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The Role of Sumatra in the Integration of the Indonesian Economy into the World Economy from Two Waves of Globalization[1]

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Abstract

This study is aimed at investigating the role of the Sumatran economy in integrating the Indonesian economy with the rest of the world, both from a historical perspective and from the current policies that are shaping the future of Sumatra, including the current condition of the business environment in Indonesia and Sumatra. Literature review and a simple descriptive statistics are employed to give a better understanding of the past and current conditions. Some interesting findings include: first, from the two waves of globalization (1830-1914 and 1945-now), the Indonesian economy has been integrated and enjoyed gains by increasing its income through international linkages with the world economy while the de-globalization period during 1914-1945 was the time when Indonesia got pains from the international linkages. From an Indonesia regional perspective, Sumatra has advantages to be explored by Indonesia to integrate the Indonesian economy with the world market. This potential was recognized by the Dutch during its second wave of regional development in Dutch Colony (Indonesia) by developing the Sumatran economy after focusing in developing Java Island as the center of Dutch Colony in its first wave of development in Indonesia. In addition, the Indonesian government has also paid attention to the development of Sumatra through Development of Batam Island, IMS-GT (Indonesia Malaysia Growth Triangle) and IMT-GT (Indonesia Malaysia Thailand Growth Triangle). However, the current business environment in Indonesia and Sumatra for the time being is still facing some challenges to acquire the potentials.

***Key Words**: Indonesia, Sumatra, Globalization, IMS-GT, IMT-GT*

***JEL Classification**: N95, R58, F0, F59*

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1. INTRODUCTION

During the global financial crises 2008-2010, there were only three Asian countries which were able to achieve positive economic growth, namely China, India, and Indonesia. China and India are the two economic giants have attracted much attention in the world about their rapid economic growth, which has as yet not been matched by Indonesia.

Indonesia is included into G20 because of its economic size. The table below shows that Indonesia's GDP accounts for 35% of the ASEAN economies, 9% of the Asia & Pacific countries, and 1% of World GDP. Another aspect of the importance of Indonesia is its population size, since the Indonesian share of population in ASEAN10 is 40%, in East Asia and Pacific 12%, and in the rest of the world is around 3%.

Table 1
Relative Size of Indonesia 2008 (%)

Relative Size of Indonesia	Year 2008
1. Share of GDP(Indonesia/ASEAN 8)	35%
2. Share of GDP(Indonesia/East Asia&Pacific)	9%
3. Share of GDP(Indonesia/World)	1%
4. Share of Population (Indonesia/ASEAN-10)	40%
5. Share of Population (Indonesia/East Asia&Pacific)	12%
6. Share of Population (Indonesia/World)	3%
ASEAN8=ASEAN10 minus Brunei and Myanmar	
East Asia&Pacific=24 developing countries based on the World Bank classification.	

Source: Based on World Development Indicator (WDI), World Bank, processed

Compared to some of the other ASEAN countries, the linkage of Indonesia with the world economy is still low. This is indicated from the share of trade, FDI and number of tourist arrivals in table below. From these indicators, Malaysia, Singapore, and Thailand tend to dominate the ASEAN countries. One of the reasons is the advantages that they get from their location which has a direct access to the Malacca Straits. However, even though Indonesia has direct access to the Malacca Straits, especially Sumatra Island, the linkage is still low. It means that Indonesia is still under-utilizing the role of Sumatra in gaining the benefit of its location along the Malacca Straits.

Compared to the other major economies in Asia (China, India, South Korea and Japan), Indonesia's external linkages are in the middle range. From the share of trade in GDP, China and South Korea have a higher share than Indonesia. Only China surpasses Indonesia in the share of FDI to GDP. In tourism, only India receives fewer tourists than Indonesia.

Table 2
Trade, Investment, and Tourism in ASEAN10

Country	Average 2004-2008		
	%(Trade/GDP)	%(FDI/GDP)	No of international visitor arrivals**
Brunei Darussalam	82*	1*	842,667
Cambodia	111	6	1,446,000
Indonesia	**51**	**2**	**5,175,000**
Lao PDR	49	4	640,333
Malaysia	**183**	**4**	**17,663,500**
Philippines	83	2	2,712,250
Singapore	**352**	**15**	**7,294,250**
Thailand	**129**	**4**	**12,897,500**
Vietnam	144	5	3,555,750
Myanmar	NA	NA	246,500

*=average year 2004-2006 only

**=average year 2004-2007 only

Source: Based on World Development Indicator (WDI), World Bank, processed

Table 3
Trade, Investment, and Tourism in China, India, South Korea, and Japan

Country	Average 2004-2008		
	%(Trade/GDP)	%(FDI/GDP)	No of visitor arrivals***
China	63	3.4	48,300,750
India	31	1.4	4,226,250
South Korea	72	0.6	6,111,000
Japan	27	0.15	7,136,750

Source: Based on World Development Indicator (WDI), World Bank, processed

Indonesia as the largest economy in Southeast Asia has the potential to be one of the leaders of the East Asian Economies and become another economic giant in Asia and the world. One of the potentials that are still underutilized is its geographical position along the Malacca Straits. This geographic location could give some advantages for Indonesia to reach out to both the rest of Asia and the world market, especially in trade, investment, and tourism.

