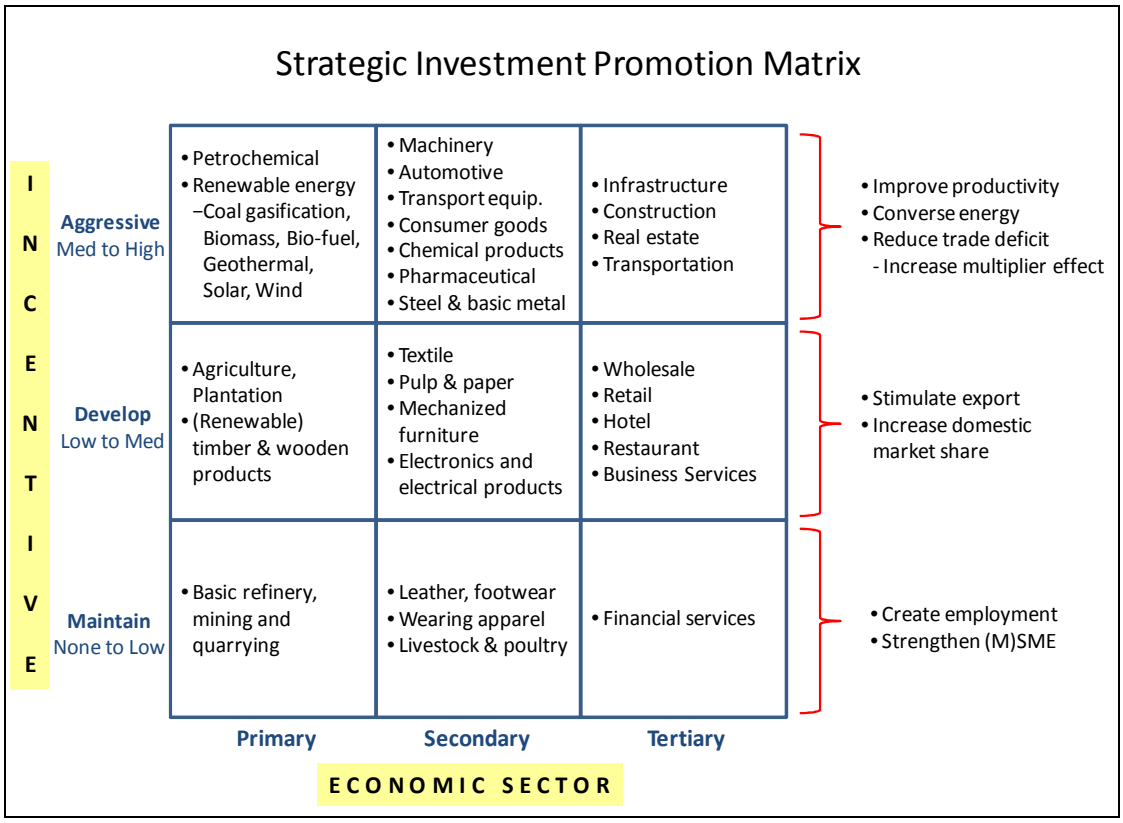
"Maintain" incentive policy is imposed on sectors with comparative advantages, which means there is no significant threat or threatening competition from other countries, and on sectors with labor-intensive, low-tech characteristics:

- Natural resources: e.g. oil & gas, coal, mineral
- Plantation: e.g. palm oil,
- Labor-intensive sectors: e.g. apparel, footwear.

