The Republic of Indonesia
Study on Trade in Logistics services
Analysis

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Abbreviations and Acronyms

3PL	Third Party Logistics Provider	**KBLI**	*Klasifikasi Baku Lapangan Usaha Indonesia 2015* (Indonesia Standard for Industrial Classification 2015)
ALFI	Indonesian Logistics and Forwarder Association	**KSOP**	Kantor Syahbandar dan Otoritas Pelabuhan (Port Authority and Harbor Master)
ASPERINDO	*Asosiasi Perusahaan Jasa Pengiriman Ekspres Indonesia* (The Association of Indonesian Express Delivery Services)	**LPI**	*Logistics Performance Indicators*
BI	Bank Indonesia	**MoF**	Ministry of Finance
BKPM	*Badan Koordinasi Penanaman Modal* (The Investment Coordinating Board)	**MOMT**	Ministry of Manpower and Transmigration (*Kementerian Tenaga Kerja Dan Transmigrasi*)
BoP	Balance of Payment	**OP**	*Otoritas Pelabuhan* (Port Authority)
BOT	Build-Operate-Transfer	**PELINDO**	Pelabuhan Indonesia (Indonesia Port Corporation)
BPS	*Badan Pusat Statistik* (Central Bureau of Statistics)	**PM**	*Peraturan Menteri* (Ministerial regulation from the Ministry of Transport or Telecommunication)
CPC	Central Product Classification	**PMA**	*Penanaman Modal Asing* (A foreign investment limited liability company)
DAG	Ministry of Trade Regulation	**PP**	Peraturan Pemerintah (Government Regulation)
DG	Directorate General	**PPIAF**	Public Private Infrastructure Advisory Facility
DNI	Negative Investment List	**PPID**	*Pejabat Pengelola Informasi Dan Dokumentasi* (The Ministry of Transportation's Information and Documentation Management office)
FDI	Foreign Direct Investment	**PPP**	Public Private Partnership
FEL	Foreign Equity Limit	**RA**	Regulated Agent
FY	Fiscal Year	**RAS**	Reimbursable Advisory Services
GDP	Gross Domestic Product	**RPJMN**	Rencana Pembangunan Jangka Menengah Nasional (National Medium Term Development Plan)
GHA	Ground Handling Agent	**SISLOGNAS**	Sistem Logistik Nasional (National Logistics System)
GOI	Government of Indonesia	**SIUPAL**	Surat Ijin Usaha Perusahaan Angkatan Laut (Marine Transport License)
GSA	General Sales Agent	**SIUKK**	Surat Ijin Usaha Keagenan Kapal (Shipping Agent Licenses)
IBRD	International Bank for Reconstruction and Development	**SOE**	State-Owned Enterprise
ICAO	International Civil Aviation Organization	**STRI**	Services Trade Restrictiveness Index
ICT	Information and Communications Technology	**TKBM**	*Tenaga Kerja Bongkar Muat (*Port workers' union)
IDR	Indonesian Rupiah	**UNCITRAL**	The Secretariat of the United Nations Commission on International Trade Law
ILO	International Labor Organization	**UNCLOS**	The United Nations Convention on the Law of the Sea
IMO	International Maritime Organization	**USD**	United States Dollar
INAPORT	Indonesia Port system	**VAT**	Value Added Tax
INSA	Indonesia National Ship-owners Association	**WB**	World Bank
INSW	Indonesia National Single Window	**WBG**	World Bank Group
INTR	Indonesian National Trade Repository	**WCO**	World Customs Organization
JICT	Jakarta International Container Terminal	**WHO**	World Health Organization
JV	Joint-ventures	**WTO**	World Trade Organization

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Introduction: an unbreakable link between industrial development and logistics

Indonesia, Southeast Asia's largest economy and the World's 16th largest economy (GDP of USD 861.9 billion), has been emerging as middle-income country characterized by its archipelago nature of more than 17 000 islands, 300 ethnics and 257.5 million inhabitants[1]. Large economic disparities between islands, provinces, and within cities and a slower economic growth [2] have been putting considerable pressure on the need for reform.

The World Bank Development Policy Report (The World Bank, 2014) **described the risk of Indonesia to be caught in the middle-income trap and recommends an increase of income per capita by utilizing labor force increase and promoting labor productivity improvement policies.** The latter can be achieved by "moving labor from low to higher productivity sectors". Manufacturing, [3]five times more productive than agriculture, would present an alternative to increase productivity growth as well as to absorb a large number of workers (especially for the 15 million people reaching working age by 2020). [4]Therefore, creating the right conditions for manufacturing would help increase Indonesia's labor productivity, and its growth and as a result contribute to poverty reduction. Action should be taken now to exploit the competitive advantage of a young labor force before the labor force starts losing this age momentum by 2025.

Manufacturing is back at the top of the Indonesian Government's agenda. This has been part of the GOI's key economic development sectors since the independence, however its priority level has varied depending on other sectors. With the decrease of the global commodity prices, the manufacturing sector has witnessed a growing reform effort by the GOI which is reflected through several economic policy reform packages addressing bottlenecks to its development. Several aspects of manufacturers' efficiency are being addressed, ranging from incentives to manufacturers in strategic sectors of the economy such as automobile, to trade facilitation efforts.
The following sections (1) give an overview of manufacturing in South-East Asia and more specifically in Indonesia, then (2) introduce the role of logistics service providers in supporting this sector. Finally, a section on methodology and literature review.

I. Industrial development in South-East Asia

Since the beginning of the 1980s, South-East Asian countries together with other EAP countries have benefited from off-shoring of labor intensive industries from industrialized countries to developing

1 GDP and population data, as of 2015. Source: The World Bank database

2 The Indonesian economy has been slowing down between 2013 and 2015, from 6.2% of GDP growth in 2011 to 4.8% in 2015.

3 Increasing workers' skill level, adoption of new technologies, and increasing market competition are also engines that contribute to high productivity.

4 High End services, such as financial services that are 14 more productive than agriculture, have much higher productivity levels. However, the skill level is much higher than manufacturing. Therefore by focusing only on high end services such a productivity growth is harder to achieve.

countries. This trend is still in progress, with international manufacturers in a continuous search for countries offering low-cost and skilled workforce, high productivity and favorable business climate[5].

Box 1: The Plaza Accord in 1985 triggered massive manufacturing off-shoring

The main trigger was the Plaza Accord, a multilateral agreement intervening in the international currency market, to depreciate the US Dollar value compared to the Japanese Yen and the German Deutsche Mark market. It was signed between France, West Germany, Japan, The United States of America and the United Kingdom. As a result, Japanese manufacturers lost their competitiveness due to the strong appreciation of the Japanese Yen, and moved manufacturing overseas, mainly in the EAP region.

1. South East Asia as a region

1. Background

Between 1990 and 2000, "Non-industrialized countries" captured 13% of the industrialized countries 'share in manufactured exports, from 18% in 1980 to 31% in 2000, with East Asia[6] capturing 57% of the non-industrialized countries' exports. [7] Literature provides a big range of information interpreting this trend and the various industrial development strategies behind them.

Figure 1: Industrialization phases in South East Asia

Decades	Policy focus
1960-1980	Organic growth, import substitution
1980-2000	Export-led growth
Since 2010	Combination of import substitution, industry diversification, commodity-led

In South East Asia, although countries have followed similar industrialization phases, their economic growth has been fostered by different industrial development policies. Furthermore, specific country context has led these policies to change overtime. For instance, Malaysia's industrial value-added growth has switch from being largely dominated by commodity-based industries, to diversifying its industry by increasing its manufacturing base of equipment's (machinery, transport, professional and scientific equipment) from 20% in 1975 to 40% in 2000.[8] In 2015, South East Asian countries have reached different levels of development, with Indonesia lower-middle income, Malaysia and Thailand upper-middle income, and Singapore high income.

2. New opportunities with ASEAN?

With the launch of the ASEAN Economic Community and China losing its appeal to manufacturers, new opportunities arise for South East Asian countries. China has been a leading country in offshore

5 Based on the available literature, low-cost labor is the main driver for many labor-intensive manufacturing investors to relocate. For instance, Mc Kinsey's report on understanding ASEAN revealed survey results according to which low labor costs in countries like Cambodia, Myanmar, Vietnam and Indonesia "can be" a competitive advantage. Discussions with private sector companies show that Investment climate and infrastructure seem to come at later stages of delocalization appraisal.

6 Regional division: Industrialized countries, East Asia, Latin America and the Caribbean, Transition economies, Middle East and North Africa, South Asia, Sub-Saharan Africa

7 United Nations. Industrial Development (slides) http://www.un.org/esa/sustdev/publications/trends2006/indusdev.pdf

8 United Nations. Industrial Development (slides) http://www.un.org/esa/sustdev/publications/trends2006/indusdev.pdf

manufacturing, from heavy machinery equipment to fast-moving consumer goods. However, the country has a reach a level of development and demographic saturation resulting in higher manufacturing costs. This change has already led to manufacturers relocating into lower labor cost areas for labor-intensive industries.

2. Indonesia's industrial development

Indonesia's industrial strategy has evolved from an import-substitution strategy in the 1960s and 1970s, to an export-oriented led industrialization in the 1980s and 1990s, to a commodity-export driven economy in 2000s when commodity exports accounted for 65% of total exports in 2012 (Danani, 2000). The decline of commodity prices led the government to intensify its efforts towards manufacturing industries. Since September 2015, the Indonesian government has launched several reform packages to stimulate the country's economic development.

Examples of reform efforts that will directly impact Indonesia's manufacturing sector's competitiveness include:

- To improve the investment climate: (1) to simplify licensing procedure for investments in industrial estates (package II), (2) to develop new bonded logistics parks (Package II), (3) to facilitate several aspects investment and operations in SEZs (Package VI)
- To reduce production costs: (1) a labor cost aspect: to control labor costs with "formula based minimum wages" (Package IV), (2) a fiscal aspect: to specifically encourage labor-intensive industries by reducing companies and workers' income tax in Indonesia (package VII), (3) other costs: fixed costs such as electricity with fuel, electricity and gas subsidies' (package III).

By implementing such reforms, the GoI aims at attracting "off-shore manufacturing" such as automotive, machinery, communication devices industries. For instance, Indonesia hopes to capture a share of automotive manufacturing in South East Asia, to become part of the global automotive production chain, competing with Thailand as the main hub for the automobile industry in South East Asia.[9]

Besides such incentives, manufacturing needs support of a reliable, cost efficient and quality logistics industry. Developing manufacturing to stimulate Indonesia's export growth and become integrated into global production chains requires awareness about the role of logistics service providers (LSPs) in driving global integration and supporting economic development (Kopicki, 2009). The cost benefits of low wages can be eroded by bad logistics performance, making "made in Indonesia" not competitive on the global market.

II. The Study on Trade Logistics services in Indonesia: relevance and methodology

1. Significance of logistics for economic development

Logistics integration between third party logistics providers [10]and producers/exporters has been ongoing in industrialized countries since the 1970s, with globalization and increasing demand for efficiency. These include fierce competition, production outsourcing, international sourcing of raw materials and semi-finished products, and inventory optimization techniques.

9 "Automotive Manufacturing Industry in Indonesia". http://www.indonesia-investments.com/business/industries-sectors/automotive-industry/item6047

10 Third Party Logistics Service Providers (3PLs) act on behalf of manufacturers (and other cargo owners) to support their logistics activities, such as arranging transportation, warehousing, and sourcing.

On the meso level, such business integration generated supply chain efficiency, whereas it has created a competitive advantage within the industries concerned, and within the countries. Furthermore, empirical evidence shows that strong third party logistics industry and a supporting infrastructure (transport and telecom) achieve “net competitive gains” for a country’s economy (The World Bank - DFID, 2009).

2. Relevance of the study for Indonesia’s manufacturing agenda

With Indonesia’s intention to become a prime-manufacturing hub of South-East Asia, it is necessary to analyze the underexplored supporting industry of logistics. What needs to be done to facilitate the development of logistics services in Indonesia? The context of this study is the manufacturing industry in Java, where most manufacturers are located, and which benefits from a large population (139 million people) capable to attract labor-intensive industry investments.[11] The Cikarang area is Indonesia’s largest industrial area, with 12 industrial estates and a large number of offshore manufacturing firms. With supporting infrastructure such as a dry port and logistics centers, and established industry clusters (suppliers, customers, and service providers of the same industry), Cikarang area is more likely to attract future manufacturing investors.

Compared to other World Bank Studies on logistics in Indonesia and on trade in services (focused on the 4 modes namely Cross Border Supply, Consumption Abroad, Commercial Presence, Movement of Natural Persons), this study is focuses on the practical aspects. This report addresses the companies providing logistics services, the “service” production process, the regulatory bottlenecks, and learning from the international experiences. This study provides input to trade in services and to private sector development in logistics.

3. Methodology

a) Literature review

This study draws from several articles, reports and toolkits that have been published on the topics of trade in logistics services, the quality of logistics services in Indonesia and regulatory issues related to logistics in Indonesia. Trade in logistics services include; C. Kunaka et al, *Trade Dimensions of Logistics Services: a proposal for trade agreements* (2013) that provides a proposal how logistics services should be treated in trade agreements. N. Nurridzki and S.Rahardja, *Liberalization of Trade in Services* (2009) have analyzed the opportunities for the airfreight industry in Indonesia to open up as part of the AFTA commitments. Their conclusion states that airfreight services should be opened up to foreign operators although regulatory obstacles hamper Indonesia from reaching its full potential. J.Tongzon, *Trade Liberalization in Logistics Services for Indonesia* (2009) has analyzed the opportunities for liberalizing logistics services for Indonesia. One of the main findings was that Indonesia can export labor to markets with a high demand for logistics labor such as Hong Kong, Singapore and UAE but that its core services itself are currently not competitive.

Quality of services and regulatory issues related studies and reports include; World Bank, *Connecting to Compete: Trade Logistics in the Global Economy* (2014, 2016) assesses the logistical performance of 160 countries and therefore provides a tool to compare individual countries in six areas of logistics

11 Note: especially as East and West Java where wage rates remain competitive compared to Jakarta or resource-rich islands such as Kalimantan and Riau

performance. C. Hollweg and MH. Wong, *Measuring Regulatory Restrictions in Logistics Services* (2009) have developed a Logistics Sector Restrictiveness Index as an extension of the Service Trade Restrictiveness Index (STRI) using various indicators to measure the restrictiveness of logistics services in ASEAN +6. S. Magiera, *Regulatory Issues Impacting Indonesia's Logistics Service Sector* (2014) describes the regulatory issues for a subset of logistics services in Indonesia while R.Kopicki, *Freight Transport for Development Toolkit: Integrated Logistics Services* (2009) has developed a toolkit to stress the importance of logistics services integration for developing countries.

All these studies and reports have contributed to raise the need for good logistics practices. This study on multiple areas differentiates from the current available literature. Firstly, the majority of the studies apply a holistic approach to logistics services while the focus of this study is on logistics services as supporting services for expanding the manufacturing base in Indonesia. Secondly, the current literature either addresses the element of trade in logistics services, the quality of logistics services or regulatory issues related to logistics services. This study aims to combine the various elements and apply this to the export supply chain for manufactured goods. The objective is to provide a solid analysis of seven vital sub-sectors of logistics services that can provide insight to the Ministry of Trade on the benefits of liberalization of logistics for the manufacturing industry. Thirdly, in 2015 many regulations have been issued such as the freight forwarding regulation that replaces regulation dating back to the 1980's.

b) From literature to a practical overview of sectors

In addition, a regulatory review of each sector's bottlenecks from a supply chain perspective (input, production, and output), interviews with industry experts, and regulatory analysis through the lens of AFAS 9 commitments provided the study with salient information. Several findings include (1) identification of similarities and differences between Indonesia and the World Trade Organization classification, (2) bottlenecks to the development of service providers, other than market access and national treatment, and (3) learnings from international practice.

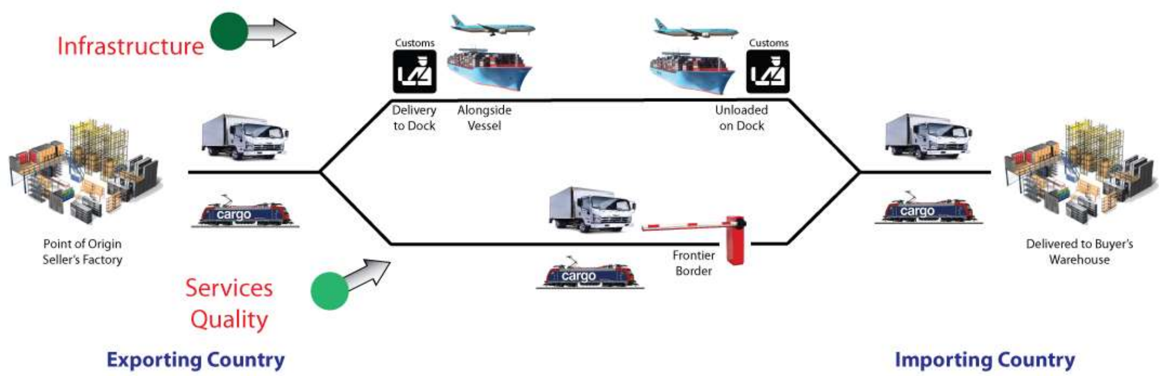
Chapter 1: Logistics services in Indonesia's logistics system

I. Back to the basics: logistics and supply chain management

1. What is "logistics"?

The terms 'logistics" and "supply chain" are commonly used to describe the flow of resources, products, people and information. These two terms are closely linked but not interchangeable, as logistics management is part of supply chain management.