This study aims investigating the role of the Sumatran economy in connecting the Indonesian economy to both Asia and the world both from a historical perspective and the present. This study also explores the condition of the Indonesian businesses/enterprises in Sumatra in relation to the development of cooperation among Indonesia and Singapore, Malaysia, and Thailand.

The data collection is based on a literature survey and an enterprise survey. Data of enterprise survey were collected by the World Bank Group and from the Asian Development Bank and the Institute for Economic and Social Research, Faculty of Economics, University of Indonesia (LPEM FEUI). The data analysis is focused on the descriptive analysis both from the literature and descriptive statistics.

This paper will be organized as follows :(1) Introduction: background, purposes, and methods; (2) Literature survey: theoretical and historical to emphasize the importance of the geographical position of Sumatra in Indonesia since the Dutch colonial era; (3) Indonesia's policy: to show the recognition of the importance of Sumatra along the Malacca Straits to the development of Indonesia's economy; (4) Recent conditions of business in Indonesia and Sumatra in relation to some cooperation among Indonesia, Singapore, Malaysia, and Thailand; and (5) Conclusions.

2. LITERATURE REVIEW

From a theoretical perspective, economies of scale and transportation costs are the key factors that explain economic agglomeration. Krugman (1980) and Krugman (1991) confirm that manufacturing firms, in order to achieve economies of scale and minimum transportation cost, will concentrate their production in locations with higher demand. Furthermore, a country will tend to export goods for which there is a high domestic demand (which leads to increasing returns to scale)[2].

Indonesian economic agglomeration could be divided into three parts: Sumatra, (especially the coastal area along the Malacca Straits or Eastern Part of Sumatra), Java and Bali (especially the Coastal Northern Part of

[2] In Krugman (1980:page 958),"the analysis in this section has obviously been suggestive rather than conclusive. It relies heavily on very special assumptions and on the analysis of special cases. Nonetheless, the analysis does seem to confirm the idea that, in the presence of increasing returns, countries will tend to export the goods for which they have large domestic markets. And the implications for the pattern of trade are similar to those suggested by Steffan Linder, Grubel (1970), and others." Furthermore, in Krugman (1991:page 497),"With lower transportation cost, a higher manufacturing share, or stronger economies of scale, circular causation sets in, and manufacturing will concentrate in whichever region gets a head start"

Java along the Java Sea), and Eastern Indonesia (which is mainly concentrated in South Sulawesi, closer to Sulawesi Sea). Among the three agglomerations, Java and Bali are the center which has become the largest, both in terms of economic size and population size, while Sumatra and Eastern Indonesia are the peripheries. One of the reasons is Java Island has been the most developed in term of infrastructure in Indonesia, especially the transportation which was developed by the Dutch. However, from international trade perspective, Sumatra could be promoted for the further development of the Indonesian economy. As the three largest trading countries based on trade per GDP in South East Asia are Singapore, Malaysia, and Thailand, all of those three are located in the Malacca Straits and use it to their advantages the bridge to the rest of the world, while Indonesia that has a large geographical part in Malacca Straits is still underutilizing it, especially the Sumatra Island. As shown in Table 2 above, Indonesia is still below Vietnam, Cambodia, Brunei, and Philippines.

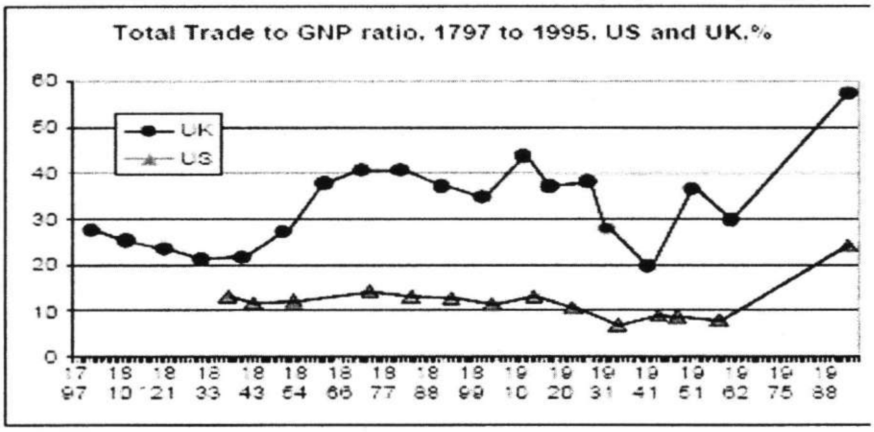
To understand how the world economy affects the Indonesian economy, we could trace it from the two waves of globalization and the impact on the Indonesian economy and especially Sumatran economy. This paper applies the study of Baldwin and Martin (1999) and van der Eng (2008) to see the pattern of the world economy which are represented by the UK and US from 1797-1995 and the Indonesian economy from 1880-2005 from van der Eng's study (1998).