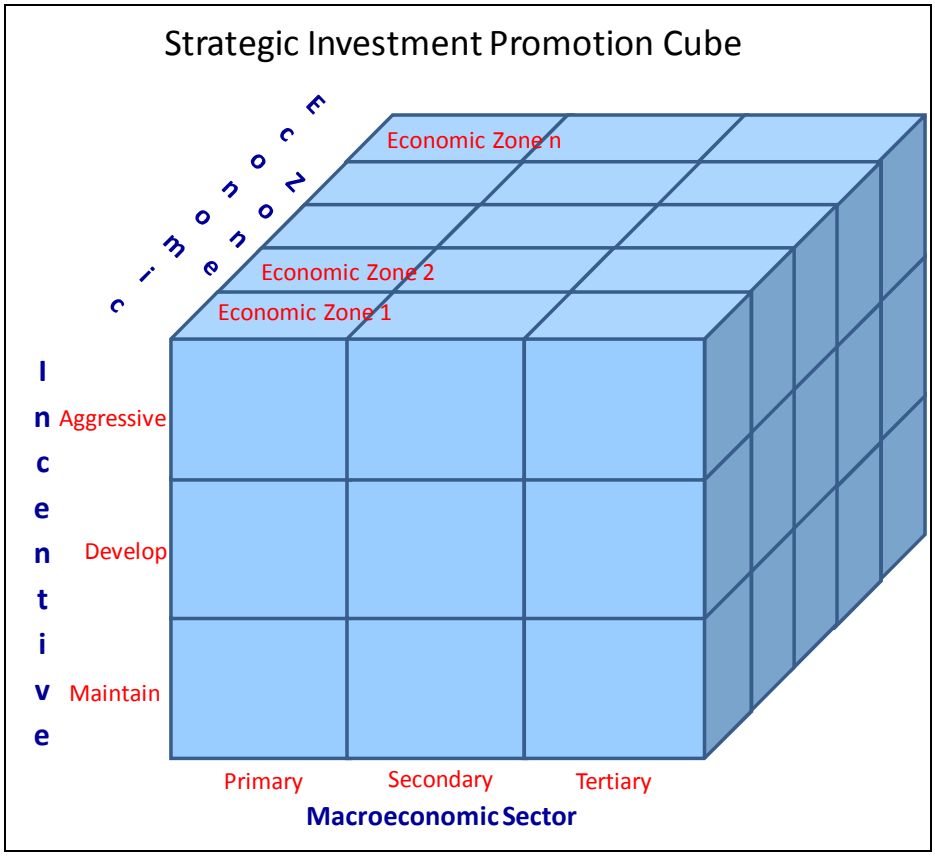
Tax incentive policy:

- Value-added tax reduction or exemption on domestic-produced capital goods (e.g. machinery)
- Corporate tax reduction for energy sectors for domestic consumption
- Corporate tax reduction on small and medium enterprises
- Export incentives for non-natural resources sectors.

Based on this, a **Strategic Investment Promotion Matrix** is as follows:



Additionally, the matrix can be expanded to promote regional economic development divided into economic zones. Additional incentives will be provided to corporates that invest in the promoted economic zones, as shown in the figure below: the **Strategic Investment Promotion Cube:**



As a closing remark, we would like to stress that notwithstanding the important role that government must play in ensuring Indonesia's competitiveness, it is the companies who carry the main responsibility. Companies in Indonesia need to invest in innovation, joint vocational training institutes and in supplier development.
Many of these activities can be categorized under Corporate Responsibility and they serve to improve the company's economic and social environment. Companies should not wait for the government to regulate such activities, but should take the initiative. Business associations can play an important role here, and companies should work on making business associations stronger and giving them more means to take initiatives that can strengthen the sector. In a number of sectors, Indonesian and European business can work together, such as in the establishment of vocational training centers. In general, as abundant evidence shows, the application of sustainability standards will often lead to higher efficiency and more profitability, certainly in the long run.

Appendix 1: Twenty Sectors with the Highest Production Inducement Coefficient (i.e. Multiplier Effect) in 1995 and 2005

Industry Sectors		Multiplier Effect		Industry Sectors		Multiplier Effect
Code	Description	1995		Code	Description	2005
77	Wearing apparel	2.055		57	Milling and polishing of rice	2.031
85	Furniture and fixture of wood, bamboo and rattan	2.016		64	Coffee milling	1.974
104	Rubber and crumb rubber	2.013		104	Rubber and crumb rubber	1.942
84	Wooden building materials	1.984		55	Copra	1.936
57	Milling and polishing of rice	1.961		60	Bakery products	1.914
67	Other food	1.960		150	Railway transport	1.895
106	Other rubber products	1.958		61	Noodle, macaroni and the like	1.871
54	Processing and preserving of fish and similar food	1.957		75	Other textiles	1.865
166	Health services - private sector	1.952		148	Restaurant	1.848
142	Residential and non residential buildings	1.949		77	Wearing apparel	1.832
60	Bakery products	1.912		49	Meats and others	1.832
148	Restaurant	1.905		70	Non alcoholic beverages	1.828
55	Copra	1.894		106	Other rubber products	1.822
82	Saw mills	1.891		146	Other constructions	1.821
64	Coffee milling	1.888		54	Processing and preserving of fish and similar food	1.814
75	Other textiles	1.877		145	Construction and instalation of utility and communication	1.807
49	Meats and others	1.874		140	Electricity and gas	1.798
70	Non alcoholic beverages	1.850		91	Printing and publishing	1.791
146	Other constructions	1.845		85	Furniture and fixture of wood, bamboo and rattan	1.790
83	Manufacture of plywood and the like	1.821		56	Animal oil and fat	1.789

Appendix 2: Twenty Sectors with the Lowest Production Inducement Coefficient in 1995 and 2005