Figure 2: Along the supply chain from a manufacturer to a consumer



Source: (Banyomong, 2014)

Below are the official definitions, by the Council of Supply Chain Management Professionals:

- *"Supply chain management encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third party service providers, and customers. In essence, supply chain management integrates supply and demand management within and across companies."*
- *"Logistics management is that part of supply chain management that plans, implements, and controls the efficient, effective forward and reverses flow and storage of goods, services and related information between the point of origin and the point of consumption in order to meet customers' requirements."*

Outsourcing of logistics activities has been ongoing since the 1970s, with growing business integration between manufacturers and their freight forwarders which has resulted in supply chain efficiency, *inter-alia* lowering costs, decreasing transaction time, and increasing quality (Kopicki, 2009)**. Kunaka et al. describes the evolution of logistics through three phases (1) *Management of Integration*, (2) *Management of Relationship*, and (3) *Management of Knowledge and of Information*.** The first phase refers to the time when logistics were managed in-house, with owners of goods hiring directly transport operators such trucking companies and shipping lines to move their goods. The second phase saw the beginning of outsourcing the relationship with transport operators to freight forwarders, also commonly known as 2PL (The World Bank, 2014). The third phase saw the rise of third-party (3PL) service providers that offer integrated services related to transportation and also related to supply chain management, such as inventory management and order processing. Such value-added services are offered to companies outsourcing these previously internal activities to owners of goods. The development of fourth-party (4PL) [12]is also considered by the authors as part of the third level of development, which adds strategic consultancy services to the already integrated logistics and supply chain offering.

Figure 3: Traditional freight forwarding activities. By Ruth Banyomong (The World Bank, May 2015)

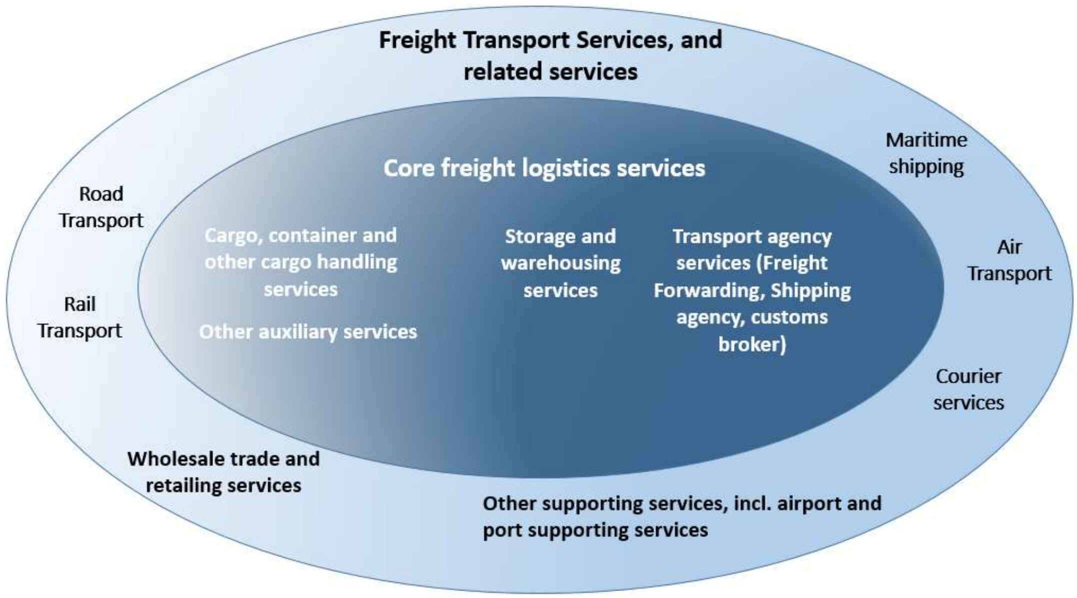
• Advise customers on most appropriate mode of transport.
• Choice of the most suitable carrier and conclusion of the transport contract.
• Organisation of "groupage" or consolidation.
• Provisions of carriers' and forwarders' documentation.
• Compliance with regulations and letter of credit requirements.
• Customs clearance.
• Advise customers on packing.
• Insurance cover during transit.
• Advise customers on warehousing and distribution.
• Supervision of the movement of goods.

The WTO's "collective request list" (2006) provides an alternative way to classify logistics services in terms of core, related and non-core freight logistics services:

- Core freight logistics services: Services auxiliary to all modes of transport with (1) cargo handling services, container handling services, other cargo handling services, (2) storage and warehousing services including distribution center services, (3) transport agency services in addition to customs agency services and other auxiliary services
- Freight transport services, other related logistics services.

Figure 4: Difference between Core Freight Logistics Services and Freight Transport Services

12 This type of services is not addressed in this study, as it is a consultancy service.



Source: Illustration by the authors

One of the challenges of the logistics industry is that it is composed of a "network of industries". By definition, a network consists of nodes and connecting lines, any line disruption would impact a part or the whole network. Furthermore, the heterogeneity of these industries brings forward the fact that they operate under different business and regulatory environments. For instance, a 3PL that is asset-based and offers road transport, warehousing and customs brokerage would need to comply with transportation regulation (road transport), trade regulations (warehousing), and financial regulations (Customs brokerage being under the ministry of finance).

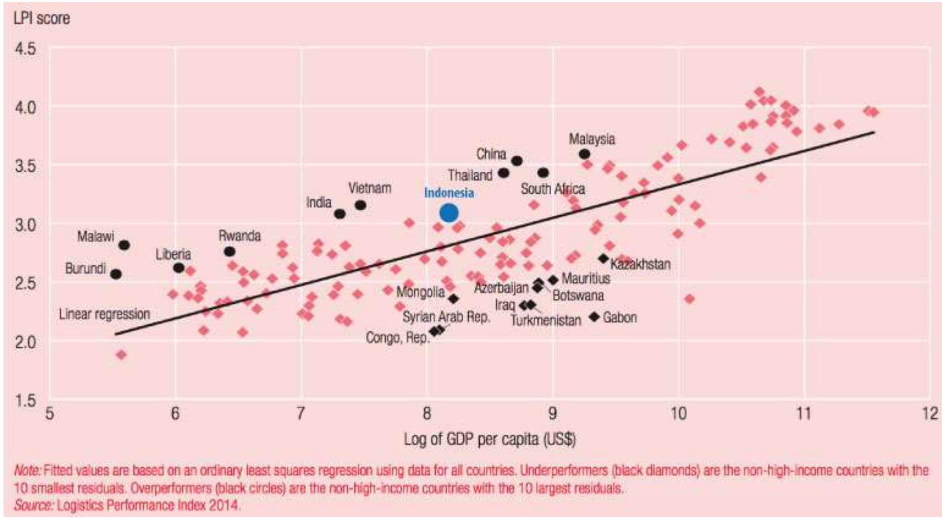
The logistics industry needs an environment that enables coordination and prevents disruptions to insure the accomplishment of its full potential.

2. Logistics dual role: trade enabler and tradable services

From a trade perspective, logistics services play "a dual role" that impact on a country's trade of goods and of services. They both enable trade and are tradable.

The performance of logistics services is recognized as a pillar of countries trade supply chain, as this supports the development of industries. Global industry fragmentation, with raw materials, semi-finished products and products being sourced and produced in different countries, requires efficient logistics services to provide "the right product, at the right time, and at the right cost". Countries that have succeeded in improving their logistics performance have also shown a strong development of their manufacturing sector. Direct correlation has been identified between countries GDP and their Logistics Performance Index score. Figure 5 shows that countries above the line score higher in terms of logistics performance compared to the average GDP and are therefore well positioned to attract manufacturing industries. It is important to note that logistics are a natural derivative of trade, without trade there would be no demand for its supporting logistics services. Therefore, trade is the driver for the demand of logistics services.

Figure 5: Correlation between Logistics Performance Index and Economic Growth



(The World Bank, 2014)

Logistics services have also become tradable services for countries that developed the logistics industry as a competitive advantage. Countries that succeeded in such strategy have become regional distribution centers and transshipment hubs. Hong Kong, Singapore and U.A.E.'s logistics industries are a relevant illustration of such success. Favorable business and regulatory environment for such companies helps the development of small and medium enterprises in the service industry. As evidence will show later on in this report, most logistics sub-sectors are dominated by small and medium sized enterprises, with limited assets only. Therefore, by creating the right conditions for the sector, countries give an opportunity for new small companies to enter the market, enabling job creation and benefits for the overall economy. Although it is emphasized that trade of logistics services should not be a goal on its own. Indonesia's import of freight services only stands at 5.4% of total export of goods in 2014, highlighting an emphasis on the production of goods rather than the service of moving it.

3. LSPs at work in Indonesia: basic flows to understand operations

In order to better understand the roles of each type of players, the figures below describe an export shipment flows from a manufacturer's warehouse in Cikarang area to Tanjung Priok port (in case sea export) and to Soekarno-Hatta airport (in case of air export).

a. By sea

There are two types of exports by sea, in Full Container Load (FCL) and Less than Container Load (LCL). The choice of LCL or FCL depends on whether an exporter exports enough products to fill in a full container. If it's not the case, it is cost effective to ship using LCL, as an exporter's goods are "consolidated" into one container together with other exporters' goods. Consolidation of cargo is performed by a company called "consolidator" inside a CFS [13]warehouse.

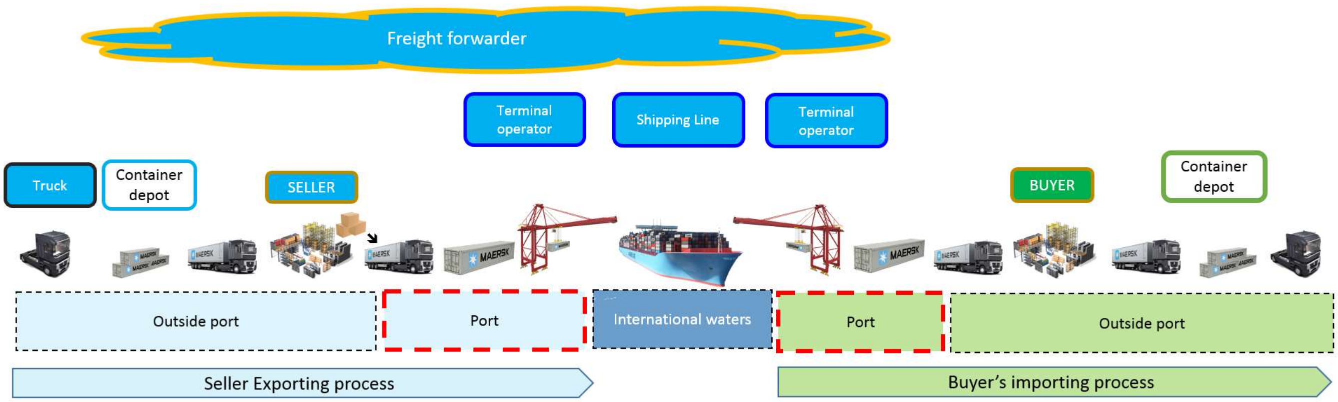
The following three figures illustrate:

- Cargo flow from shipper in Indonesia to buyer's country

[13] A Container Freight Station (CFS) is a bonded warehouse equipped to handle consolidation of goods and stuffing into containers, before the latter is shipped.

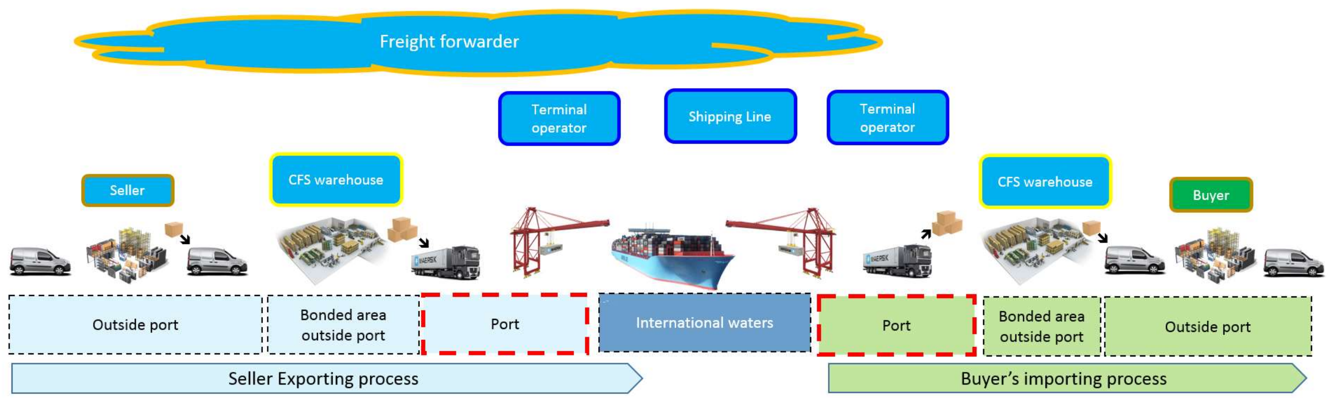
- Focus on document flow from the exporter's side (in Indonesia)
- Roles, documentation and charges issued by each stakeholder involved in the export process

Figure 6: Maritime cargo flow, by Full Container Load (FCL)



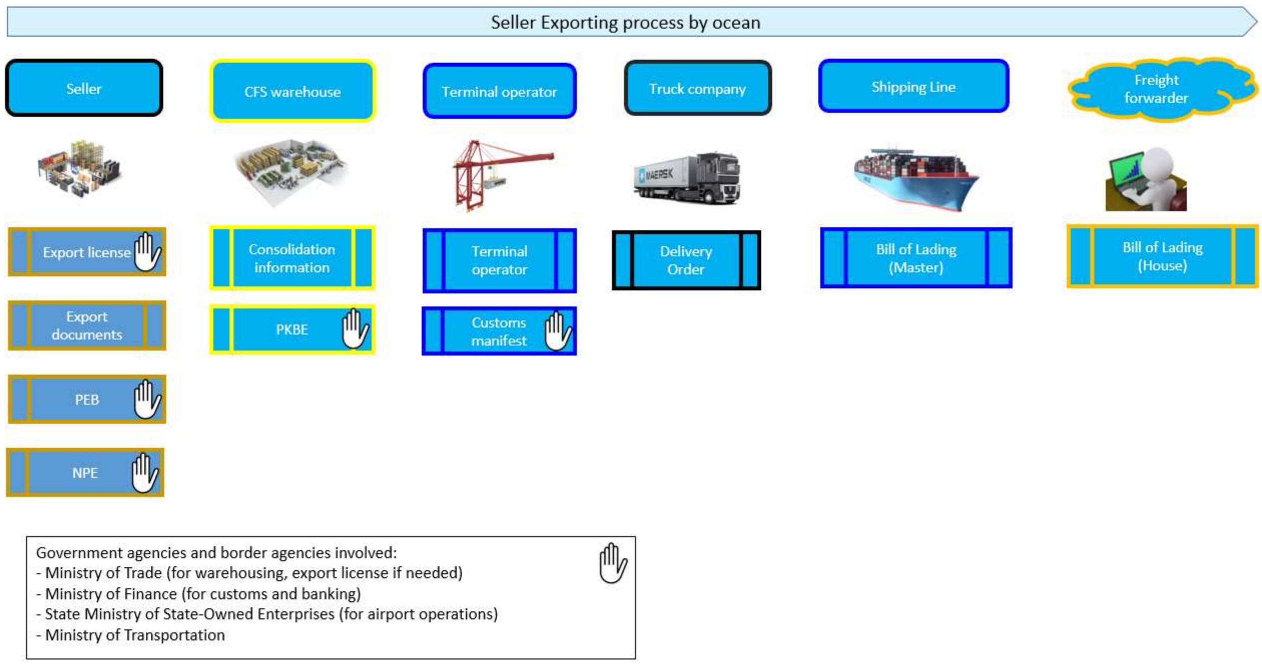
Source: By the authors

Figure 7: Maritime cargo flow, by Less than Container Load (LCL)



Source: By the authors

Figure 8: Maritime cargo flow, focus on document flow from the exporter's side (in Indonesia)

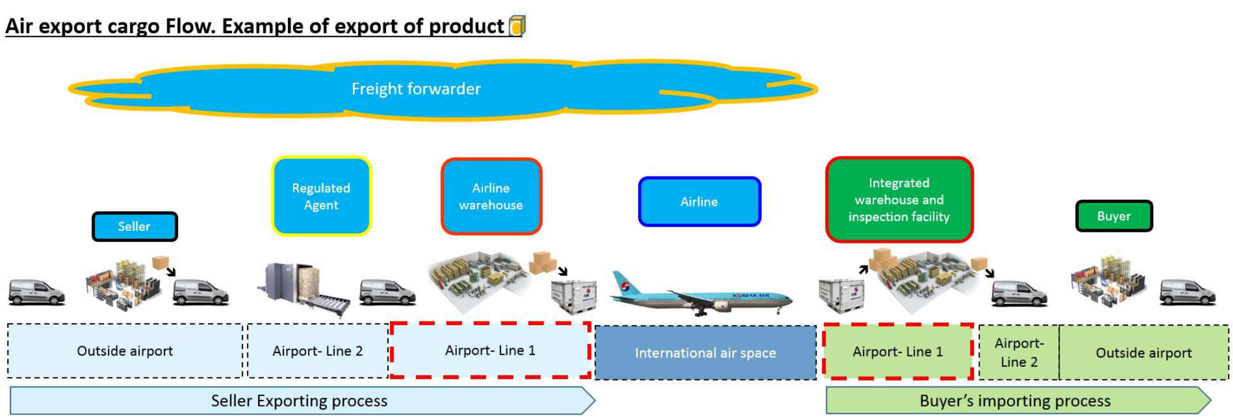


Source: By the authors

b. By air

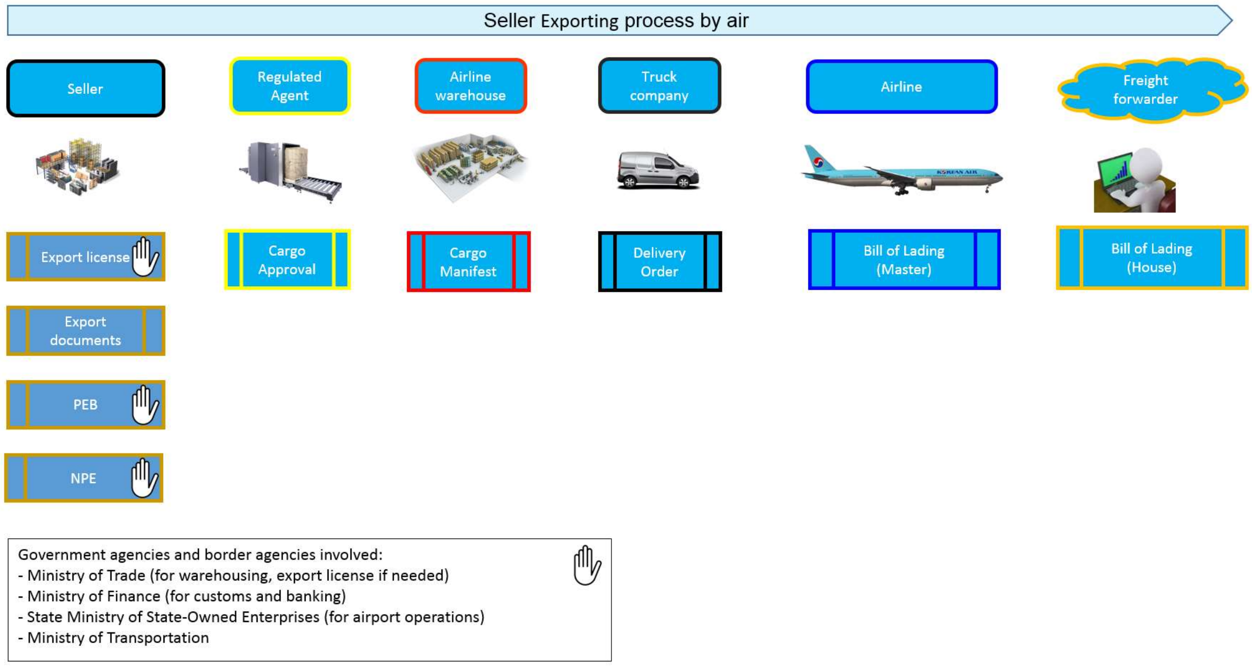
Goods exported by air are usually consolidated in the same way as ocean-bound LCL exports. Depending on the packaging of cargo (small boxes, large crates), goods are either stuffed in an airfreight container (ULD) or directly loaded in to an aircraft's belly. The operation is performed by Ground Handlers or other cargo handling companies in bonded warehouses located in airport terminals.