The period of globalization started in the 18th century and was marked by the United Kingdom (UK) and the United States of America (USA) that experienced an up-and-down trend during the process. Figure 1 shows that during the period 1830-1914, the share of trade to GDP in the UK and the US had increased. Both economies could well represent the world economy at that time. During the period 1830-1914, the integration of world economy was very intense and the so-called " first wave of globalization" that lasted for almost 84 years[3]. The figure also shows that from around 1914-1945, the opposite directions occurred: this period was called "de-globalization" and lasted for around 30 years during World War I, the inter-war period, and World War II. From 1945-now[4] the upward trend has been referred to as the "second wave of globalization".

[3] It should be emphasized in this study that the term globalization in this study only refers to the recorded history because of the better available data. Some readers probably will argue that this will be a too-western view because we also know that from the previous centuries, globalization also occurred with the different main globalizers such as e India in the 7th century, Arabs in 12th century, and China in the 14th century.

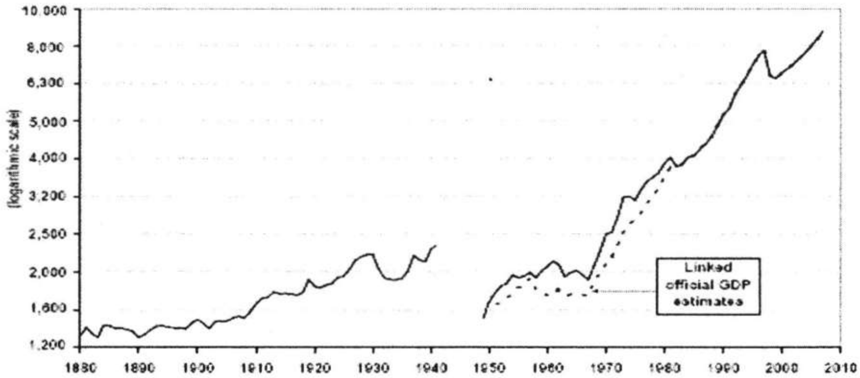
[4] 1945-1995 represent from 1945 until now. The author used 1995 because it was the latest data that was used at the time of the study released.

Figure 1
UK and USA Openness 1797-1995



Source: Baldwin and Martin (1999) from Bairoch (1989)

Figure 2
GDP per Capita in Indonesia,1880-2005
(Thousand 2000 Rupiah)



Source: van der Eng (2008).

What happened in Indonesia during the two waves of globalization? One of the best data available that could be found about Indonesia is shown in Figure 2. According to van der Eng (2008), there were sustained periods of economic growth during 1900-1929 (average growth was 2.6%) and 1967-1997 (average growth was about 6.7%). During the period 1880-1920s (as part of the first wave of globalization), Indonesian income increased dramatically. We have an incomplete picture of the period of "de-globalization" 1914-1945; however, the truncated data from the picture still shows that the growth pattern of the Indonesian economy was similar to the pattern of the world economy. During the period of the second wave of globalization (1945-present), the Indonesian economy was still following the growth pattern of the world economy pattern which had significantly increased since the 1970s.

To explain the similarity in the growth patterns of with the world economy and the Indonesian economy during the period of the 1880s-2000s, we should look at the world economy above as the representation of the world demand for Indonesia's commodities. Additionally, the economic history of Indonesia is supported by a similar pattern as shown in table 4, which shows that the world politics and economy was linked to Indonesia's politics and economy. The table shows the following; first, the Dutch integrated Indonesia (Netherlands Indies) into the world economy during the first wave of globalization started in 1830, while the New Order re-integrated Indonesia into the world economy since 1966-1967. Both integrations improved Indonesia's economic performance; second, during the first wave of globalization, the Dutch pursued two waves of development strategy as seen from a regional perspective: the first wave was concentrating its development on Java (the main commodity production was agriculture-based) with Java as the center of the Netherlands Indies . The second wave was moving outside of Java (periphery), especially on Sumatra along the Malacca Straits (with the main commodities being minerals and big-plantation products)[5]. This trend might be explained by politics and economic reasons in Sumatra as shown in tables 5 and 6.

[5] From the historical perspectives above we could agree on the conclusion of Dick (2002): "Western Indonesia (Sumatra, Kalimantan and Java-Bali) together with Singapore and Malaysia constitutes the economic core of Southeast Asia along a main axis Kuala Lumpur-Singapore-Jakarta-Surabaya. This core is fairly well integrated. People and goods move with high intensity between Java and Singapore and from Sumatra and Kalimantan to both Java and Singapore. Sumatra and West Malaysia is also an important link".