Industry Sectors		Multiplier Effect		Industry Sectors		Multiplier Effect
Code	Description	1995		Code	Description	2005
11	Other cereals	0.046		16	Fibre crop	0.043
123	Generators and electrical engines	0.119		45	Ferrous ore mining	0.101
172	Unspecified sector	0.140		41	Bauxite ore mining	0.126
135	Photographic, optical equipment and watches	0.223		11	Other cereals	0.145
126	Household electrical appliance	0.272		131	Ship building and repairing	0.333
115	Non ferrous basic metal	0.338		170	Motion picture production and distribution	0.367
129	Ship building and repairing	0.367		137	Photographic, optical equipment and watches	0.424
134	Aircraft building and its repair	0.397		46	Other ferrous metal ore mining	0.453
125	Electronics, communication equipments	0.441		93	Basic chemicals except fertilizer	0.466
122	Machine and apparatus, except electrical machinery	0.448		36	Crude oil	0.477
78	Carpet, cordage and the like	0.495		124	Machine and apparatus, except electrical machinery	0.523
124	Electrical machinery and apparatus	0.526		136	Aircraft building and its repair	0.555
46	Non ferrous mineral mining	0.562		7	Soybean	0.599
88	Pulp	0.598		47	Non ferrous mineral mining	0.654
168	Motion picture production and distribution	0.625		116	Basic iron and steel products	0.687
95	Synthetic resins, plastic materials and synthetic fibre	0.647		115	Basic iron and steel	0.716
92	Basic chemicals except fertilizer	0.654		112	Ceramic and clay building materials	0.730
138	Sporting and athletic goods	0.674		104	Retroleum refinery	0.736
45	Other ferrous metal ore mining	0.719		97	Synthetic resins, plastic materials and synthetic fibre	0.781
101	Other chemicals	0.739		126	Electrical machinery and apparatus	0.812

Appendix 3: The Most Improved Sectors in 2005 compared to 1995

	Industry Sector	Multiplier Effect			Import Ratio		
Code	Description	1995	2005	Increase	1995	2005	Change
123	Generators and electrical engines	0.119	1.483	1.364	92.31%	20.10%	-72.21%
79	Leather tanneries and leather finishing	0.884	1.773	0.889	57.47%	13.30%	-44.17%
125	Electronics, communication equipments	0.441	1.311	0.870	72.49%	25.79%	-46.69%
126	Household electrical appliance	0.272	1.099	0.827	82.96%	36.28%	-46.68%
121	Prime mover machinery	0.838	1.623	0.785	42.42%	8.24%	-34.19%
115	Non ferrous basic metal	0.338	0.952	0.614	81.33%	52.42%	-28.91%
88	Pulp	0.598	1.184	0.586	64.33%	35.53%	-28.80%
76	Knitting mills	1.125	1.569	0.444	36.20%	16.46%	-19.74%
138	Sporting and athletic goods	0.674	1.078	0.404	61.55%	41.22%	-20.34%
150	Railway transport	1.497	1.895	0.399	13.38%	1.07%	-12.31%
23	Other estate crops	1.098	1.489	0.392	7.56%	3.33%	-4.23%
136	Jewelry article	1.315	1.679	0.364	8.81%	7.59%	-1.22%
78	Carpet, cordage and the like	0.495	0.850	0.355	71.97%	40.95%	-31.02%
80	Leather finished goods	1.378	1.716	0.337	10.07%	9.88%	-0.19%
151	Road transport	1.400	1.717	0.317	6.31%	0.66%	-5.65%
124	Electrical machinery and apparatus	0.526	0.812	0.286	69.29%	50.63%	-18.65%
158	Insurance and pension funds	0.955	1.192	0.238	41.05%	13.00%	-28.06%
153	River and lake transport	1.281	1.517	0.236	6.98%	0.80%	-6.18%
162	Education services - public sector	1.273	1.497	0.225	2.33%	6.90%	4.57%
2	Maize	1.084	1.286	0.201	9.71%	1.27%	-8.44%