Figure 9: Air cargo flow from shipper in Indonesia to buyer's country



Source: By the authors

Figure 10: Air Cargo flow, focus on document flow in Indonesia

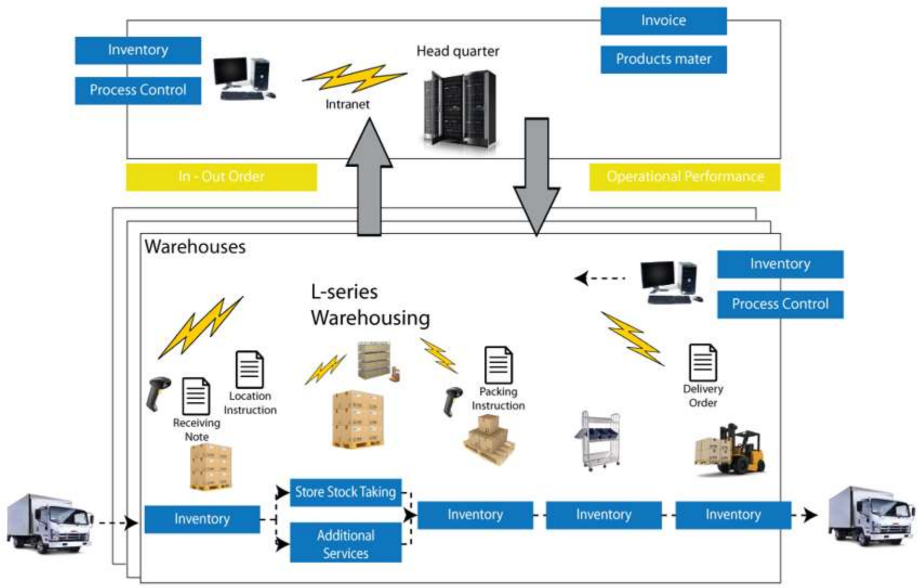


Source: By the authors

c. Warehousing and storage operations

Every warehouse witnesses the same range of cargo handling operations covering receipt (unloading, counting, quality inspecting), storage and on-forwarding operations. Each operation is documented by relevant receipt notes, stock-taking/ inventory reports and delivery notes. Key differences will depend on the function of a warehouse, the type of cargo stored, and the level of warehouse sophistication. For instance, modern warehouses are designed in a process-efficient manner, are equipped with an information system and is partly or fully equipped with automated equipment. On the other hand, conventional warehouses would mainly use paper trail, manpower and may even not have dedicated areas for receipt, storage and on-forwarding.

Figure 11: Basic warehousing processes



Source: Adapted by the authors. Source: http://ictroi.net/warehouse-management-solution/

II. Introducing the seven sub-sectors of this study (manufacturing export supply chain perspective)

In attempting to find a concordance between Indonesia's sectorial definitions and ASEAN's definitions (same as WTO), this study also uncovers variances within Indonesia, with a few variances identified among the country's government agencies.

The study covers service providers listed in the World Trade Organization's Section H[14] "Services Auxiliary to All Mode of Transport Section", in addition to one service provider from "Air Transport Services" and "Road Transport Services".

Table 1: Services sectors covered in this study (WTO)

H. Services Auxiliary to All Mode of Transport Section	Freight transport agency services (CPC 748): maritime shipping agencies, freight forwarding agencies; Other supporting and auxiliary transport services (CPC 749)	Cargo-handling services (CPC 741)	Storage and warehouse services (CPC 742)
C. Air Transport Services	Selling and Marketing of Air Transport Services (No CPC).	-	
F. Road Transport Services	Freight transportation (CPC 7123)		

In Indonesia the above sectors fall under different line-ministries. Freight transport agency services, air transport services and freight transportation are under the Ministry of Transportation, whereas storage and warehouses are under the Ministry of Trade. Despite this diversity, BKPM, the Indonesian Investment

14 The H sector includes core freight logistics services (a) cargo-handling services (CPC 741), (b) Storage and warehouse services, (c) Freight transport agency services, and (d) Others.

Coordinating Board, follows a similar classification to the WTO. Freight transport agency services fall into the same 52nd class "*This base class includes warehousing and support activities of transport, such as transport operations related to infrastructure (example airports, harbors, tunnels, bridges, etc.), and the activities auxiliary of such transport and unloading of goods*".[15]

This sub-section explores the concordance within the Indonesian legislation, and between the Indonesian legislation and WTO's classifications. A table summarizes the concordance at the end of this sub-section.

1. Freight transport agency services (CPC 748) and other supporting and auxiliary transport services (CPC 749)

Definition by the World Trade Organization

The WTO defines Freight Transport Agency Services (CPC 748) as "*Freight brokerage services, freight forwarding services (primarily transport organization or arrangement services on behalf of the shipper or consignee), aircraft space brokerage services, and freight consolidation and break-bulk services*". Other supporting and auxiliary transport services (CPC 749) refer to "*Freight brokerage services; bill auditing and freight rate information services; transportation document preparation services; packing and unpacking services; freight inspection, weighing and sampling services; and freight receiving and acceptance services (including local pick-up and delivery)*." (WTO. Council for Trade in Services, 2001)

Definition in Indonesian legislation

The Indonesian legislation divides freight agency services into several types of service providers, with each of these service providers adhering to different sector regulations. Below are two service agencies that will be included in this study, and that are relevant to fostering Indonesia's manufactured exports.

a. Freight forwarding agencies

Definition by the World Trade Organization

As defined by the WTO, freight forwarding agencies are part of Freight Transport Agency Services (CPC 748) and consist of transport organization or other services accomplished on behalf of shippers or consignees.

Definition by the Indonesian Government

Ministry of Transportation

Freight Forwarding Company (PJPT) is an entity that takes care of all activities required for the execution of shipping and receipt of goods through land, railway, and sea and air transportation.[16]

Investment Coordination Board

1515 Translation of: "Pergudangan dan Aktivitas Penunjang Angkutan

Golongan pokok ini mencakup kegiatan pergudangan dan penunjang angkutan, seperti pengoperasian infrastruktur angkutann(misalnya bandara, pelabuhan, terowongan, jembatan, dan lain-lain), kegiatan agen angkutan dan bongkar muat barang.". (Badan Pusat Statistik, 2015)

16 Ministry of Transportation Regulation PM74/2015, article 1, para 16

Freight forwarding companies are classified as Transportation Management Companies (Jasa Pengurusan Transportasi JPT, KBLI 52291). These companies arrange shipment and packing of large volumes of goods by rail, road, sea and air transport. [17]

	BKPM	Ministry of Transportation	WTO	Comments
Freight forwarding agencies	Organization of shipment and packing of large volumes of goods by multiple modes	All activities required for the implementation of goods shipping and receipt	Transport organization or other services, on behalf of shippers or consignees.	**Match**

b. Maritime shipping agencies

Definition by the World Trade Organization

It is part of maritime auxiliary services, in the same way as freight forwarding services, cargo handling services, and storage and warehousing.[18] These are part of the Freight Transport Agency Services (CPC 748).

Definition by the Indonesian Government

Ministry of Transportation

The importance and role of maritime shipping agencies is recognized in the Shipping Law (17/2008)[19], under the "General Agent" business[20]. However up to 2016, its activity was considered in combination with maritime transportation. Even if a ministerial regulation refers to shipping agencies as business entity specifically established for shipping agency activities, [21] only the Ministry of Transport regulation PM 11/2016 confirms that ship agency' activities can be performed without maritime transport activity. Shipping Agency companies are business entities specifically established for ship agent activities. Their role is to take care of the interests of vessels belonging to national or foreign sea transportation companies in Indonesia.

Investment Coordination Board (BKPM)

In the absence of specific KBLI code called "Shipping Agencies", the most plausible interpretation is that BKPM still considers shipping agencies as part of sea transport companies (KBLI 5013 for domestic sea transport, and 5014 for international), that are limited to 49% of foreign equity. Alternative category may be applicable, however, this does not cover all aspects of shipping agents activities:

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17 English translation of "Kelompok ini mencakup usaha pengiriman dan atau pengepakan barang dalam volume besar, melalui angkutan kereta api, angkutan darat, angkutan laut maupun angkutan udara.". Source KBLI 2015

18 Source: slide 13,presentation on"allyou've ever wanted to know about maritime transport". http://www.oecd.org/tad/services-trade/46330212.pdf

19 Undang-Undang Republik Indonesia No. 17 tahun 2008 tentang Pelayaran

20 The Shipping Law 17/2008 article 1, para 7. "Agen Umum adalah perusahaan angkutan laut nasional atau perusahaan nasional yang khusus didirikan untuk melakukan usaha keagenan kapal, yang ditunjuk oleh perusahaan angkutan laut asing untuk mengurus kepentingan kapalnya selama berada di Indonesia."

21 Ministry of Transportation PM.93 number year 2013, about operation and business of sea transport, Chapt 1 art.1. 12. Peraturan Menteri Perhubungan no. PM 93 tahun 2013 tentang Penyelenggaraan dan Pengusahaan Angkutan Laut

- Commission Agents classified in KBLI 46100 ("Jasa Keagenan[22]") under the "Wholesale on a fee or contract basis" category. However this seems unlikely because the KBLI does not refer to trade in services and mainly mentions commodities. Furthermore, this activity also neglects ship agencies' key role in supporting vessels.

Similarities and differences in terms of definition

Maritime shipping agencies seem to be a new business sub-sector, where there is not a consensus yet.

Table 2: Maritime shipping agencies: Similarities and differences between international and Indonesian definitions

	BKPM	Ministry of Transportation	WTO	Comments
Maritime Shipping Agency	There is no such category by BKPM. It is likely that it is still considered as part of sea transport companies' activity. Foreign equity limit: 49%	A business entity specifically established for shipping agency activities. Foreign equity limit: 0%	A part of maritime auxiliary services	No match

2. Warehousing and Storage (CPC 742)

Source: Google

Definition by the World Trade Organization

As part of Services Auxiliary to All Modes of Transport, Storage and warehouse services (CPC 742) include several subsectors, such as Refrigerated storage services (7421), Storage of Bulk Liquid or gas storage

22 http://www.ina.or.id/images/stories/download/Investment-Negative-List-Reg-39-2014.pdf

services (CPC 7422) and other storage services (CPC 7429) for other non-containerized goods such as cotton, tobacco and grains. (WTO. Council for Trade in Services, 2001). It also includes distribution center services and materials handling and equipment services such as container station and depot services.

Definition in Indonesian legislation

Ministry of Trade

Warehousing is part of trade services, with warehouses considered as “Trade structures aimed at encouraging smooth Distribution of Goods traded domestically and internationally”. (Trade Law No 7/2014[23], art.15 (1)). Warehousing and storage services are differentiated in terms of general, basic goods and strategic goods. [24] Warehousing services, include open and closed warehouses that are classified in terms of size and storage capacity[25]. Warehouses are managed by a warehouse management company, a business entity that performs such activity, either in its own warehouse or a warehouse owned by another party. (Ministry of Trade Regulation No. 90/2014 on warehouse arrangement[26], article 1, para 9). Warehousing and storage also include warehouses located in bonded zones and those attached to a retail business place as retailers’ temporary storage.

Investment Coordination Board (BKPM)

The Indonesian Investment Coordinating Board has a dedicated category on warehouse and storage (KBLI 5210, “*Pergudangan dan penyimpanan*”). Specific sub-categories are dedicated to temporary storage (52101), cold storage (52102), bonded warehousing (52103), and other types of categories not covered by the first three. However, the concept of distribution is not included. Distribution is under another category called “Other Supporting activities to transport” (Aktivitas Penunjang Angkutan Lainnya) KBLI 5229.

Similarities and differences between international and Indonesia

The authors identified a partial match between Indonesia’s government agencies and the WTO. First, warehousing and storage are part of trade services or transportation services. Second, distribution is either included or excluded from warehousing and storage services.

	BKPM	Ministry of Trade	WTO	Comments
Storage and warehouse	Storage is part of transportation and warehousing category.	Storage is part of trade services	Storage is part of services auxiliary to all modes of transport.	**Partial Match:** only between BKPM and WTO
	Several types of storage activities. Distribution is not included in this category.	Several types of storage, in addition to distribution activities.	Several types of storage, in addition to distribution activities.	**Partial Match:** only between M. of Trade and WTO, not with BKPM

23 Undang-Undang nomor 7 tahun 2014 tentang Perdagangan

24 Perpres 71 tahun 2015 Barang umum, barang pokok dan barang penting

25 Function is also a criteria in specific cases where Silos are used to store goods such as grains

26 Peraturan Menteri Perdagangan Republik Indonesia nomor 90M-DAG/PER/12/2014

3. Cargo handling services (CPC 741)

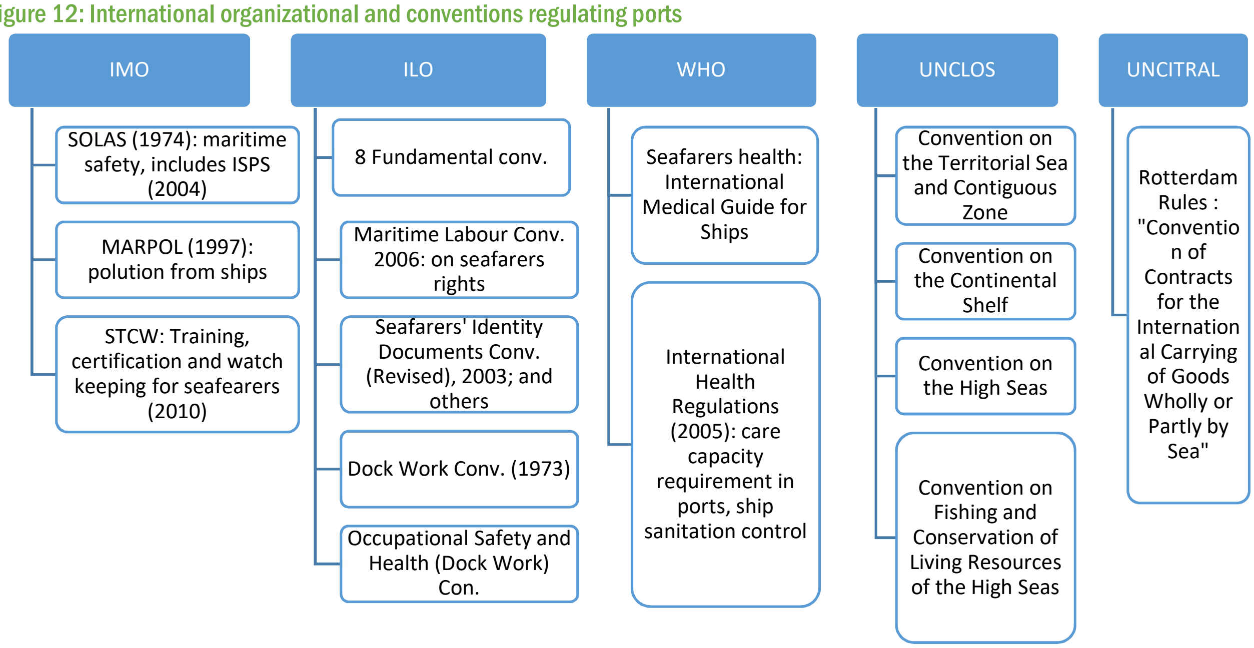
Under the WTO definition, cargo handling services in ports and airports are covered by the same CPC code. Cargo handling services are part of "Supporting services and services auxiliary to all modes of transport". These include handling services of containerized (CPC 7411) and non-containerized cargo (CPC 7419) for all modes of transport. These also include stevedoring services (such as cargo loading, unloading, and vessels discharge at ports. (WTO. Council for Trade in Services, 2001). The Indonesian investment board BKPM also considers cargo handling in airports (ground handling) and ports (terminal handling) under cargo unloading/loading: Cargo Handling Services ("Penanganan kargo (bongkar muat barang)" KBLI 52240), that covers all businesses providing loading and unloading of cargo or passengers' luggage, regardless of the type of transport used.[27] Given structural differences between the two each falls under different international organizations. The Indonesian government also places these services under different regulators.

a. Cargo handling in ports is part of port terminal operations services

International organizations: IMO, ILO, UNCITRAL, UNCLOS, AND WHO

Ports and maritime transportation are regulated by a large number of inter-governmental organizations and UN agencies (UNCITRAL, UNCLOS, and WHO). Terminal operators' activities including; supporting vessels' berthing, cargo loading and unloading, quay-side activities (such as container handling), and other activities such as container storage. Cargo container handling therefore constitutes the largest share of terminal operators' responsibility.