Table 4
Main Features of Politics and Economy in the World and "Indonesia" 1830-present

World Politics and Economy	Main Features of "Indonesia's" Politics and Economy
Pre Indonesia **(as a Dutch colony)**. This period could be divided into the **first wave of globalization** (1830-1914) and **de-globalization** (1914-1945 including World War I, the inter-war period, and World War II). This period included the *Great Depression which started in 1929.*	**1830-1870**. Peasants (especially in Java) were forced by the Dutch to plant commodities for exports, such as coffee, sugar cane, and indigo. Indonesia, especially Java, was known as a big exporter to the world for tropical commodities.
	1870-1900. Private companies (both Dutch and other European) were allowed to invest in the colony. Large plantations outside of Java, especially in Sumatra's East Coast, were established, including tobacco, and later rubber, oil palm, and tea plantations.
	1900-1930. The world economic boom during this period had raised the demand for agricultural commodities and minerals (such as oil, coal, and tin). *Most of the commodities originated from Sumatra and Kalimantan*. However, since the 1920s demand for primary commodities declined.
	1930-1942. There was a huge drop in world commodity prices due to the fall of world demand as a result of the Great Depression. This condition adversely affected the Netherlands Indies, especially Java.
	1942-1945. Japanese expansion after the Nazis occupied most of the European countries, including the Netherlands. Under Japanese occupation, Indonesia was turned into a war economy to support Japan's war machine.
Since Indonesian Independence This period could be put as **second wave of globalization** (1945-now). This period including cold war between the capitalist and communist, the campaigned of deregulation & liberalization since the early 1980s and the *global economic crises since 2009*	**1945-1949**. The war of independence against the Netherlands which ended with the Dutch transfer of sovereignty to Indonesia on December 27, 1949.
	1950-1965. Due to suspicious to the former colonial ruler and the western world, Indonesia applying some policies to support a self reliant nation.
	1966-1974. Outward looking policies were pursued which reintegrated Indonesia with the world economy since the New Order government took over power from Sukarno. The main policies were an open door policy for foreign direct investment, free capital movements (an open capital account), reduction in trade barriers, and better acceptance of foreign aid from the Western countries.
	1974-1983. Due to high oil price, the government enjoyed an oil bonanza. At the same time, political tensions arose because of opposition to foreign investment. Import substitution industrialization was pursued.
	1983-1998. The oil boom ended in 1982 which forced the government to seek another way to support its development. Deregulation and trade liberalization were introduced to promote non-oil exports.
	1998- present. The Asian financial crisis, domestic political and social crises, and then the fall of Suharto. The dawn of a new era, reformation: democratization, decentralization, and further economic integration with countries in the region.

Source: Thee (2001), Dick (2002), and Goldin and Reinert, 2007

Table 5
Main Factors Affecting Sumatra and the Malacca Straits

Main Factors Affecting Sumatra and the Malacca Straits
1811-1816: British occupation of Java and return of Dutch authority, leading the British to look for an alternative port to link the British and Asian economies.
1819: The establishment of Singapore that strengthened many kingdoms of Outer Islands, including on Sumatra, against the Dutch due to greater access to international trade.
1824: Treaty of London that swapped the British and Dutch settlements in Sumatra and the Malay Peninsula, separating the British and Dutch spheres of influence along the Malacca Straits.
1871: Sumatra Treaty reserved the Indonesian archipelago for Dutch colonial expansion.
1896: British Declaration of the Federated and Un-federated Malay States separated the Malay Peninsula and the Dutch Archipelago.
1821-1837: Padri War in West Sumatra.
1873-1904: Aceh War in Aceh.
1821: Extension of Dutch colonial rule in Bangka.
1822: Extension of Dutch colonial rule in Belitung.
1824: Extension of Dutch colonial rule in Bengkulu.
1825: Extension of Dutch colonial rule in South Sumatra (Palembang).
1834: Extension of Dutch colonial rule in Lampung.
1838: Extension of Dutch colonial rule in West Sumatra.
1863; Extension of Dutch colonial rule in East Sumatra (Medan).
1872: Extension of Dutch colonial rule over the interior of North Sumatra (Tapanuli).
1873: Extension of Dutch colonial rule in Riau.
1904: Extension of Dutch colonial rule in Aceh.
1906: Extension of Dutch colonial rule in Jambi.

Source: Lindblad (2002) in Dick (2002)

The focus of Dutch colonial expansion during the first wave of globalization is shown in table 5 and 6. First, the course of Sumatra's history was determined by the strategic alliance and competition between the Dutch and the British. Once they had reached an agreement about the demarcation line between their respective spheres of influence, the Dutch expanded their political and economic power from the center (Java) into the regions outside of Java (especially Sumatra)[6]. Second, the

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[6] The furious resistance in Sumatra was coming from Aceh and the Dutch need longer time to occupy it. It was not only for political and military reasons but also due to the geographical condition and distance of Aceh from Java Island (as the Center of the Dutch Colony). Dick (2002) notes that: "The Dutch control of Java was established following the Java War of 1825-1830. Control of Aceh, however, was bitterly contested for 30 years from 1873 to 1904. Other kingdoms such as in South Bali and Bone (South Sulawesi) were not conquered until 1906".

movement into Sumatra did not only show the shift of the world market demand from agricultural commodities to minerals, but also witnessed the establishment of large-scale plantations by non-Dutch enterprises, including from Britain and the US.