Appendix 4: The Most Declined Sectors in 2005 compared to 1995

	Industry Sector	Multiplier Effect			Import Ratio		
Code	Description	1995	2005	Decrease	1995	2005	Change
40	Bauxite ore mining	1.551	0.126	-1.425	0.00%	90.95%	90.95%
16	Fibre crop	1.157	0.043	-1.113	1.22%	96.19%	94.96%
50	Processing and preserving meat	1.706	0.882	-0.824	22.40%	59.95%	37.56%
62	Sugar	1.576	0.971	-0.605	6.07%	51.35%	45.28%
51	Dairy products	1.781	1.266	-0.514	12.28%	36.23%	23.94%
102	Petroleum refinery	1.219	0.736	-0.483	21.92%	38.35%	16.43%
71	Processing tobacco	1.564	1.088	-0.476	22.78%	42.31%	19.54%
160	Business services	1.293	0.836	-0.457	12.86%	45.98%	33.12%
149	Hotel	1.378	0.941	-0.436	16.91%	41.81%	24.90%
90	Paper and cardboard	1.662	1.247	-0.415	12.89%	34.65%	21.75%
117	Kitchen apparatus	1.324	0.924	-0.400	21.37%	41.64%	20.27%
93	Fertilizer	1.496	1.099	-0.398	8.09%	26.70%	18.61%
7	Soybean	0.981	0.599	-0.382	16.84%	51.46%	34.63%
36	Crude oil	0.858	0.477	-0.381	22.73%	55.09%	32.36%
94	Pestiside	1.397	1.023	-0.374	7.58%	33.02%	25.44%
84	Wooden building materials	1.984	1.618	-0.365	1.32%	11.52%	10.20%
114	Basic iron and steel products	1.021	0.687	-0.334	35.90%	59.69%	23.79%
21	Cacao	1.222	0.921	-0.301	0.57%	27.07%	26.50%
110	Ceramic and clay building materials	1.031	0.730	-0.301	41.54%	59.19%	17.65%
26	Milk livestock raising	1.757	1.458	-0.299	0.00%	8.34%	8.34%

Appendix 5: Production Inducement Coefficient Gap in the 2005 Industry Structure

	Industry Sector	Production Inducement Effect		
Code	Description	2005 Industry Structure	If Imports were fulfilled by Domestic Production	Gap
124	Machine and apparatus, except electrical machinery	0.523	3.006	2.483
136	Aircraft building and its repair	0.555	2.994	2.439
131	Ship building and repairing	0.333	2.438	2.105
171	Motion picture production and distribution	0.367	2.387	2.020
137	Photographic, optical equipment and watches	0.424	2.310	1.886
116	Basic iron and steel products	0.687	2.508	1.821
44	Ferrous ore mining	0.101	1.803	1.702
126	Electrical machinery and apparatus	0.812	2.497	1.685
40	Bauxite ore mining	0.126	1.712	1.586
94	Basic chemicals except fertilizer	0.466	1.976	1.510
50	Processing and preserving meat	0.882	2.368	1.486
115	Basic iron and steel	0.716	2.185	1.469
103	Other chemicals	0.824	2.238	1.414
129	Other electrical appliances	1.007	2.400	1.393
133	Motor vehicle except motor cycle	0.960	2.353	1.392
141	Other manufacturing industries	0.885	2.272	1.387
112	Ceramic and clay building materials	0.730	2.105	1.375
90	Pulp	1.184	2.554	1.369
139	Sporting and athletic goods	1.267	2.617	1.350
97	Synthetic resins, plastic materials and synthetic fibre	0.781	2.108	1.327

Appendix 6: Trade Deficit and Production Inducement Coefficient Gap in 2005

	Industry Sector	Trade Balance 2005 (x Rp 1 million)			Prod Ind. Eff
Code	Description	Export	Import	Surplus (Deficit)	Gap
124	Machine and apparatus, except electrical machinery	20,016,087	86,725,989	-66,709,902	2.483
104	Petroleum refinery	20,192,132	79,565,331	-59,373,199	0.726
163	Business services	12,198,042	57,271,693	-45,073,651	1.103
94	Basic chemicals except fertilizer	21,125,128	55,851,700	-34,726,572	1.510
133	Motor vehicle except motor cycle	9,220,413	39,145,071	-29,924,658	1.392
116	Basic iron and steel products	4,258,710	24,262,124	-20,003,414	1.821
115	Basic iron and steel	1,051,112	14,026,097	-12,974,985	1.469
97	Synthetic resins, plastic materials and synthetic fibre	7,438,760	20,141,384	-12,702,624	1.327
134	Motor cycle	2,011,087	14,007,036	-11,995,949	0.712
62	Sugar	279,760	11,142,407	-10,862,647	1.213
11	Other cereals	30,937	9,263,525	-9,232,588	1.166
103	Other chemicals	1,383,369	8,864,662	-7,481,293	1.414
51	Dairy products	727,093	8,200,491	-7,473,398	1.247
16	Fibre crop	42,201	7,236,525	-7,194,324	1.177
171	Motion picture production and distribution	15,321	6,651,552	-6,636,231	2.020
122	Other metal products not elsewhere classified	8,771,155	14,849,884	-6,078,729	1.252
156	Air transport	7,733,265	13,749,149	-6,015,884	1.158
131	Ship building and repairing	3,424,733	9,335,731	-5,910,998	2.105
99	Drugs and medicine	1,890,231	7,681,024	-5,790,793	1.161
136	Aircraft building and its repair	2,090,066	7,841,869	-5,751,803	2.439