Figure 12: International organizational and conventions regulating ports



Source: By the authors

Definition by the Indonesian Government

Ministry of Transportation

27 "Kelompok ini mencakup usaha pelayanan bongkar muat barang dan atau barang-barang bawaan penumpang dari angkutan darat, angkutan jalan, angkutan air dan angkutan atas dasar balas jasa (fee) atau kontrak. Kegiatannya mencakup kegiatan memuat memuat dan membongkar barang atau bagasi (barang penumpang) terlepas dari jenis angkutan yang digunakan, kegiatan bongkar muat kapal dan kegiatan bongkar muat kendaraan dengan kereta gerbong barang." Source: KBLI 2015.

Port terminal operators are defined as "Port Business Entity (PBE), this is a business entity where its business activities are exploiting a terminal and other port facilities", as per the shipping law 17/2008, and restated in PM 45/2015[28]. Cargo handling in ports referred to as a business activity of loading and unloading of goods to and from ships in ports including stevedoring activities, customs clearance and receiving / delivery (Ministerial Decree PM No. 60/2014[29]).

Investment Coordination Board

Port terminal operators are referred as port facility providers, including container terminals (KBLI 52221[30]). More specific activity related to cargo handling is the category of loading/ unloading of goods (KBLI 52240), where Maritime Cargo Handling Services are included (DNI 2016).

Bidang Usaha / Business Field	KBLI/ ISIC	Persyaratan / Conditions
Provision of harbor facilities (jetties, buildings, tugs at cargo container terminals, at liquid-bulk terminals, at dry-bulk terminals, and at Roll on-Roll off (Ro-Ro) terminals/ Penyediaan fasilitas pelabuhan (dermaga, gedung, penundaan kapal terminal peti kemas, terminal curah cair, terminal curah kering dan terminal Ro-Ro)	52221	Maximum Foreign Capital Investment: 49%
Loading and Unloading of Goods/ Jasa bongkar muat barang maritime cargo handling services with CPC 7412)[31]	52240	a. Maximum Foreign Capital Investment 67%; b. Maximum 70% for capital investors from ASEAN investors; Applicable only for ASEAN countries in 4 (four) ports of the territory of eastern Indonesia, i.e Bitung, Ambon, Kupang, and Sorong.

28 Ministry of Transport Regulation No. PM 45/2015 on Capital Requirements for Companies in the Field of Transport. Peraturan Menteri Perhubungan No. PM 45 Tahun 2015 tentang Persyaratan Kepemilikan Modal Badan Usaha di Bidang Transportasi

29 Ministry of Transport Regulation number PM 60/ 2014 on organization and operation of cargo stevedoring services from and to ships. Peraturan Menteri Perhubungan Republik Indonesia nomor PM 60 tahun 2014 tentang Penyelenggaraan dan Pengusahaan Bongkar Muat Barang Dari dan Ke Kapal

30 The definition of KLBI 52221 is "Service activities in seaports: This group includes the business activities of service harbor sea, which relates to water transportation of passengers, animals or goods, such as operation of terminal facilities such as ports and docks, operation waterway locks and others, navigation, cruise and anchorage activities, and towage and pilotage services".

31 CPC 7412 is only mentioned in Indonesia's documents. 7411 refers to container handling and 7419 refers to cargo handling of non-containerized goods.

Similarities and differences between international and Indonesia in defining the maritime cargo handling sector

	BKPM	Ministry of Transportation	WTO	Comments
Maritime Terminal cargo handling	Loading/ unloading of goods, including Maritime Cargo Handling Services. In cases where this activity is performed by a terminal operator, it becomes part of another activity "port facility provider/ Provision of harbor facilities", which includes provision of port / terminal facilities and providing Maritime Cargo Handling services are included.	Business activity of loading and unloading of goods to and from ships in ports including stevedoring activities, Customs Clearance and receiving / delivery. Business activity of Port Business Entity allows to operate terminals and to handle maritime cargo.	Handling services of containerized (CPC 7411) and non-containerized cargo (CPC 7419)	Partial match between WTO and Indonesia's definitions only for stevedoring services, not for terminal operators.

b. Cargo handling in airports

Cargo handling in airport is part of ground handling services.

ICAO

Ground handling of international air transportation is regulated by The International Civil Aviation Organization (ICAO), a specialized agency of the United Nations. In its description of roles and responsibilities of air cargo supply chains, the ICAO defines ground handlers as companies acting *"on behalf of freight forwarders and/ or aircraft operators*", in case when these do not have own facilities at the airport. Ground handlers offer services ranging from "*provision of warehouses to accept, handle, prepare, and tag cargo and mail, as well as loading/unloading, transit, and storage of cargo and mail*". In an effort to secure the air cargo supply chain and to enable a smooth flow of export cargo[32], the ICAO created the role of Regulated Agents:

> "*A regulated agent is a freight forwarder or any other entity, (e.g. ground handler) that conducts business with an aircraft operator and provides security controls that are accepted or required for cargo or mail by the appropriate authority. The regulated agent concept allows aircraft operators to receive cargo already secured from an entity approved by the appropriate authority, i.e. the regulated agent that accounts for the security status of consignments*." (ICAO & World Customs Organisation, 2013)

32 Based on the ICAO regulatory framework, aircraft operators bear the full responsibility of security control systems application, under which a 100% of cargo and mail should be screened prior to loading onto a plane. (ICAO 2013). As a result, aircraft operators would need to screen 100% of cargo and mail in their warehouses in line 1 before loading, which creates a series of operational challenges that may slowdown the export flow by air, such as the quantity of cargo, the type of screening required by different sizes of parcels to be screened at the last minute. Several examples are given by the ICAO such as some parcels' large size prevents the use of conventional x-rays machines that are usually used in airports facilities.

Definition by the Indonesian Government

Ministry of Transportation, Directorate General of Civil Aviation

Cargo handling is part of services related to airports as described in the Aviation Law No 01/2009 [33](art.232) in defining airport operational activities. These include airport services that involve providing facilities (for aircraft, passenger, cargo and others), and services related to airports that include two types of cargo handling activities: (1) services support to aircraft with **warehouse and cargo and mail handling**, and (2) services to passengers and freight that include **land transportation**. Such activities are performed by Airport Enterprises or Regulated Agents.

In 2015, the Ministry of Transportation introduced a new process in an attempt to improve air cargo supply chain security (PM 32/2015 and its revision 153/2015), the Indonesian government created a special status of Regulated Agents that are solely allowed to screen cargo on behalf of airlines. PM 32/2015 on supply chain security for cargo and post defines Regulated Agents as "*Indonesian legal entity in the form of cargo agents, freight forwarder or other fields that are certified by transport minister to conduct business activities with business entities, air freight or foreign air transport companies to perform security checks on cargo and mail received from senders*". ("article 1, para 17).

Investment Coordination Board (BKPM)

Despite the fact that cargo handling is under the same KBLI code (52240), the latest DNI 44/2016 makes a specific reference to cargo ground handling in airports. However, there is no reference to regulated agents.

Bidang Usaha / Business Field	KBLI/ ISIC	Persyaratan / Conditions
Airport services/ Jasa kebandarudaraan	52230	Maximum Foreign Capital Investment 49%
Air Transportation Supporting Services/ Jasa penunjang angkutan udara		
• **computer-based reservation system/ sistem reservasi melalui komputer**	51102, 51202	Maximum Foreign Capital Investment 67%
• **passenger and cargo ground handling/ pelayanan di darat untuk penumpang dan kargo**	52240	Maximum Foreign Capital Investment 67%
• **aircraft leasing/ penyewaan pesawat udara**	77304	Maximum Foreign Capital Investment 67%
Service activities related to airports/ Pelayanan jasa terkait bandar udara	52230	Maximum Foreign Capital Investment 67%

Similarities and differences between international organizations and Indonesia.

The Indonesian Government has been making efforts to comply with international definitions and standards related to the aviation industry in general. For instance, BKPM includes ground handling into the general cargo handling code (including seaports), in addition BKPM has made a special reference to this in the latest negative investment list. By exploring definitions used by the Ministry of Transportation compared to BKPM and ICAO (international regulator for aviation), the definition of ground handling is harmonized. However, the concept of regulated agent is not yet harmonized.

33 Undang-Undang Republik Indonesia nomor 1 tahun 2009 tentang Penerbangan

	BKPM in DNI 2016	M of Transportation	International organizations: ICAO	Comments
Ground Handling Agent (for cargo handling)	Air Transportation Supporting Services: passenger and cargo ground handling	Services related to airports that include two types of cargo handling activities	Support services on behalf of freight forwarders or aircraft operators, including cargo handling and warehousing	**Match**
Regulated Agent	Not addressed	Cargo agent, freight forwarder or other field that is certified for security checks by the M. of Transportation	A freight forwarder or other entity such as ground handler that is certified for security check by relevant authority.	**No match** in considering RAs as ground handlers. The Indonesian legislation only considers them as freight forwarders or cargo agents

4. Airfreight agencies

Airfreight agencies' roles are similar to maritime shipping agencies' with the exception that the former is dedicated to air transportation.

Definition

Airlines need to have representatives in each country where their planes operate, in order to cater their passenger and cargo transportation. Airfreight agencies are companies that support airline's cargo business in a specific geographical area. Activities include supporting airlines' administrative, operational and sales activities in a geographical area. [34] Representative offices, airline branches or General Sales Agents handle a part or all these activities.

Definition by the World Trade Organization

The World Trade Organization's Services Sectoral Classification List's "C" category on Air Transport Services includes several aspects of air transport activities *inter-alia* "Passenger Transportation" (CPC 731), "Freight Transportation" (CPC 732), "Maintenance and repair of aircraft" (CPC 8868) and "Supporting Services for air transport" (CPC 746). The activity of a General Sales Agent consists of marketing and selling air transport services matches with the sub-sector on "Selling and Marketing of Air

34 By the author

Transport Services". The latter is described as "*opportunities for the air carrier concerned to sell and market freely its air transport services including all aspects of marketing such as market research, advertising and distribution. These activities do not include the pricing of air transport services nor the applicable conditions."*[35] However this sector does not have any CPC[36].

Definition by the International Air Transport Association (IATA)

IATA's definition of General Sales Agents is in line with the World Trade Organization, and set that a GSA could be any person, and does not limit it to a legal entity.

> *"General Sales Agent (GSA) means, for the purposes of the Sales Agency Rules, any person to whom a Member or a non-IATA carrier has delegated general authority to represent it for purposes of sales of passenger and/or cargo air transportation in a defined territory"*[37]

Definition by the Indonesian Government

Ministry of Transportation

Based on the ministerial decree KM No. 51/2000 on Representative and General Sales Agents [38](General Sales Agent / GSA) of Foreign Airline Company, the Indonesian legislation defines two levels of representation for airline agencies:

- Representative of foreign airlines company is a legal entity established or appointed to manage the interests in the areas of operations and administration. This is statutory requirement for all foreign airlines performing air transportation activities scheduled to and from Indonesia. However representative offices are not allowed to perform commercial and marketing activities.
- General Sales Agent (GSA) for foreign airlines company are the activities undertaken by the Indonesian legal entity to represent the interests of foreign airlines company in carrying out the marketing and sale of foreign air transportation services. A GSA is either appointed to sell cargo services or passenger services, but is not authorized to handle both activities. [39]

As a result, some airlines would either establish their own office or appoint a GSA that will act as their representatives and perform marketing and sales activities as well.

Investment Coordination Board (BKPM)

BKPM definitions include:

- Representative offices represent the interests of an overseas company and or of its subsidiary companies. It can also be a company "*preparing the establishment and development of a foreign investment company (PT PMA) in Indonesia*". [40] (Invest Indonesia, (n.d.))

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35 https://www.wto.org/english/tratop_e/serv_e/9-anats_e.htm

36 All countries' commitments in WTO use CPC codes for most sub-sectors, except for a few including "Selling and Marketing". For instance, Vietnam's scheduled commitment to ASEAN includes"Sales and Marketing of air product services", however no CPC code is listed next to this sub-sector. Source: VIET NAM Schedule of Specific Commitments (For the First Package of Commitments). Page 52. Link: http://www.asean.org/wp-content/uploads/images/archive/22557-AKTIS-Annex-Vietnam.pdf

37 https://www.iata.org/services/finance/Documents/mso-gsa-info-july2013.pdf

38 Keputusan menteri Perhubungan nomor KM 51 tahun 2000 tentang Perwakilan dan Agen Penjualan Umum (General Sales Agent/ GSA) Perusahaan Angkutan Udara Asing

39 Discussion with Aviation experts in the law firm in Indonesia

40 BKPM Regulation on Direct Investment Permits and Non-Permits, Perka 5/ 2013, art 68 (Peraturan Kepala Badan Koordinasi Penanaman Modal Republik Indonesia nomor 5 tahun 2013 tentang Pedoman dan Tata Cara Perizinan dan Nonperizinan Penanaman Modal)

- GSA: As listed in the DNI 2016, airline General Sales Agents (GSA)[41] are part of BKPM category of Travel Agent in Non-Tourism Activities, KBLI 79112.[42] “*This group includes businesses whose activities make a reservation and ticket sales air freight, sea and land, both for the purpose in the country and abroad*.”

Similarities and differences between international and Indonesia

In defining GSAs, the Indonesian legislation matches with the World Trade Organization. However, there is a variance in defining airline representative offices ‘roles. The table below highlights areas of concordance.

	BKPM	**Ministry of Transportation**	**WTO**	**Comments**
Airline representative office	Represent the interests of an overseas company and or of its subsidiary companies	Representative to manage administrative and operational side of airlines	A marketing device” for a company’s “commercial presence”	**No match**
General Sales Agent (GSA)	Business to make reservations and sale activity.	Representative to carry out marketing and sale activities for an airline	Representative to carry out marketing and sale activities for an airline	**Match:** between Ministry of Transportation and WTO. **No match** with BKPM: the activity of “making reservations” is an operational activity that is not included in GSA’s activity.

5. Road Freight Transportation services (CPC 7123)

Definition by the World Trade Organization

As part of Road Transportation, Freight Transportation includes domestic and international road freight transportation services under the master code CPC 7123, seven subsectors are defined as below:

71231: Transportation of frozen or refrigerated goods

71232: Transportation of bulk liquids or gasses

71233: Transportation of containerized freight

71234: Transportation of furniture

71235: Mail Transportation

71236: Freight Transportation by man- or animal- drawn vehicles

71239: Transportation of other freight

41 Agen penjualan umum (GSA) perusahaan angkutan udara asing”

42 Aktivitas Agen Perjalanan Bukan Wisata.

Definition in Indonesian legislation

<u>The Indonesian legislation</u>

The Road Transport Law UU No. 22/ 2009 and the Indonesian Government regulation on road transport (PP 74/2014) defines Public Transport Companies as legal entities that provide transportation services of people and / or goods by public motor vehicles. Such transport is sub-divided into general freight transport and specialized freight transport, general freight considered as "generally harmless and do not require special facilities" and specialized "using a truck which is specially designed according to the nature and shape of goods transported." The latter covers dangerous goods and non-dangerous goods requiring special facilities. (PP 74/2014, chapter V, art 51 to 54).

Box 2: Public trucks (for hire) and private trucks

> Trucks registered and used by road transportation companies are called public trucks, whereas those registered by "non-transportation" companies are called private trucks as they are used to transport a company's own goods.
>
> Source: (The World Bank, May 2015)

<u>Investment Coordination Board (BKPM)</u>

Similarly, BKPM divides road transport for goods, for general items and for special items. Road transport for general merchandise includes hauling goods by motor vehicle and can transport more than one type of goods, such as transport by truck, pick up and container. Road transport for special items refers to hauling goods by using a vehicle motor for transporting goods specifically one type of goods, such as transport fuel oil (BBM), transport of dangerous goods and freight transport heavy equipment. (Badan Pusat Statistik, 2015)

English Description	Indonesian Description	KBLI 2015
Land transport for goods	Angkutan darat untuk barang	4943
Road transport for general merchandise	Angkutan bermotor untuk barang umum	49431
Motor transport for special items	Angkutan bermotor untuk barang khusus	49432

Similarities and differences between international organizations and Indonesia

Indonesia's definitions are consistent with the WTO definition.

	BKPM	Ministry of Transportation	WTO	Comments
Freight Transportation	Road transport for goods, is divided into general items and for special items.	Road transport for goods, is divided into general items and for special items.	Freight Transportation includes domestic and international road freight transportation services. Several sub-sectors are included	**Match**

6. Concordance table of service sector classification

The concordance table below provides an interpretation of the relationship between the CPC codes applied by the WTO and the KBLI codes applied by the Indonesian legislation.