Table 6
Economic Development of Sumatra

Economic Development of Sumatra
First half of the nineteenth century. After defeating the Padris in West Sumatra, coffee cultivation for export was introduced in this region. Some marketable crops such as pepper were cultivated in Lampung, Aceh, Sumatra's West Coast, Bengkulu, Palembang, and Jambi
Second half of the nineteenth century. Large scale cultivation of tobacco in Sumatra's Eastcoast, including Deli. Tin mining in Bangka, Belitung, and Singkep. Oil exploitation was started by the Royal Batavian Petroleum Company (BPM) in Langkat (East Cost of Sumatra) and expanded into Deli and North Aceh, Pangkalan Brandan, and Pangkalan Susu. Large scale migration of Chinese and subsequently Javanese and Chinese due to the needs of labor-intensive plantations.
The twentieth century. During 1910-1930 (commodity boom era), there was an increased investment in Sumatra's primary export production, especially rubber, palm oil, and minerals. American and British companies also established large scale plantations. An improvement of the transportation (railroads, railways, roads, seaports) networks and small-scale manufacturing (brick factories, cement factories, ice blocks, ice cubes, and soap factories). During the period 1930-1940 there was a world economic crises which adversely affected the world demand for Sumatra's commodities which also adversely affected the demand for workers in Sumatra.

Source: Thee, 1994.

3. LATEST DEVELOPMENT OF SUMATRA: IMS-GT AND IMT-GT

As mentioned earlier that Java & Bali and Sumatra Islands are the two largest islands in term of size of both in population and economy. In the year 2008, total of Indonesian population reached 228.5 million people which is dominated by Java & Bali around 59%, followed by Sumatra (21%), Sulawesi (7%), and Kalimantan (5%). The economic size pattern has a similar story as following: from the total GDP around Rp 4,954 trillion, Java & Bali dominate the Indonesian economy around 50%[7], followed by Sumatra (20%), Kalimantan (9%), and Sulawesi (4%). In addition, the structure of production of the Islands is different in term of the largest sector of 9 sector of production: Manufacturing Industry is a dominant sector in Java & Bali (31%); Agriculture (including Livestock,

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[7] This figure is based on the Indonesia statistic data for very preliminary figure. However, Java & Bali Island based on the previous years, were mainly about 60% of Indonesian economy.

Forestry, and Fishery) is a dominant sector in both Sumatra (22%) and Sulawesi (33%); while Mining & Quarrying is a dominant sector in Kalimantan (31%).

Table 7
Population, GRDP, and Main Sector in Indonesian Main Islands and Sumatra Provinces

Main Islands*	Sumatra Provinces**	Share of the size of		Largest Sector***
		Population	GRDP	
Java & Bali		59%	50%	Manufacturing Industries (31%)
Kalimantan		5%	9%	Mining & Quarrying (31%)
Sulawesi		7%	4%	Agriculture (33%)
Sumatra		21%	20%	Agriculture (22%)
	1.Aceh (NAD)	9%	8%	Mining & Quarrying (26%)
	2.North Sumatra	**27%**	**22%**	Manufacturing Industries (26%)
	3.West Sumatra	10%	7%	Agriculture (25%)
	4.Riau	**11%**	**28%**	Mining & Quarrying (42%)
	5.Riau Islands	3%	6%	Manufacturing Industries (60%)
	6.Jambi	6%	4%	Agriculture (27%)
	7.South Sumatra	**15%**	**14%**	Mining & Quarrying (26%)
	8.Bangka&Belitung Islands	2%	2%	Manufacturing Industries (22%)
	9.Bengkulu	3%	1%	Agriculture (40%)
	10.Lampung	15%	8%	Agriculture (37%)

NAD=Nangroe Aceh Darussalam

*=Based on 2008, CP (current price).Population in the Island / Indonesia(228.5 Million people) for po share.GRDP of the Island / Indonesia GDP(4.954.0 Trillion Rupiah.CP) for GRDP share

**=Based on 2008, CP (current price) .Population in the Province / Sumatra(48.803 Million people) for pop share.GRDP of the Provinces/Sumatra GRDP (977 Trillion Rupiah,CP) for GRDP share

***=Based on 2006, CP (current price). GRDP of the island sector/island GRDP for main island largest sector. GRDP of the province sector/GRDP of the province for province largest sector

Source: Statistical Yearbook of Indonesia (2009): Badan Pusat Statistik, Jakarta, Indonesia and Gross Regional Domestic Product (GRDP) of Province in Indonesia 2002-2006 (2007), Badan Pusat Statistik, Jakarta, Indonesia.

Sumatra Island has also a diverse picture in term of population and economy. In term of population size, North Sumatra is a dominant province in Sumatra which consists of 27% of the Sumatra Population. It is followed by South Sumatra (15%), Lampung (15%), Riau (11%), and West Sumatra (10%). However, Riau is the largest economy in Sumatra (around 28%), followed by North Sumatra (22%), and South Sumatra (14%).