Sub-sector covered by the study	Sub-sektor (Bahasa Indonesia)	WTO Industry classification	Industry Description	CPC Code	Business sector (Indonesian definition-as defined in DNI	Sektor Jasa (Bahasa Indonesia)	KBLI
Freight forwarding	Jasa pengurusan transportasi	Services auxiliary to all modes of transport (H)	Freight transport services (748) and Other supporting and auxiliary transport services	748 & 749	Transport Management Services	Jasa pengurusan transportasi	52291
Maritime shipping agencies	Agen kapal	Services auxiliary to all modes of transport (H)	Freight transport agency services (748) and other supporting and auxiliary services	748 and 749	International sea transport (cargo)	Angkutan laut luar negeri liner untuk barang	50141
					International sea transport tramp (cargo)	Angkutan laut luar negeri tramper untuk barang	50142
					International sea transport – special (cargo)	Angkutan laut luar negeri untuk barang khusus	50143
Warehouses	Pergudangan	Services auxiliary to all modes of transport (H)	Storage and warehouse services: CPC 742 (including distribution centre services and materials handling and equipment services such as container station and depot services)	742	Warehouse	Pergudangan	52101
					Cold Storage	Cold Storage	52102
Maritime cargo handling services and Port terminal operations	Operator terminal pelabuhan	Services auxiliary to all modes of transport (H)	Container handling services	7411	Provision of harbor facilities (jetties, buildings, tugs at cargo container terminals, at liquid-bulk terminals, at dry-bulk terminals, and at Roll on-Roll off (Ro-Ro) terminals/	Penyediaan fasilitas pelabuhan (dermaga, gedung, penundaan kapal terminal peti kemas, terminal curah cair, terminal curah kering dan terminal Ro-Ro) /	52221
					Cargo handling (loading and unloading)	Penanganan kargo (bongkar muat)	52240
Air cargo handling services and airport terminal operations	Operator dan layanan terminal bandara	Services auxiliary to all modes of transport (H)	Other cargo handling services	7419	Cargo handling (loading and unloading)	Penanganan kargo (bongkar muat)	52240
					Regulated Agent	*Regulated agent*	n.a.
Airfreight agencies – airline representatives (cargo) Include GSAs and subsidiaries	Agen perjalanan (barang)	Air Transport Services (C)	Selling and Marketing of Air Transport Services	-	General Selling Agent (GSA) of foreign air transport company	Aktivitas agen perjalanan bukan wisata	79112

Sub-sector covered by the study	Sub-sektor (Bahasa Indonesia)	WTO Industry classification	Industry Description	CPC Code	Business sector (Indonesian definition-as defined in DNI	Sektor Jasa (Bahasa Indonesia)	KBLI
Land transport companies	Angkutan darat	Road Transport Services (F)	Freight transportation	7123	Land transport for goods	Angkutan darat untuk barang	4943
					General freight transport	Angkutan bermotor untuk barang umum	49431
					Special freight transport	Angkutan bermotor untuk barang khusus	49432

One of the main observations out of the concordance table is that the Indonesian codification applies to more subcategories compared to the WTO CPC codes. The deep splits of codes may present difficulties during negotiations as multiple KBLI's apply to the negotiation of one CPC. Later chapters will show that various KBLIs may have different levels of foreign equity limitations yet fall under one CPC.

III. Indonesia's commitments to the AEC blueprint and AFAS 9: brief introduction

Free flow of services in the ASEAN region is an important pillar of the ASEAN Economic Community (AEC) Blueprint towards a single market and production base. As indicated in the Blueprint that was signed in 2007, the goal of the AEC is the economic integration among the ASEAN member states (AMS). This would be achieved through liberalization of services sectors which will strengthen the flow of trade and investment in the services sector among ASEAN Member States, and will eventually contribute to overall economic integration in the region.

ASEAN member countries committed to liberalizing service sectors through a series of packages within ASEAN Framework Agreement on Services (AFAS). Liberalization of trade in services was formally started in 1995 through the signing of the ASEAN Framework Agreement on Services (AFAS) during the 5th ASEAN Summit in Bangkok, Thailand, following the signing of the General Agreement on Trade in Services (GATS) of the World Trade Organization (WTO) in 1994. Liberalization of trade in services in ASEAN was intended to expand the depth and scope of liberalization beyond those undertaken under the GATS. Negotiations on trade measures in specific services sectors were conducted and the results were specified in a schedule of commitments under AFAS. ASEAN has so far concluded nine packages of commitments in a wide range of service sectors. The latest package was signed on 27 November 2015 in Makati City, the Philippines. After the signing of AEC Blueprint liberalization of trade in services was based on targets and timelines as stipulated in the AEC Blueprint.

Logistics services sector is among the priority services sectors stated in the AEC Blueprint. Under AFAS, ASEAN members are allowed a "flexibility rule" in deciding which sectors to prioritize. Based on the ASEAN blueprint, all restrictions on this sector were expected to be removed by 2013. Furthermore, to expedite the development of integrated transport services, ASEAN has prepared the Road Map for the Integration of Logistics Services. The Road Map provides a list of actions that ASEAN Member States will pursue to achieve deeper integration of logistics services in ASEAN. The scope of measures cover freight logistics and related activities, including maritime cargo handling services, each mode of transport services, trade and customs facilitation, as well as capacity of logistics service providers. Although the

Road Map has provided the timeline for each activity, it is stipulated that the implementation of the specific measures shall be subject to relevant national laws and regulations.

1. Progress of AEC and Liberalization

At the moment, ASEAN Member States are in the progress of finalizing the 10th package of commitments, which to be concluded by 2017. Indonesia, Myanmar and Vietnam have submitted their initial offers. While Singapore and Thailand have already submitted offers which have met the 10th AFAS threshold. Other AMSs are in the process of submitting the offers but expressed difficulties in meeting the 10th AFAS threshold and propose additional flexibilities. Indonesia and all AMS, except Laos and Philippines, have ratified the Protocol to Implement 8th AFAS package. Moreover, all AMS except the Philippines have completed the respective package of commitments and signed the Protocol to implement the 9th AFAS Package.

An evaluation of the implementation of the 7th and 8th package highlights AMSs's reluctance to liberalize some sectors. The AEC Blueprint has set the target of liberalization of services sectors with a gradual approach in liberalizing the sectors. However, a study by Narjoko (2015) showed that there is only marginal improvement in the depth of services liberalization rate between the 7th package and the 8th package, albeit significant increase in the number of subsectors covered in the 8th package. Furthermore, the study found that many AMSs utilized the AFAS Flexibility Rule to avoid placing a number of sensitive subsectors subject to liberalization commitments.

2. Indonesia's commitment in AFAS 9

Indonesia's commitments under 9th package of AFAS confirms an overall reluctance to opening up sectors to foreign investment, which is reflected in the horizontal commitments on Market Access and National Treatment. Nonetheless, sector-specific commitments show more openness in attracting foreign investment by increasing foreign equity limits. In practice, Indonesia has exceeded several AFAS 9 commitments through the Negative Investment List 2016.

Table 3: AFAS 9: Horizontal commitments applicable to all sectors included in the schedule
The four modes of supply: (1) Cross Border Supply, (2) Consumption Abroad, (3) Commercial Presence, (4) Movement of Natural Persons.

Sector or Subsector	Limitation on Market Access	Limitation on National Treatment
All sectors included in this schedule	(3) Commercial Presence of the foreign service provider(s) may be in the form of joint venture and/or representative office, unless mentioned otherwise. Joint venture should meet the following requirements: (i) should be in the form of Limited Liability Enterprise (Perseroan Terbatas/PT), (ii) not more than 49% of the capital share of the Limited Liability Enterprise (Perseroan Terbatas/PT), may be owned by foreign partner(s).	(3) The Income Tax Law provides that non-resident taxpayers will be subject to withholding tax of 20% if they derive the following income from Indonesian source: (a) Interest (b) Royalties (c) Dividend (d) Fee from service performed in Indonesia The tax rate can be changed due to tax treaty Land Acquisition Undang-Undang Pokok Agraria (Land Law) No. 5 of 1960 stipulates that no foreigners (juridical and

Sector or Subsector	Limitation on Market Access	Limitation on National Treatment
		natural persons) are allowed to own land. However, a joint venture enterprise could hold the right for land use (Hak Guna Usaha) and building rights (Hak Guna Bangunan), and they may rent/lease land and property. Any juridical and natural persons should meet professional qualification requirements.
	(4) Subject to Indonesian Labour and Immigration Laws and Regulations, only directors, managers and technical experts/advisors, unless mentioned otherwise, are allowed to stay for two years and could be extended for a maximum two times subject to two years extension each time. Manager and technical experts (intra corporate transfer) are allowed based on an economic needs test. The entry and temporary stay of business visitor(s) is (are) permitted for a period of 60 days and could be extended maximum for 120 days.	(4) Expatriate Charges Any foreign natural persons supplying services are subject to charges levied by Governments Labour Laws and Regulations. Any expatriate employed by a joint-venture enterprise, representative's office, and/or other types of juridical person and/or an individual services provider must hold a valid working permit issued by the Ministry of Manpower and Transmigration.

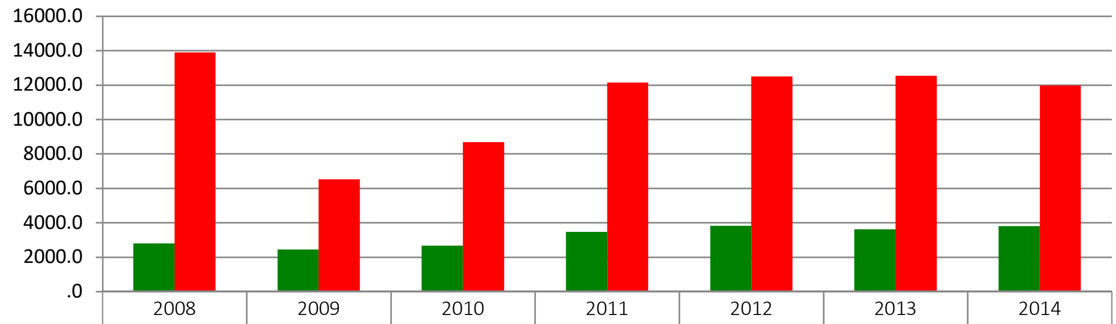
Besides various commitments as part of regional trade agreements, another important element for negotiations is the state of the balance of payment (BoP). The BoP provides an indication whether to negotiate for wider entrance into foreign markets, because the country is already a net exporter of certain services or whether to avoid liberalization to protect against in influx of services and become a net importer of services. The reality is often more robust compared to the BoP. It is important again to reiterate that logistics services are a derivative of trade whereby closing the sector may have a negative impact on the production of tradable commodities. In addition, closing of sectors is mostly done to protect strategic industries such as defense or protect infant industries. As a supporting industry it is debatable whether logistics services are a sector that needs protection.

IV. Balance payment of logistics services and Indonesia's share in trade of logistics services

A negative balance of payment (BoP) in logistics services does not necessarily mean that a country should start exporting services to move to the positive side of the balance sheet. Other factors need to be analyzed, especially in the scope of supporting the development of manufacturing- driven exports.

The BoP is the record of all economic transactions between the residents of a country and the rest of the world in a particular period. The BoP includes services that are exported and services that are imported. Unfortunately, the BoP does not specify logistics services while-services may include; transport services, financial services, communication services and others. The most straightforward approach is to analyze the transport services. Graph 1 presents the trade in transport services between 2008 and 2014.

Figure 13: Indonesia Trade in Transport Services

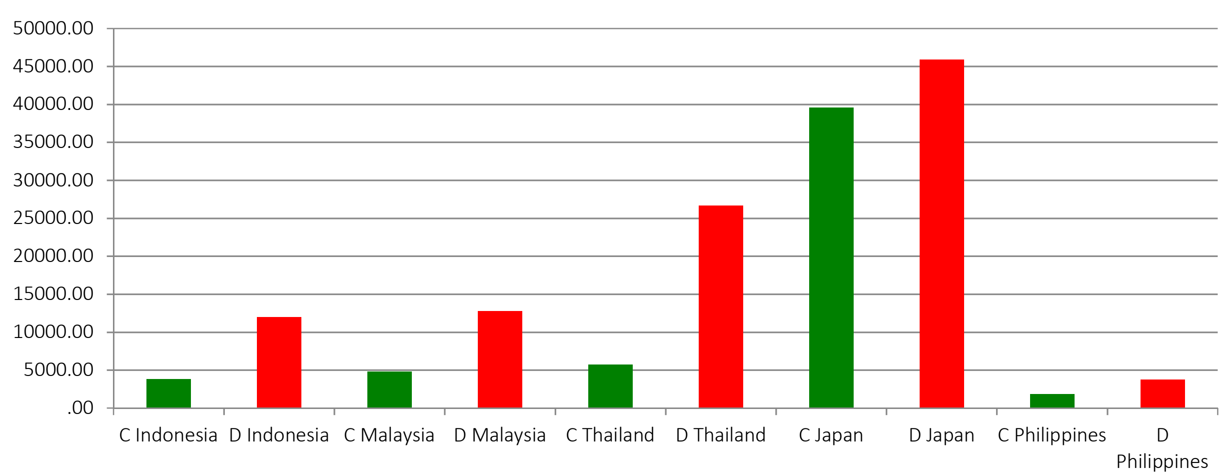


	2008	2009	2010	2011	2012	2013	2014
Transport Credit	2800.228	2438.961	2665.433	3456.163	3822.256	3610.603	3790.961
Transport Debit	13894.625	6522.283	8672.743	12149.30	12500.943	12539.032	11974.508

Figure 13 **indicates that Indonesia runs a significant deficit in the trade of transport services.** Indonesia imports more than three times the value in transport services compared to the country's exports of transport services. Although a deficit can be perceived as negative, the first question is whether it is uncommon in the region.

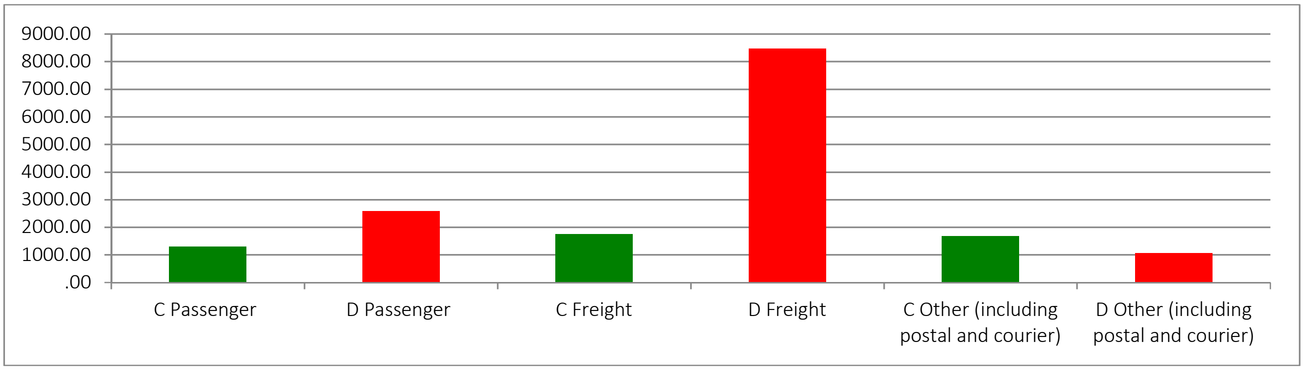
Figure 14 presents the transport debit and credit of four other countries in the region. It shows that neighboring countries such as Malaysia, Thailand and the Philippines also run significant deficits in transport services. Even Japan, globally considered a maritime powerhouse runs a deficit. Another important observation is that Indonesia's overall trade in transport services is small given the size of the economy compared to Malaysia and Thailand whom both trade a larger value of transport services.

Figure 14: Regional Trade in Transport Services



Freight transport services dominate compared to passengers and other components (including post and courier services). Figure 15 shows that freight services are the largest contributor to transport services followed by passenger services. Due to the archipelago nature passenger service mainly consist of airline passengers.

Figure 15: Breakdown of Transport Services



Decline in exports of freight services is linked to global overcapacity. It can be observed in Figure 16 that exports of freight services is declining**.** Freight services covers the costs of movement of goods beyond the customs frontier. Overall declining trade in transport services (debit and credit) can be linked to a global depression in shipping rates due to major overcapacity of the global fleet. Figure 17 shows that based on the Shanghai Containerized Freight Index (SCFI) global freight rates have been volatile and currently only stand at half compared to 2014.

Figure 16: Trade in Freight Services between 2008-2014

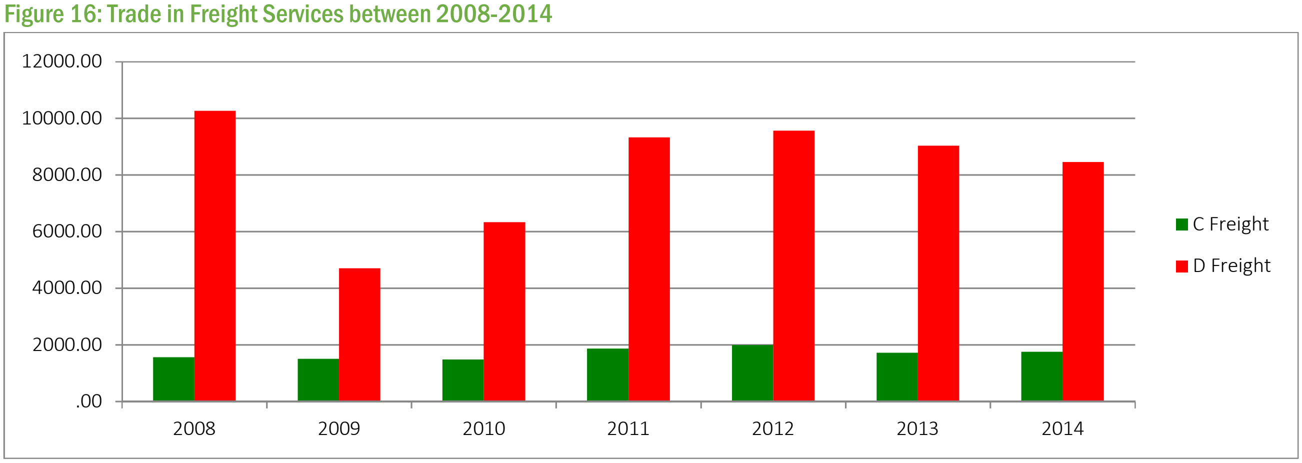
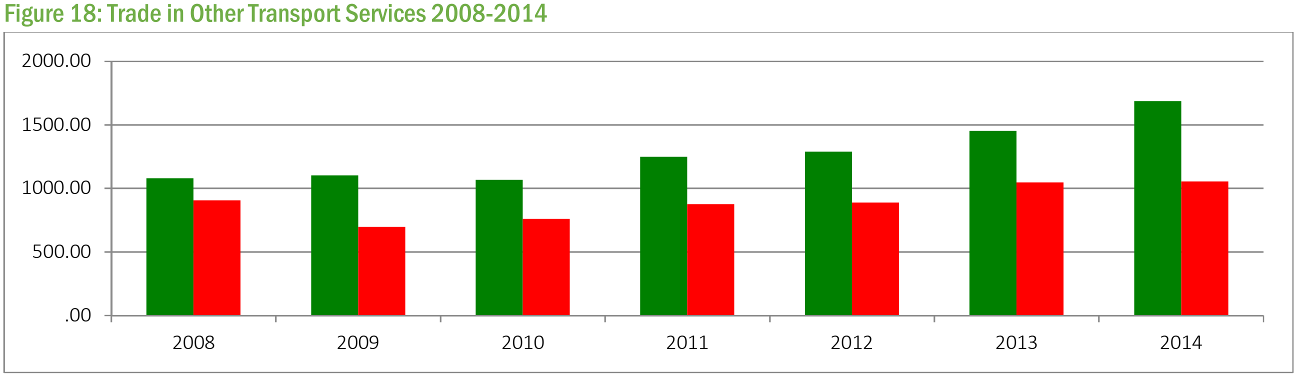


Figure 17: Shanghai Containerized Freight Index (SCFI) 2014-2016

Freight services only covers the costs of the movement of goods beyond the customs frontier. Activities behind the customs frontier can also be traded and these are recorded as other transport services. Figure 18 shows a positive balance of other transport services although small in size compared to freight services. Other transport services include services that are auxiliary to transport and not directly provided for the movement of goods and persons. The category includes cargo handling charges billed separately from freight, storage and warehousing, packing and repackaging, towing not included in freight services, pilotage and navigational aid for carriers, air traffic control, cleaning performed in ports and airports on transport equipment, salvage operations, and agents' fees associated with passenger and freight transport (e.g., freight forwarding and brokerage services).

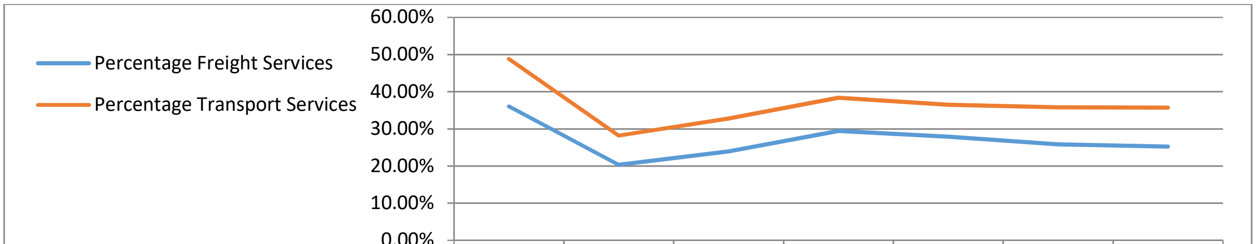
Figure 18: Trade in Other Transport Services 2008-2014



The majority of trade in other transport services is exported. The complication is in how these services are recorded. For example, if an overseas buyer has obtained the goods under an Ex Works (EXW) incoterm all the domestic services up till the customs frontier will be recorded as imported. The World Bank is also conducting a study with ITS Surabaya on the impact of a shift in Inco terms for import and export.[43] Significant deficits are observed in the trade of transport services caused by deficits in freight services and passenger services. Figure 19 displays the overall contribution of freight and other transport services to the overall debit in services.

Figure 19: Contribution of debit in total transport services and freight services to total debit in services

43 The study covers four strategic export products; coal, palm oil, rubber and shrimp



	2008	2009	2010	2011	2012	2013	2014
Percentage Freight Services	36.04%	20.32%	23.91%	29.41%	27.93%	25.80%	25.22%
Percentage Transport Services	48.80%	28.17%	32.78%	38.34%	36.53%	35.81%	35.70%

Note: Passengers and other transport services are part of total transport services.

A deficit in transport services cannot be overcome by investment-unfriendly policies. Since 2010 debit in transport services contributes to about a third of the total in services of which freight services contribute to about a quarter of the total debit in services. A rapid hypothesis would be that if Indonesia could reduce its dependency on foreign freight services it would contribute significantly to reducing the trade in services deficit. Unlike the domestic shipping industry that can be protected through cabotage, international shipping falls outside the control of policy makers due to the freedom of navigation. Freight services, which is dominated by shipping services is precisely the area where the deficit is the highest and trying to close the sector is not an available tool. Currently policy interventions are explored to encourage the use the incoterm of CIF on exports and FOB on imports that would place the responsibility of choice of carrier with the Indonesian traders, although this is no guarantee Indonesian LSP's will be contracted. For example, Indonesia's share in global container shipping services is 0.79% and consisting mainly of providers active in the domestic shipping market and the currently low shipping rates as shown in Figure 17 do not provide strong incentives for Indonesian shipping lines to venture onto the international stage.

V. The development of quality logistics services in Indonesia is constrained by barriers, of which regulations appears to be the most significant

1. Importance of logistics services in country's supply chain performance

Diversity and competition of supply chain "investors", such as freight forwarders and other logistics services providers, enables developing economies to attract a large scope of investments ranging from manufacturing, agribusiness players and energy. (Kopicki, 2009)

2. Indonesia's quality of logistics services: a key driver of freight logistics reform

The development of Logistics Services has been part of Indonesia's agenda to improve the national logistics system and accelerate the country's economic development, since the beginning of 2000.

Despite improvements in Indonesia's overall logistics performance in the past decade, the latest Logistics Performance Index shows a significant reduction of the country's performance with a ranking of 63, compared to 53 in 2014. Most of its neighbors saw the same trend, except China and India.

Table 4: LPI scores 2014 and 2016

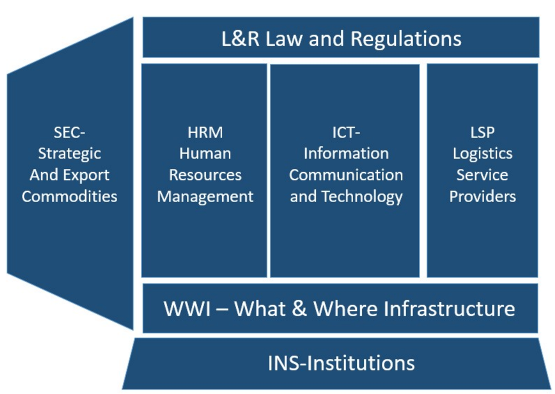
Country	LPI 2014	LPI 2016	Variance
China	28	27	↑
Malaysia	25	32	↓
India	54	35	↑
Thailand	35	45	↓
Indonesia	53	63	↓
Vietnam	48	64	↓
Philippines	57	71	↓

Source: compiled by the authors. (The World Bank, 2016)

a) SISLOGNAS

The Indonesian Logistics Blueprint (SISLOGNAS) issued in 2012 sets Indonesia's strategy to reform national logistics. The three main objectives of the blueprint are (1) to reduce logistics costs to facilitate the competitiveness of export products, (2) to secure the availability of basic and strategic commodities at affordable prices throughout Indonesia, and (3) to prepare the country for better market integration within ASEAN. With an in-depth analysis of Indonesia's national logistics conditions, the SISLOGNAS outlines Indonesia's challenges in regards to the flow of commodities for domestic use and for export, and proposes an action plan. Seven key drivers would support the development of Indonesia's logistics system: (1) focusing on key commodities (strategic and export); (2) strengthening the competitiveness of logistics actors and service providers; (3) upgrading transport infrastructure; (4) implementing law and regulatory reforms; (5) further introducing information and communication technologies; (6) upgrading the quality of human resources and management; and (7) establishing an institutional framework. (The World Bank, March 2011)

Figure 20: SISLOGNAS framework

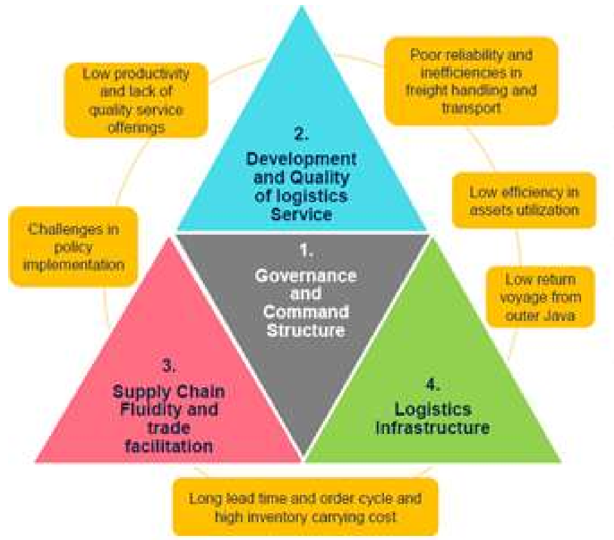


Source: the SISLOGNAS 2012

b) *Regulatory reform proposed by the World Bank*

A recent study by the World Bank (2014-2015) identifies similar challenges and drivers for Indonesia's freight logistics. It also proposes a pragmatic plan of action to address key challenges, one of which is to boost the development and quality of logistics services. The note identified specific actions to "foster development and quality of logistics services".

Figure 21: Framework for Indonesia's logistics reform

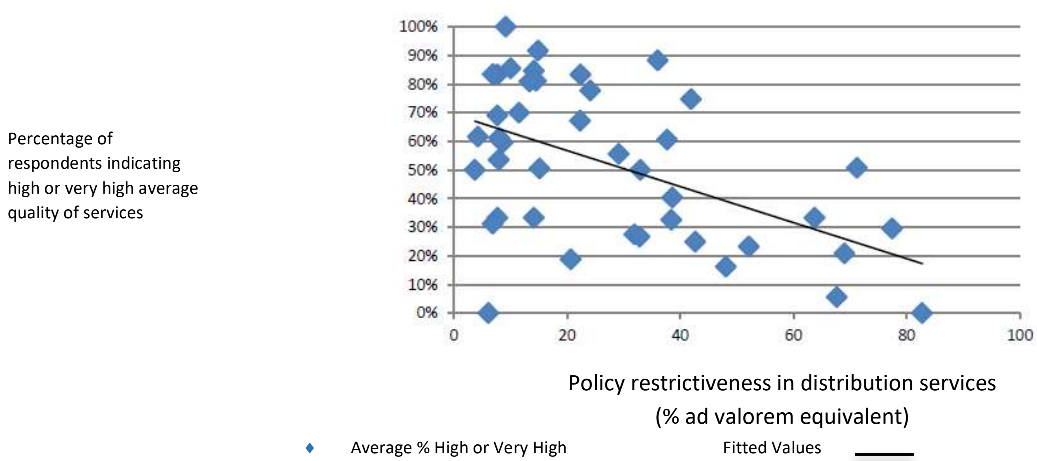


Source: (The World Bank, May 2015)

3. Framework to analyze Indonesia's restrictions in trade logistics

Regulatory and institutional frameworks have been identified as one of the main barriers to logistics service providers' competitiveness (Kunaka, Mustra, & Saez, 2013). Research has revealed a strong correlation between "Restrictive logistics regulations" and the performance of logistics services.

Figure 22: Correlation between policy restrictiveness and quality of services



Source: World Bank 2010 (Kunaka, Mustra, & Saez, 2013)

In order to analyze constraints to Indonesia's 7 logistics services sub-sectors' development, the authors adopt three approaches. First, considering logistics service providers as companies that produce services, this study analyses regulatory constraints using a supply-chain lens. Regulatory barriers to inputs (capital, labor, licensing), production and outputs (price control) are explored. Second, Indonesia's trade commitments in regards to each sub-sector are summarized and compared with applied policies. And finally, international guidance and country examples illustrate international trends.

Chapter 2: Freight Transport Agency services (CPC 748)

This chapter focuses on agency services involved in exports of manufactured goods, as per the scope of the study on logistics services. This chapter will cover:

- Freight forwarding agencies: representatives of cargo owners.
- Maritime shipping agencies: representatives of shipping lines (ship owners).

I. Freight forwarding agencies

1. General facts about the sector

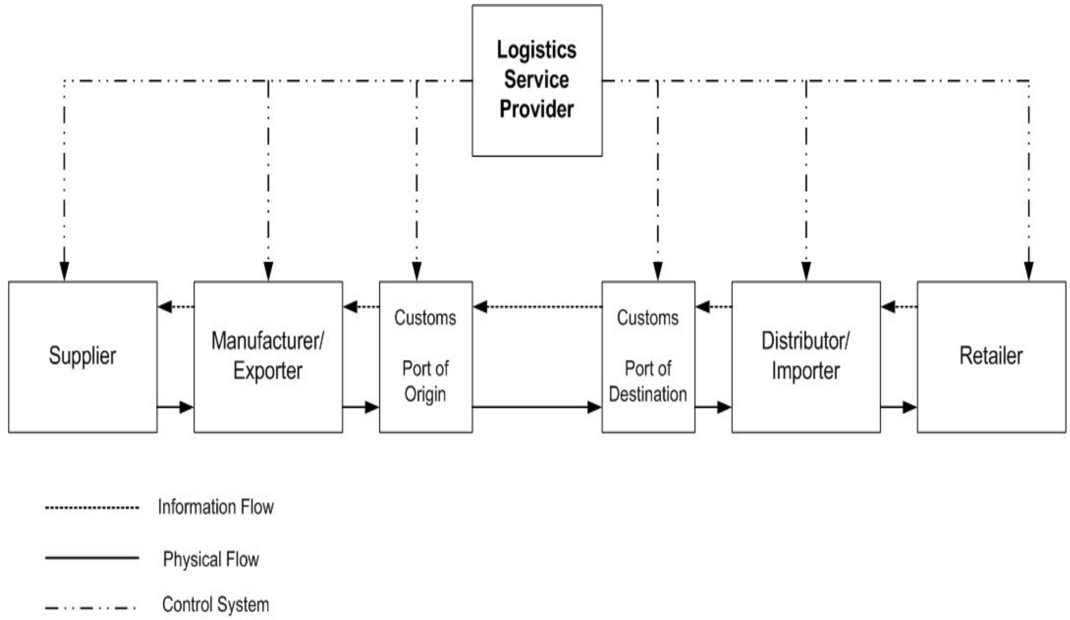
Freight forwarders are involved in planning, implementing, and controlling the flow goods and services in an efficient and effective way, from point of origin to point of destination. Freight forwarders coordinate and monitor several stakeholders, ranging from owners of goods, cargo carriers such as shipping lines and road transport companies, government agencies such as customs authorities. Their mission is to provide "the right product, at the right time, and at the right cost" for their customers (owners of goods) whom they represent. They are non-asset based (*asset-light*), with low capital needs, and their efficiency depends on skilled professionals and efficient processes. Depending on individual strategies, some companies may own assets such as trucks and warehouses, or remain asset-light focusing on supply chain management activities and outsourcing asset-based activities, which is consistent with international practice.

Box 3: Reminder of definitions of freight forwarding

Extract from Chapter 1: matching definitions between Indonesian government agencies and the WTO

	BKPM	Ministry of Transportation	WTO	Comments
Freight forwarding agencies	Organization of shipment and packing of large volumes of goods by multiple modes	All activities required for the implementation of goods shipping and receipt	Transport organization or other services, on behalf of shippers or consignees.	**Match**

Figure 23: The role of logistics service providers



Source: (Banyomong, 2014)

2. Global market (structure, global players) and trends

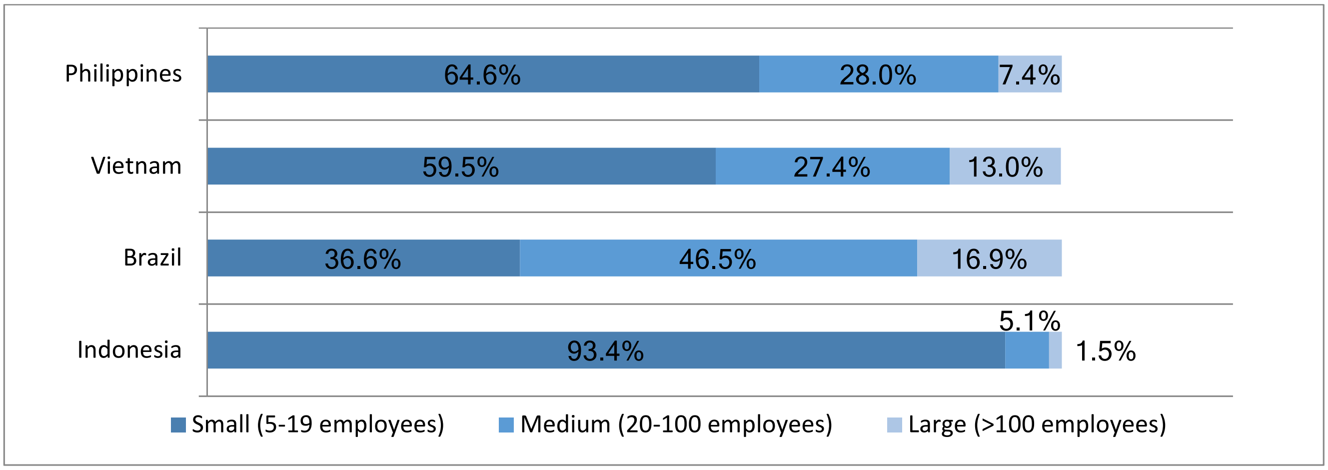
The freight forwarding sector has witnessed fast development, but remains highly diverse ranging from simple freight brokerage and customs brokerage to state-of-the art supply chain management support to manufacturers and traders. Small and medium freight forwarders are needed to support small and medium manufacturers.

The role of freight forwarders has evolved from assisting in booking modes of transport into providing added-value services to their customers such as warehouse and inventory management, purchasing or other services. This is how the concept of third-party logistics provider (3PL) was developed, with owners of goods outsourcing non-core businesses to 3PL (Kopicki, 2009). Within the realm of logistics, the most developed level of freight forwarding services is 4PL. In a nutshell, 3PLs are freight forwarders that offer added-value supply chain services, and 4PL[44] are consultancy firms focused on advising on supply chain management strategies.

The international freight forwarding market is fragmented and heterogenic, ranging from large-scale multinational 3PL to small and medium size enterprises catering relatively small owners of goods. Multinational manufacturers and traders tend to use multinational 3PLs with regional or global presence, and with whom processes are integrated (including information systems). In contrast, small and medium sized owners of goods tend to use relatively small freight forwarders that are more responsive to their needs. In the case of Indonesia there is a wider need for small and medium sized freight forwarders because the size distribution of manufacturing firms shows that the manufacturing industry in Indonesia is dominated by small (5-19 employees) in contrast to other developing countries (Figure 24).