Furthermore, the structure of production, based on largest sector of the Sumatra Provinces is dominated by agriculture. There are 4 provinces that are still dominated by the agriculture sector: West Sumatra (25%), Jambi (27%), Bengkulu (40%), and Lampung (37%). Mining and Quarrying sector dominate Aceh (26%), Riau (42%), and South Sumatra

(26%). North Sumatra, Riau Island, and Bangka & Belitung Islands are dominated by Manufacturing Industry of 26%, 60%, and 22% respectively.

There is also inequality in Sumatra's development. Currently, Sumatra consists of 10 provinces as shown above. When the provinces are compared by location, it can be clearly seen that provinces located along the east coast of Sumatra (especially North Sumatra, South Sumatra, Riau, and Riau Islands), have a better economic performance than those along the west coast.. This indicates the importance of geographical location that the provinces closer to international borders (market)–the Malacca Straits—have a better economic performance (Panennungi, 2010)[8].

Some policies by Indonesian government have also promoted the development of the Eastern part of Sumatra. This policy was based on the market orientation and also affected by the historical development of Sumatra as shown above. However, recent developments show that some efforts are being made to develop Sumatra as one island, and not only the Eastern part of Sumatra. At present there are at least two main policies from the Government of Indonesia that highlight the regional development of Sumatra, namely SIJORI or the Singapore-Johor-Riau growth triangle, which was later broadened into Indonesia-Malaysia-Singapore Growth Triangle[9] (IMS-GT) and there is also the establishment of Indonesia-Malaysia-Growth Triangle (IMT-GT). One of the reasons of the growth triangle development is the complementarities of resources among the regions/provinces/states[10]. Both IMS-GT and IMT-GT are only connected with the Sumatra Island provinces in Indonesia. IMS-GT are the sub regional cooperation among Riau Province and West Sumatra (Indonesia), Johor State (Malaysia), and Singapore. IMT-GT is broader

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[8] In addition, the Sumatran provinces which are located closest to Java, Singapore, Malaysia, and Thailand tend to dominate the share of FDI, exports, and foreign tourists which means Sumatra's dominant provinces in FDI, export, and tourism are determined by their external international and regional linkages..

[9] The previous name was SIJORI (Singapore-Johor-Riau).

[10] Kakazu (1997) lists several advantages of the Growth Triangle Area: (1) It involves only contiguous parts of countries. Therefore, the political-economy risks associated with regional integration will be localized or minimized when it fails; (2) It can be established at a much lower cost and in a shorter period of time; (3) It will be useful to initiate the trade liberalization of a country; (4) It is motivated by foreign direct investment and exports for which the size of the regional market is less important than the openness of the global trading systems; (5) It can also be useful to cope with the emerging and deteriorating environmental problems through cross border cooperative efforts and sub-regional participation; (6) It can be effectively applied to develop remote, peripheral areas where economic complementarities and adequate infrastructure with the neighboring national borders exist. Toh (2007) also mentions specifically about resource complementarities among regions.

than IMS-GT, which become the sub regional cooperation that covers all Sumatra Island Provinces with Southern Part of Thailand and Malaysian Peninsular. Since it's formation, the IMT-GT has grown in geographic scope and activities to encompass more than 70 million people. It is now composed of 14 provinces in southern Thailand, 8 states of Peninsular Malaysia, and the 10 provinces of Sumatra in Indonesia (imtgt.org, 2010).

IMS-GT was initiated by President Suharto and Prime Minister Lee Kuan Yew in 1988. In the ASEAN summit in 1992, with the endorsement from Malaysian Prime Minister Mahathir Mohamed, SIJORI was formalized. Indonesia proposed Batam Island, a major island of the Riau Archipelago, to be a free trade zone for cooperative development[11]. The same story also happened in the establishment of IMT-GT among Indonesia, Malaysia, and Thailand. For further information of the development IMS-GT and IMT-GT, please see table 8 below.

Figure 3
Geographical Location of Sumatera Island

Source: http://www.aseansec.org/69.htm

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[11] The Batam free trade zones offered: (1) 100% foreign equity ownership were allowed; (2) Investment applications can be made in Batam instead of Jakarta which usually took several months or years; (3) Batam Industrial Park, a joint venture between the Indonesian private sector and Singaporean government-linked enterprises was established for the development of industrial estates and infrastructure (Toh, 2006).

Table 8
Economic Cooperation of Sumatra

Economic Cooperation of Sumatra
1.SIJORI/IMS-GT
1970: Development of Batam, an island close to Singapore.
1990: Economic cooperation in the framework of the development of Riau Province and the promotion & protection of investment[12].
1990: Batamindo Industrial Park; then EPZ (Export Processing Zones).
1994: Formation of SIJORI, then IMS-GT.
2006: The framework agreement on economic cooperation
in the Islands of Batam, Bintan and Karimun was signed on 25
June, 2006 in Batam[13].
Then move to FTZ (Free Trade Zone)
2.IMT-GT
In 1993, Indonesia, Malaysia, and Thailand recognized the potential of the IMT-GT sub region by launching the IMT-GT. It is a program of cooperation to accelerate the sub region's economic transformation, through exploiting complementarities and comparative advantages; enhancing competitiveness for investments and exports; promoting tourism; lowering transport and transaction costs; reducing production and distribution costs through scale economies (ADB, 2010). In 1995 JBC (Joint Business Council) was established by the three governments[14].