44 This study will not address 4PL as it is under consultancy sectors.

Figure 24: Distribution of manufacturing firms by size



Source: (The World Bank, 2015)

Despite the global trend of integrating supply chain services, with freight forwarders offering more integrated services, large freight forwarders have the capacity (financial and human resources) and are better positioned to offer integrated services to their customers, by acting as third-party logistics providers.

<u>Top 50 Third-Party Logistics Companies</u>

TOP 50 GLOBAL 3PL COMPANIES

2015 RANK	COMPANY	BASE COUNTRY	2014 REVENUE (MILLIONS OF DOLLARS)	2015 REVENUE (MILLIONS OF DOLLARS)	PERCENT GROWTH	COMMENTS
1	DHL LOGISTICS^	Germany	$37,496	$32,740	-12.7%	
2	KUEHNE + NAGEL	Switzerland	$23,279	$21,084	-9.4%	Acquired ReTrans in August 2015.
3	DB SCHENKER LOGISTICS^	Germany	$18,987	$16,444	-13.4%	
4	C.H. ROBINSON WORLDWIDE	USA	$11,937	$11,990	0.4%	Acquired Freightquote.com in January 2015.
5	DSV~	Denmark	$8,651	$7,567	-12.5%	Acquired UTI Worldwide in January 2016.
6	CEVA LOGISTICS	Netherlands	$7,863	$6,959	-11.5%	
7	EXPEDITORS INTERNATIONAL	USA	$6,565	$6,617	0.8%	
8	DACHSER^	Germany	$7,033	$6,116	-13.0%	
9	PANALPINA	France	$7,333	$6,087	-17.0%	
10	XPO LOGISTICS	USA	$2,357	$6,063	157.2%	Acquired Norbert Dentressangle in April 2015 and Con-way in October 2015.
11	UPS SUPPLY CHAIN SOLUTIONS	USA	$5,758	$5,900	2.5%	Acquired Coyote Logistics in July 2015.
12	J.B. HUNT	USA	$5,799	$5,815	0.3%	Excludes truckload revenue.
13	SINOTRANS	China	$5,728	$5,566	-2.8%	Freight forwarding segment revenue.
14	SNCF GEODIS ^	France	$5,847	$5,194	-11.2%	Acquired OHL in August 2015.
15	GEFCO**	France	$5,334	$4,512	-15.4%	Acquired ISJ Global in September 2015.
16	YUSEN LOGISTICS*	Japan	$4,130	$4,013	-2.8%	
17	AGILITY LOGISTICS	Kuwait	$4,305	$3,988	-7.4%	
18	BOLLORÉ^	France	$4,259	$3,828	-10.1%	
19	TOLL GROUP***	Australia	$4,528	$3,718	-17.9%	Acquired by Japan Post in February 2015.
20	UTI WORLDWIDE	USA	$4,182	$3,604	-13.8%	Acquired by DSV in January 2016.
21	HUB GROUP	USA	$3,571	$3,526	-1.3%	
22	RHENUS & CO.^	Germany	$4,081	$3,495	-14.4%	Excludes asset-based and public transportation.
23	HELLMANN WORLDWIDE LOGISTICS^	Germany	$3,981	$3,459	-13.1%	
24	KINTETSU WORLD EXPRESS*	Japan	$2,935	$3,212	9.4%	Acquired APL Logistics in February 2015.
25	DAMCO	Denmark	$3,164	$2,740	-13.4%	
26	PANTOS	South Korea	$2,750	$2,739	-0.4%	LG International acquired 51 percent stake in March 2015.
27	NEOVIA LOGISTICS	USA	$2,673	$2,737	2.4%	
28	FEDEX	USA	$1,502	$2,694	79.4%	Acquired Genco in January 2015.
29	RYDER	USA	$2,461	$2,443	-0.7%	Supply Chain Solutions segment only.
30	SCHNEIDER LOGISTICS	USA	$2,430	$2,426	-0.2%	Dedicated, intermodal and logistics services segments.
31	SAMSUNG SDS LOGISTICS	South Korea	$2,289	$2,334	2.0%	Logistics unit of Samsung SDS; began offering services to external customers in 2015.
32	TQL	USA	$2,180	$2,280	4.6%	
33	NIPPON EXPRESS*	Japan	$2,419	$2,260	-6.6%	
34	BDP INTERNATIONAL	USA	$2,200	$2,253	2.4%	
35	HITACHI TRANSPORT*	Japan	$2,383	$2,146	-9.9%	
36	SANKYU*	Japan	$2,335	$2,133	-8.7%	
37	WINCANTON	United Kingdom	$1,824	$1,758	-3.6%	
38	SWIFT LOGISTICS	USA	$1,637	$1,726	5.4%	Dedicated, intermodal and logistics services segments.
39	TRANSPLACE	USA	$1,400	$1,600	14.3%	Acquired M33 Integrated in September 2015.
40	FIEGE^	Germany	$1,858	$1,538	-17.2%	Acquired FAS Fritsch Air Service in August 2015.
41	ECHO GLOBAL LOGISTICS	USA	$1,173	$1,512	28.9%	Acquired Command Transportation in April 2015 and Xpress Solutions in February 2015.
42	KERRY LOGISTICS	Hong Kong	$1,566	$1,476	-5.7%	International Forwarding segment only; acquired Able Logistics in January 2015.
43	PENSKE LOGISTICS	USA	$1,137	$1,433	26.0%	Acquired Transfreight North America from Mitsui & Co. in May 2015.
44	BLG LOGISTICS^	Germany	$1,593	$1,364	-14.4%	
45	CJ KOREA EXPRESS	South Korea	$1,183	$1,208	2.1%	Global Forwarding Segment only.
46	NFI INDUSTRIES	USA	$1,163	$1,200	3.2%	
47	LOGWIN^	Luxembourg	$1,499	$1,175	-21.6%	
48	WERNER	USA	$1,177	$1,172	-0.4%	Dedicated and value-added services.
49	MAINFREIGHT****	New Zealand	$1,189	$1,119	-5.9%	
50	YAMATO-BIZ LOGISTICS*	Japan	$1,046	$1,018	-2.7%	
	TOP 50 TOTAL		$244,170	$229,981	-5.8%	

*Revenue negatively impacted by 12.6 percent decline in Japanese yen against U.S. dollar.
**Revenue negatively impacted by 37.1 percent decline in Russian ruble against U.S. dollar.
***Revenue negatively impacted by 16.8 percent decline in Australian dollar against U.S. dollar.
****Revenue negatively impacted by 15.9 percent decline in New Zealand dollar against U.S. dollar.
^Revenue negatively impacted by 16.4 percent decline in euro against U.S. dollar.
~Revenue negatively impacted by 16.5 percent decline in Danish krone against U.S. dollar.

Company revenues are primarily from non-asset third-party logistics.
Source: Company reports, SJ Consulting estimates

Prepared by SJ Consulting Group

Source: JOC[45]

45 http://www.joc.com/special-topics/top-50-3pls

3. Market structure/dynamics in Indonesia

Number of firms, Level of industry integration, Market share

Indonesia's freight forwarding sector is similar to the global trend in its diversity, and a dominant part of small and medium players. According to ALFI, the Indonesian Association of Freight Forwarders, there are 3.207 freight forwarders registered.[46] However, it is unclear whether these companies act as freight forwarders, trucking companies, warehousing providers, or other types of services. ALFI uses a basic classification as local (customs clearance), domestic and international[47]. The obstacle in Indonesia is again the data gap. Freight forwarding companies in Indonesia are mostly small to medium-sized companies, and non-asset based (as in other ASEAN countries). For example, in Jakarta, 87% of ALFI members are small and medium enterprises (SME), and only 13% (208 companies) are classified as large. The market share is unavailable at the time of the study. But based on discussions with freight forwarders, international freight is dominated by large freight forwarding companies, especially as such sector requires having a network of international offices, whereas the small and medium sized firms focus on specific activities such as domestic freight, customs clearance, trucking and in some cases on special cargo.[48] A World Bank study on freight forwarding[49] (The World Bank, May 2015) revealed that freight forwarders engage in other logistics activities beyond freight forwarding.

Expenses and Revenues

Traditional freight forwarding activities represent the largest shares of freight forwarders' revenues. However, it is unclear which activity is the most profitable. Below graph highlights the revenue structure of freight forwarders that participated to the survey.

The expense side, is dominated by the same activities in addition to fixed costs related to overheads. Most freight forwarders acts as traders of services, receiving service orders from customers and sourcing such services from suppliers. Therefore, a large share of their expenses is dedicated to paying for services.

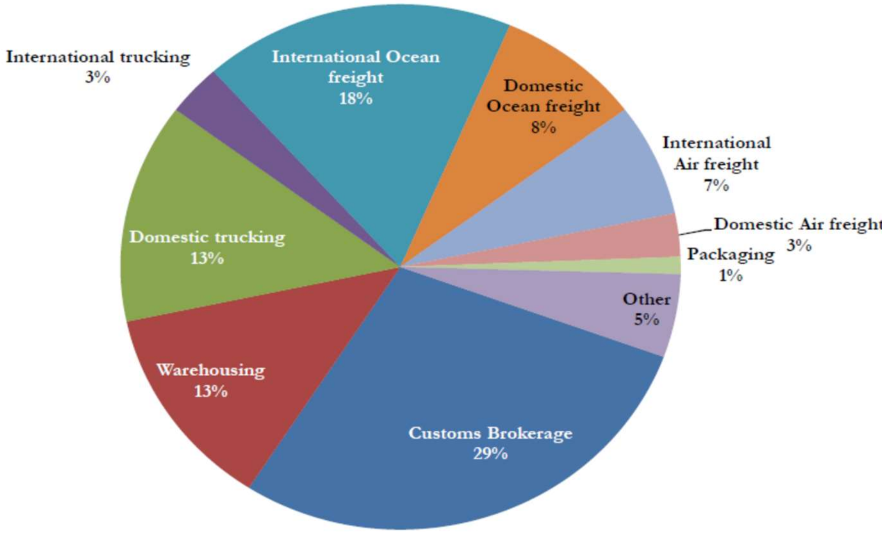
46 A World Bank scoping survey, prior to a study on freight forwarders, revealed that many ALFI members were no longer active, and therefore ALFI membership does not reflect the level of companies' activity.

47 Interview with ALFI board members on 14 April 2016.

48 A freight forwarding survey in Makassar (2014) by the World Bank revealed that most freight forwarders were actually trucking companies, due to a regulatory requirement by the port that all trucking companies entering the port should be ALFI members.

49 The analysis of the freight forwarding survey was performed by Ruth Banyomong.

Figure 25: Revenue Generation of freight forwarders in Indonesia



Source: Freight Forwarder Survey (The World Bank, May 2015)

Customers of freight forwarding agencies in Indonesia

Customers of freight forwarders are all companies in need of moving or storing goods, such as traders and manufacturers, agri-business, and distributors. Given the fierce competition between freight forwarders in Indonesia, especially in terms of pricing, customers are perceived to have a high bargaining power. However, if other considerations are more important than price, especially for specific services such as oversized cargo, a limited number of service providers leads to a lower bargaining power of customers.

Suppliers of freight forwarding agencies in Indonesia

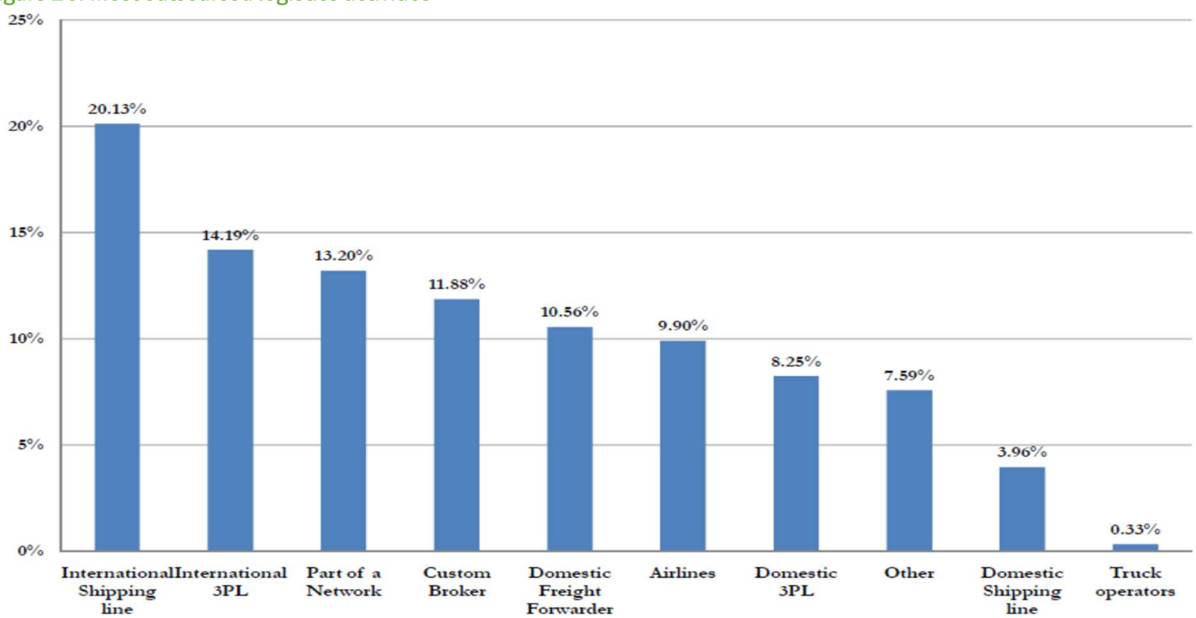
Freight forwarders need to have long-term relationships with providers for price, quality and financial sustainability (as long term suppliers would give longer payment terms vs. short term suppliers that tend to request advance payments). The table below provides a list of key suppliers, and the tendency to have long-term contractual relations. Transactions requiring mobilization of large amounts of funds, such as airfreight, international ocean freight and customs brokerage are more likely to push freight forwarders to have long term relationship, which grants payment terms.

Table 5: Long Term Contractual Relationships

	Cikarang	Jakarta	Semarang	Surabaya	Medan
Part of a Network	3.70%	5.56%	6.82%	1.85%	0.00%
International Shipping line	14.29%	12.96%	15.91%	14.81%	20.69%
Domestic Shipping line	9.52%	12.96%	18.18%	18.52%	21.14%
Domestic Freight Forwarder	4.76%	6.48%	9.09%	9.26%	3.45%
International Freight Forwarder	11.90%	3.70%	6.82%	1.85%	3.45%
Truck operators	7.14%	4.63%	3.70%	9.26%	3.45%
Domestic 3PL	9.52%	5.56%	2.27%	0.00%	3.45%
International 3PL	9.52%	5.56%	2.27%	3.70%	3.45%
Airlines	14.29%	20.37%	22.73%	24.07%	13.79%
Custom Broker	9.52%	14.81%	6.82%	16.67%	24.14%
Other	7.14%	7.41%	6.82%	0.00%	0.00%

Source: Freight Forwarder Survey by Ruth Banyomong (The World Bank, May 2015)

Figure 26: Most outsourced logistics activities



Source: Freight Forwarder Survey by Ruth Banyomong (The World Bank, May 2015)

Figure 27: A competitive analysis of freight forwarders in Indonesia. Porter's five forces

Source: By the authors

4. Performance of Indonesia's service providers/ competitiveness

Indonesian freight forwarders' performance remains below global benchmarks (Survey on freight forwarders (The World Bank, May 2015)**).** Compared to neighboring Thailand, it is well performing in terms of damage rate with 3.54% rate compared to 5% in Thailand. However, it is underperforming in regards to two key performance indicators: (1) Delivery In Full and On Time (DIFOT) which reflects reliability of logistics service providers in delivery cargo in full, with 13.40% of goods not delivered in full and on time; and (2) Cash Conversion Cycle (C2C) that indicates that freight forwarders need to pay service providers 15.84 days in advance before receiving payments from their customers, which puts a lot of pressure on freight forwarders' financial situation.

Table 6: Comparison of logistics performance

Key Performance	Indonesia	Thailand	Global Benchmark
Delivery In Full and On Time (DIFOT)	82.60%	86.60%	95.00%
Damage rate	3.54%	5.00%	1.00%
Cash Conversion Cycle (C2C)	15.84 days	13 days	1 day

Source: Freight Forwarder Survey 2014 (The World Bank, May 2015)

5. National Regulatory Framework

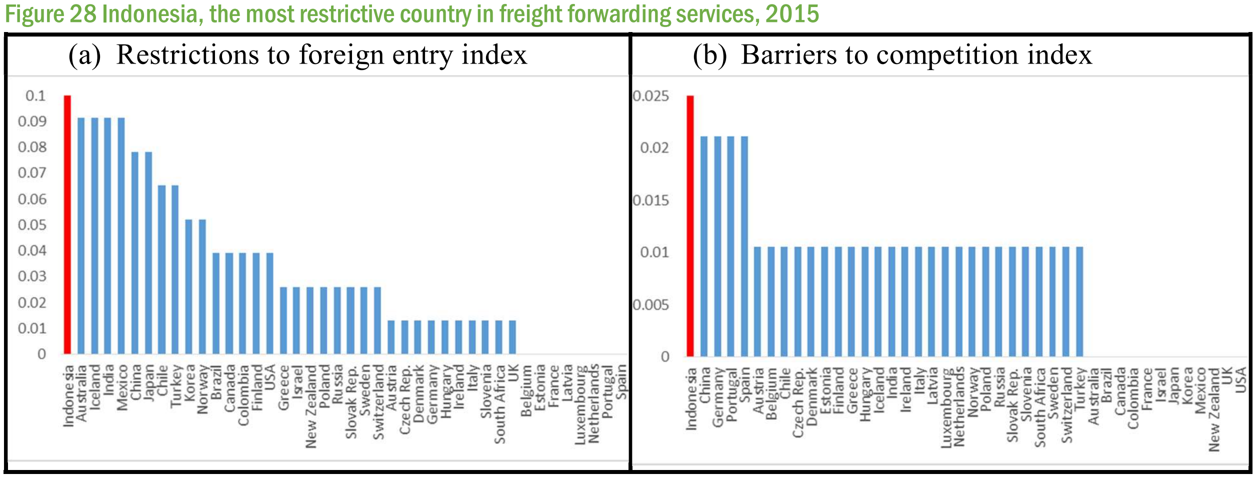
Red tape and market access restrictions prevent the development of integrated logistics service providers. In 2015, Indonesia ranked as the most restrictive country in regards to freight forwarding services.