Source: Toh (2006), ADB (2010), JBC (2010)

[12] The simplification of product distribution and delivery procedures between Singapore and Riau province; joint tourism promotion and development; cooperation in water supply & transportation to Singapore; cooperation in industrial and technology development in Riau province (especially in trade, agriculture and warehousing); simplification of the tax system to facilitate investment; and simplification of entry and exit procedures (Toh, 2006).

[13] The Framework Agreement formalizes the aim of Indonesia and Singapore to develop economic cooperation in special economic zones (SEZs) in Batam, Bintan and Karimun, and promotes and enhances the economy. It outlines (i) investment; (ii) finance and banking; (iii) taxation; (iv) customs and excise procedures & documentation; (v) immigration; (vi) manpower movement; and (vii) capability development, a Joint Steering Committee (JSC) established to implement the Framework (Toh, 2006).

[14] It gave mandate to the national chambers of Indonesia Kamar Dagang & Industri Indonesia (KADIN); Malaysia National Chamber of Commerce & Industry Malaysia (NCCIM); and Thailand: Thailand Joint Standing Committee on Commerce, Industry and Banking (JCCCIB). The IMT-GT Joint Business Council (IMT-GT JBC) was inaugurated in 1995 as the official vehicle to mobilize private sector participation and involvement in the IMT-GT. Between 1995 – 2005, the IMT-GT JBC facilitated the investment of an estimated US$ 3.80 billion worth of new projects in the IMT-GT region (JBC,2010).

4. INDONESIA AND SUMATRA: BUSINESS ENVIRONMENT/INVESTMENT CLIMATE, TRADE, AND TOURISM

Understanding the Sumatran economy should also facilitate the understanding of business conditions in Indonesia as a whole[15]. The figure in Appendix 1 shows the top 10 business environment constraints for firms in Indonesia, lower middle income countries (average), and East Asia and Pacific (average). Access to finance and practices of the informal sector are recognized as the main constraints by 47.9% and 13.7% of total responses, respectively. The percentage of both constraints is higher than both the average of lower middle income countries and East Asia & Pacific. The following constraints are political instability, electricity, inadequately educated workers, transportation, access to land, license and permits, crime /theft/disorder, and corruption[16].

To show the current condition of the Sumatran economy, the firm's level survey of Sumatra Investment and Trade Survey (SITS) in 2008, which was conducted by ADB (Asian Development Bank) and LPEM FEUI[17], will be employed. The survey covers firms of all sizes and consist of 929 firms[18] in selected manufacturing sectors (23.3% were food and beverages; 22.8% were textiles and garments; 22.8% were wood and wood processing; and 22.6% were metal products and equipment), representative at the district level and at the all-Sumatra level. The firms were classified into four groups by number of employees, namely micro enterprises(1-4 employees around 44.7%), small enterprises (5-19

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[15] In general, from the World Bank aggregate data base (2009), Indonesia is included into lower middle income country with the GNI per capita (US$) is 2,007 and 228,248,538 population

[16] From the firm level, the latest survey of the World Bank on Indonesian firms in 2009, covered 1,444 firms[16]. The data contains business environment indicators which provide critical insight into a country's economic, financial, regulatory, and investment environment which is based on a face-to-face survey of business owners and top managers. It covers information such as easiest access to finance, least corruption, strongest infrastructure, most productive workforce, lowest crime rates, highest female entrepreneurship, etc.

[17] The ADB team members were Pradeep Srivastava, Sharad Bhandari, Rajesh Sukhla, Jaffer Qomar, Georginia Nepomuceno, and the LPEM team. The LPEM FEUI (Institute for Economic and Social Research, Faculty of Economics University of Indonesia) team members were Maddaremmeng A. Panennungi, Vid Adrison, M. Shauqie Azar, Usman, Herman, Desi Setiadestriati, and Hamdan Bintara. The survey was meant to provide an empirical understanding of the factors and policies that influence firm's performance, where firms may use this to benchmark their business against domestic and international competitors.

[18] Based on publication of Asian Development Bank (ADB), downloaded from http://www.adb.org/IMT-GT/Partner/sits.asp#5d

employees around 43.7%), medium enterprises (20-50 employees around 8.2%), and large enterprises (>50 employees around 3.4%). The distributions of surveyed enterprises by location comprised of North Sumatra (38.1%), West Sumatra (15.9%), South Sumatra (18.2%), Bengkulu (3.9%), and Lampung (23.9%). From the ownership side of the firms, sole proprietorship is dominated by 97.2% of the firms surveyed, followed by partnerships (2.3%), and private corporations (0.5%).

The recognition of respondents to some of the important policies/institution related to Sumatran economy is very low: ASEAN was recognized by 37.8%, SIJORI (or IMS-GT) by 2.3%, and IMT-GT by the lowest percentage with only 1.6%. The main sources of information about the ASEAN, SIJORI, and IMT-GT were from the media.

An improvement of the investment climate, trade orientation, and tourism linkage in Sumatra still need special attention. The investment climate/business environment faces severe problems arising from access to financing (29.2%), price uncertainty of primary commodities (25.4%), and electricity (19.4%). Orientation of the market tends to be more locally oriented, since only 1.4% are exporters, while 98.6% are domestically oriented. The pattern of the tourism is also less connected to the neighborhoods (namely Peninsular Malaysia and Southern Thailand). Only 2.6% of the respondents or anyone from his/her household had traveled to Peninsular Malaysia and only 0.43% had traveled to Southern Thailand. Selangor, Penang, Melaka were the main destinations for Sumatrans going to Malaysia for leisure/recreation, medical, business, while Pattani, Thailand was the destination in Southern Thailand for leisure/recreation.

Table 9
Investment, Trade, and Tourism in Sumatra

Three Most important constraint faced by the enterprise in 2007 (% of total firms)	Global Market Orientation (% of total firms)	Tourism	
Access to Financing (29.2)	*Exporter* (1.4)	*Whether the respondent or anyone from his household traveled to Peninsular Malaysia*: (% of total firms): 2.69 (Yes)	*Whether the respondent or anyone from his household traveled to Southern Thailand*: (% of total firms): 0.43(Yes)
Price Uncertainty in Primary Commodities (25.4)	*Non-Exporter* (98.6)	*Location of Peninsular Malaysia*: Selangor, Penang, Melaka	*Location of Southern Thailand*: Pattani
Electricity (19.4)		*Main Purpose of Travel to Peninsular Malaysia*: Leisure, medical, business	*Main Purpose of Travel to Southern Thailand*: Leisure/ recreation

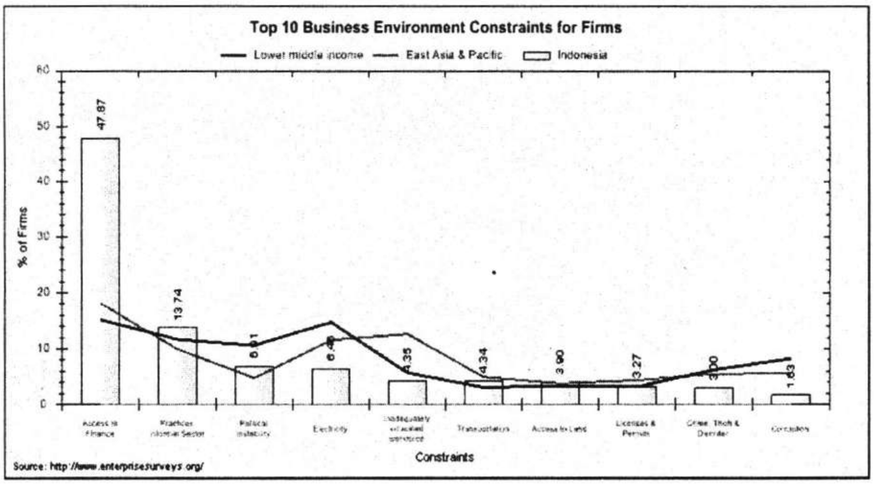
Source: Based on data of Asian Development Bank (ADB), 2010, Sumatra Investment and Trade Survey (SITS), downloaded from http://www.adb.org/IMT-GT/Partner/sits.asp#5d, restructured.

5. CONCLUSION

Indonesia is the largest economy in the ASEAN-10 and recently has become one of the potential countries that could be one of the key players in the world economy in the future. From the two waves of globalization history (1830-1914 and 1945-now), the Indonesian economy has been integrated and enjoyed gains from international linkages with the world economy. During the first wave of globalization, Indonesia (the Netherlands Indies) was one of the largest exporters of agriculture-based commodities cultivated in Java, and large plantation-based commodities and minerals in Sumatra. In the same period, Indonesia was also the recipient of Foreign Direct Investment from the Netherlands and other West European countries and the United States of America (USA), especially in Sumatra for investment in large plantations and mines. In the second wave of globalization, the re-integration of Indonesian economy with the world economy in 1966 until the present, Indonesia has become one of the main exporters of agriculture-based commodities, minerals, and light manufacturing products. Indonesia has also become one of the most important FDI recipients in South East Asia. However, during the de-globalization era during the period 1914-1945, Indonesia experienced pains through a huge contraction and devastation of the economy due to the world depression and World War II.

From a regional perspective, Sumatra has an advantage to connect the Indonesian economy with the world market. This potential was recognized by the Dutch in its second wave of regional development in Indonesia during the first wave of globalization after developing Java Island in its first wave regional development in Indonesia (Netherland Indies). In addition, the Indonesian government has also paid attention to the development of Sumatra through the development of Batam, IMS-GT (Indonesia Malaysia Singapore Growth Triangle) and IMT-GT (Indonesia Malaysia Thailand Growth Triangle). However, the current business environment in Indonesia, especially Sumatra, for the time being is still facing serious challenges.

Appendix 1
Investment Climate in Indonesia,2009



Source: World Bank Group, 2010, available at http:// www.enterprisesurveys.org/

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