A World Bank study on Reducing Logistics Costs in Indonesia[50] diagnosed that several barriers prevent the development of quality freight forwarders. In addition to the fact that freight forwarding agencies are influenced by regulations applicable to other logistics sectors, key legislations directly regulating freight forwarding agencies include:

- The Presidential Regulation No. 44/2016 about the list of business fields that are closed to investment and business fields that are conditionally open for investment (DNI 2016). *Peraturan Presiden Republik Indonesia Nomor 44 tahun 2016 tentang Daftar Bidang Usaha Yang Tertutup Dan Didang Usaha Yang Terbuka Dengan Persyaratan Di Bidang Penamanan Modal.*
- The Ministry of Transportation regulation No. PM 74/2015 on Freight Forwarding and its revisions 78 & 146 of 2015, and 12 of 2016. *Peraturan Menteri Perhubungan Republik Indonesia nomor PM 74 tahun 2015 tentang Penyelenggaraan dan Pengusahaan Jasa Pengurusan Transportasi, dan perubahan 78 tahun 2015, 146 tahun 2015 dan 12 tahun 2016.*
- Bank Indonesia Regulation Number 17/3 / PBI / 2015 on the Obligations Penggynaan Rupiah On the territory of the Republic of Indonesia. *Peraturan Bank Indonesia nomor 17/3/PBI/2015 tentang Kewajiban Penggunaan Rupiah Di Wilayah Negara Kesatuan Republik Indonesia*

The following paragraphs address regulatory barriers using a supply chain process, with freight forwarding firms considered as service manufacturers, and which therefore need input, production, and output. Regulations will also be classified using the 4 modes of supply.

Figure 28 Indonesia, the most restrictive country in freight forwarding services, 2015



Source: OECD Services Trade Restrictiveness Index (STRI) Database

a) Supply chain process: Input, Production, Output

Input: Barriers in employing factors of production (capital, labor, licensing)

Capital

Limits to foreign equity would not only affect new entrants but also incumbent companies wishing to engage into additional logistics activities that are subjects to other equity threshold. Indonesia recently increased the foreign equity requirement to attract more international investment. Since the issuing of the Negative Investment List in 2007 (DNI 2007), foreign equity in freight forwarding activities has been limited to a maximum ownership of 49% of company shares, except for incumbent companies that are

50 (The World Bank, May 2015)

protected by a grand-father clause that protects equity of incumbent foreign equity companies. However, in cases the latter planned to provide additional services such as warehousing, they need to set up new companies as the foreign equity limits are different for freight forwarding and warehousing. Such issue is perceived as a barrier to the development of 3PLs in Indonesia. Recently, the 2016 DNI 2016 sets the same equity limit to both freight forwarding and warehousing licenses (67%), companies wishing to enter the 3PL market can combine both activities. For incumbent companies with foreign investment before 2007 there have been cases where upon license renewal the issue of foreign ownership has been raised.

Labor

Recent staff requirements were added to freight forwarders' already existing barriers to employ labor that are the same as for all other sectors in Indonesia. The Ministry of Transport Regulation PM 74/2015 and its revisions' administrative requirements include the obligation to employ Indonesian citizens with university diplomas, vocational training (D III) or IATA diploma in one of the fields of logistics, such as maritime shipping, air transportation, or trucking. Such conditions aim at upgrading the level of competency of freight forwarders, and in line with international guidance. However, it is only implementable once the country has a large pool of university or IATA certified logistics expert.

Furthermore, the Indonesian legal framework is highly protective of workers and creates barriers to company's flexible hiring policies, especially in regards to worker termination (even in cases of serious infringement of company policy), non-permanent worker agreements, and other. In cases where the domestic labor market does not provide necessary qualified people, barriers prevent from hiring foreign employees. For a company to employ foreign workers, first a Foreigner Workers Recruitment Plan (RPTKA) needs to be endorsed by the MOMT, renewable every 5 years. Once endorsed, a company can apply for foreign workers recruitment permit (ILO & IFC, 2012).[51] Such legislations are applied to most sectors in Indonesia.

Licensing

The licensing process has been improving, especially for new foreign equity investors. Nonetheless, Red tape, national treatment, and market access restrictions create uncertainties for incumbent and potential new entrants.

Freight forwarding licensing system has been revised from set conditions in the Ministry of Transport regulation PM 10/1988. In 2015 and early 2016[52], the Ministry of Transport issued a new freight forwarding regulation and its revisions that clarify the scope of activities performed by freight forwarders and set requirements to local and foreign equity firms, in terms of capital and other administrative areas.

On the one hand, this new legislation carries beneficial provisions for the development of the freight forwarding sector including *inter-alia* that (1) it recognizes the key role of freight forwarders, not only to arrange forwarding of goods but also all other activities third-party logistics providers (3PL) perform on

51 Izin Memperkerjakan Tenaga Kerja Asing – IMTA, renewable yearly. Relevant regulation: Manpower Act No. 13/2003 (Undang-undang Ketenagakerjaan No. 13 Tahun 2003, Art. 42-48); MOMT Decree No. 40 of 2012 on prohibited positions for foreign workers (Keputusan Menteri Tenaga Kerja dan Transmigrasi Republik Indonesia nomor 40 tahun 2012 tentang Jabatan-Jabatan Tertentu Yang Dilarang Diduduki Tenaga Kerja Asing); MOMT Regulation No. PER.02/MEN/III/2008 on foreign worker employment (Peraturan menteri tenaga kerja dan transmigrasi republik Indonesia tentang Tata Cara Penggunaan Tenaga Kerja Asing).

52 Ministry of Transport regulation PM 74 of 2015 and its revisions 78 & 146 of 2015 and 12 of 2016

behalf of their customers, and (2) that the Ministry of transport [53] delegated licensing of newly established foreign equity companies to BKPM[54], whereas newly established local companies and license renewal for all companies remain under sub-national government at provincial level. This amendment allows foreign investors to enjoy the benefits of BKPM's one-stop-service program to support investors.

On the other hand, the legislation includes red tape, market access and national treatment restrictions. Besides high capital requirements and the need to be "sponsored" by the Indonesian Freight Forwarding Association, the new regulations on freight forwarding licenses apply discriminative rules against foreign equity joint-ventures (JV), in terms of (1) capital requirements of USD 10 Million for foreign JV[55], 5 times higher than for domestic companies (USD 1.8 Million) that benefit from an exemption option, (2) 25% of capital amount to be deposited (3) restrictions for foreign JV to 5 airports and 4 seaports[56], with obligation to close unauthorized locations, and (4) breaches the grandfather clause on minimum capital requirement which raises concerns about the validity of that clause on foreign equity share[57].

Box 4: Why would a combination of DNI and the freight forwarding license regulations harm competition within the logistics industry, and prevent freight forwarding services' upgrade in Indonesia?

For a joint venture to be approved, the total capital requirement is USD 10 million, with USD 2.5 million of paid up capital. This translates into a domestic partner paying up USD 825,000 (33%) and a foreign partner with USD 1.675 million (67%). This raises the question of how many domestic freight-forwarding companies in Indonesia can afford to partner with a foreign investor. Most domestic freight forwarding companies are small and medium sized, that cannot afford to pay even 25% (USD 450,000) of the minimum capital required in the regulations PM 74/2015.[1] Therefore the current framework would reduce competition because it would not benefit the incumbent majority of domestic freight forwarding (SME), and makes foreign player market entry challenging.

In addition to this license, freight forwarders need to obtain a license for each additional activity that is not included in the initial license, such as warehouse operations and transport operations (for trucking service). This silo approach in licensing hampers freight forwarders to vertically integrate into other logistics services as part of the 3PL philosophy.

Production: Barriers in producing services

Statutory requirements at several levels are perceived to "handicap" for freight forwarders' operations.

53 Freight forwarding is regulated by the directorate General of Sea Transport.

54 Ministry of Transport regulation No. PM 146 of 2016, revision of PM 74 and 78 of 2016.

55 Under previous regulation PM 10/1988, the minimum capital requirement for all freight forwarding companies was USD 125,000. New requirement is 10 times higher than in China for foreign investment in freight forwarding. Other countries apply non-discriminatory minimum capital requirement, such as Bangladesh with USD 4,286 and Thailand USD 65,833. (United Nations ESCAP, 2011)

56 Airports: Kuala Namu, Soekarno Hatta, Juanda, Hasanuddin, I Gusti Ngurah Rai.

Main ports of Belawan, Tanjung Priok, Tanjung Perak, and Makassar. (PM 74/2015, art. 8, para 3)

57 A large number of foreign freight forwarders in Indonesia were already established early 2000s, with 95% foreign equity shares. They are protected by the grandfather clause in the latest DNI 2016.

Inability to renew licenses is becoming a serious bottleneck to freight forwarders' to produce their services. The regulations' provision that non-compliant companies will not be able to renew their licenses creates the risk of causing "market exit" for freight forwarders, thus reducing competition and potentially the quality of services. Anecdotal evidence shows that some sub-national governments do not yet comply with the latest regulation on freight forwarding. Therefore, licensing for both local and foreign equity companies (renewal) was reported to be problematic due to conflicting requirements between the ministerial regulation and sub-national governments.

Other regulatory barriers to production include taxation regulations[58]. Freight forwarders face tax-related issues that appear to put pressure on their cash flow, generate additional administrative workload, and in some cases may cause financial losses, and impact competitiveness. These issues are relevant to all freight forwarders in Indonesia (withholding of income tax), with two being specific to those handling international logistics services. Such constraints are applicable to all companies in Indonesia, however weight more on traders.[59] Furthermore, availability and quality of services sourced by freight forwarders is constrained by relevant regulations applying to each service provider[60], such as shipping lines, airlines, airport and port terminal operators, trucking companies, warehouse operators, and customs brokers. The slow integration of the National Customs System is also barrier to freight forwarding service production, as it prevents the implementation of efficient transshipment procedures and Just-In-Time logistics.[61]

Output: barriers in selling services or generating profitability in selling services

No limit to outputs are applicable to freight forwarders in Indonesia.

b) Indonesia's commitment in AEC, AFAS compared to applied policies

Market Access and National Treatment restrictions off-set the impact of increasing foreign equity limits for freight forwarding agencies. The recent DNI 2016 exceeded AFAS 9 commitments and got closer to the AEC blueprint of 70% foreign equity limit for Freight Transport agencies. Freight forwarding companies can now have 67% of foreign equity. Nonetheless, high capital requirements act as a Market Access barrier and discriminative provisions against foreign investment such as higher capital requirement and limits on operating locations enforce National Treatment restrictions.

Table 7: Comparison of Indonesia's applied policy with the AEC goals and AFAS commitments (Freight forwarding agencies)

GOALS OF AEC	AFAS 9	APPLIED POLICY
	(1) None (MA/NT)	(1) No regulation
	(2) None (MA/NT)	(2) No regulation
AEC Blueprint: **not less than 49% by 2008, 51% by 2010, and 70% by 2013 for logistics**	(3) Joint venture company with foreign equity participation up to 49 per cent (MA)	(3) Joint venture company with foreign equity participation up to 67 per cent The new regulations PM 74 & 78 2015

58 Ministry of Finance Regulation no. 141/PMK.03/2015 about the other companies, as referred to in the Law No 7/1983 on taxation. Peraturan Menteri Keunangan Republik Indonesia nomor 141/PMK.03/2015 tentang Jenis Jasa Lain Sebagaimana dimaksud Dalam Pasal 23 Ayat (1) Huruf C Angka Undang-Undang nomor 7 tahun 1983 tentang Pajak Penghasilan Sebagaimana Telah Beberapa Kali Diubah Terakhir Dengan Undang-Undang nomor 36 tahu 2008

59 Traders play a dual role in regards to income tax as tax payer (customers withhold a trader's tax) and collector (trader withholds suppliers' taxes). A combination of business practices and red tape lead to a part of their cash trapped either by their suppliers, by M. of Finance, or by their customers.

60 The higher the offer through competition, the higher the potential to source quality services at competitive price. Any regulation preventing market entry affects competition and therefore affects service availability.

61 Although not directly relevant to this study that is focused on export manufacturing from Java, the authors preferred to mention it for information only.

GOALS OF AEC	AFAS 9	APPLIED POLICY
services **It is stipulated in the Roadmap for the integration of logistics services: "member country shall endeavor to achieve substantial liberalization of logistics services in Freight transport agency services (CPC 748) and other auxiliary services by 2013**	(3) As indicated in the horizontal section (NT)	on freight forwarding licenses apply discriminative rules against foreign equity joint-ventures (JV), in terms of (1) capital requirements of USD 10 Million for foreign JV, almost 5 times higher than for domestic companies (USD 1.8 Million) that benefit from an exemption option, (2) 25% of capital amount to be reserved (3) restrictions for foreign JV to 5 locations, with obligation to close unauthorized ones, and (4) breaches the grandfather clause on minimum capital requirement which raises fear about the validity of that clause on foreign equity share. Name of license to obtain: Freight Forwarder Services License (SIUPJPT) to be issued by provincial governor for domestic investment company (PMDN); and Investment Coordinating Board (BKPM) for foreign investment company (PMA)
		(4) Other requirement to obtain SIUPJPT is having an expert staff in shipping/maritime/airline/transportation/ IATA Diploma/FIATA Diploma (diploma degree), and in logistics in Customs/Ports (bachelor degree).

6. Learnings from international experiences

a) International guidance

International practice provides examples of lower capital requirements, no licensing requirements, and incentives to upgrade labor force competencies. Based on examples available at the time of the study, Indonesia has one of the highest capital requirements for domestic and international freight forwarders in the world.

b) Country examples

Several countries adopted "*light-handed regulatory*" environment (Kopicki, 2009) **and have removed restrictions on FDI.** For example, in 2014 Vietnam removed restrictions on all auxiliary services to transport that include freight forwarding, to comply as part of their WTO commitments. China recently removed the capital requirement for Foreign Equity Investment for 12 business sectors, including freight forwarding. In regards to licensing, most countries do not require licenses for companies to operate as freight forwarders. Instead, the industry self-regulates (United Nations ESCAP, 2011) . Furthermore, as logistics is driven by skilled human capital, the logistics industry benefits from an upgrade of freight forwarding professionals through professional certification (FIATA). Singapore put supply-chain and logistics as a top priority field and has been providing incentives to companies that train their staff.

7. Freight forwarding agencies in a nutshell

Indonesia's definition of freight forwarding activities is in line with WTO, acting as freight transport services. In a view of the current regulatory bottlenecks to freight forwarders development in Indonesia, freight forwarding may be perceived an asset-based, capital-intensive business. However, in the facts, it is a freight agency business with the overall responsibility to optimize cargo flows, time and costs for owners of goods.

a) Challenges

Based on the latest DNI 2016 where foreign equity limit for freight forwarders has been increased from 49% to 67%, the Indonesian government is getting closer to the AEC blueprint plan to allow 70%. However, line ministry regulations' requirements and policy implementation at sub-national level offset the positive impact of an increase of foreign equity limits.

The most stringent bottlenecks are high capital requirements, a market entry barrier to both domestic and joint-venture companies. When setting even higher capital requirements to international joint-ventures and limits on the number of locations to operate, this becomes a Market Access restriction. Beyond looking at multinational and large domestic freight forwarders, such barriers threaten mostly the development of small and medium freight forwarders that are needed to cater the need of a large pool of small and medium manufacturers in Indonesia[62].

b) Opportunities

Best practice shows *light-handed* regulatory practices and giving incentive to companies' development of skilled professionals are key success factors to develop the freight forwarding sector. Even countries known for rigorous market access restrictions have recently removed either capital requirements (China in 2015) or foreign equity limits (Vietnam in 2014).

From the skills side, ALFI, the Indonesian freight forwarder association, in cooperation with FIATA, offers vocational educational programs to upgrade skills of logistics professionals. ALFI Institute is approved by FIATA to provide training modules, such as FIATA diploma in freight forwarding. [63]

62 Country data: 93.4% of Indonesian manufacturers are small companies.

63 http://www.ilfa.or.id/index.php?pg=training&id=7

II. Maritime shipping agencies

1. General facts about the sector

International maritime shipping agencies represent shipping lines at a port of call. Based on the UNCTAD definition, shipping agents are "*any person (natural or legal) engaged on behalf of the owners, charterer or operator of a ship or of the owner of cargo, in providing shipping services*". [64] They are critical part of maritime shipping efficiency and security (United Nations Conference on Trade and Development, 1988).[65]

Box 5: Reminder of definitions of maritime shipping agencies: Maritime shipping agencies: a business sub-sector, where there is not a consensus yet.

	BKPM	Ministry of Transportation	WTO	Comments
Maritime Shipping Agency	There is no such category by BKPM. It is likely that it is still considered as part of sea transport companies' activity. Foreign equity limit: 49%	A business entity specifically established for shipping agency activities. Foreign equity limit: 0%	A part of maritime auxiliary services	No match

A maritime shipping agent act as an intermediary between a shipping line and, (1) port stakeholders by arranging all documentation and payments from the ship's arrival to departure, this includes activities such vessel services (towage, pilotage), supply, loading/unloading, and (2) customers, by exchanging necessary documentation and payments. Shipping agents may also offer on-ward services to owners of goods, therefore acting as a freight forwarder to arrange cargo movement between a port and final

64 In its minimum standard requirements for shipping agencies, sets (1) professional qualifications of agents with combined business ethics, education and experience, (2) financial qualifications include availability of financial resources and a liability insurance, and (3) a strict code of professional conduct that applies care, efficiency and due diligence in accomplishing agency duties.

65 Shipping agents contribute to shipping security against maritime fraud, including smuggling and piracy.

destination. Depending on the type of agreement between a ship owner and its agent, some shipping agents would also promote ship-owners maritime transport services to potential customers. All these responsibilities require high reliability, timeliness and cost efficiency.

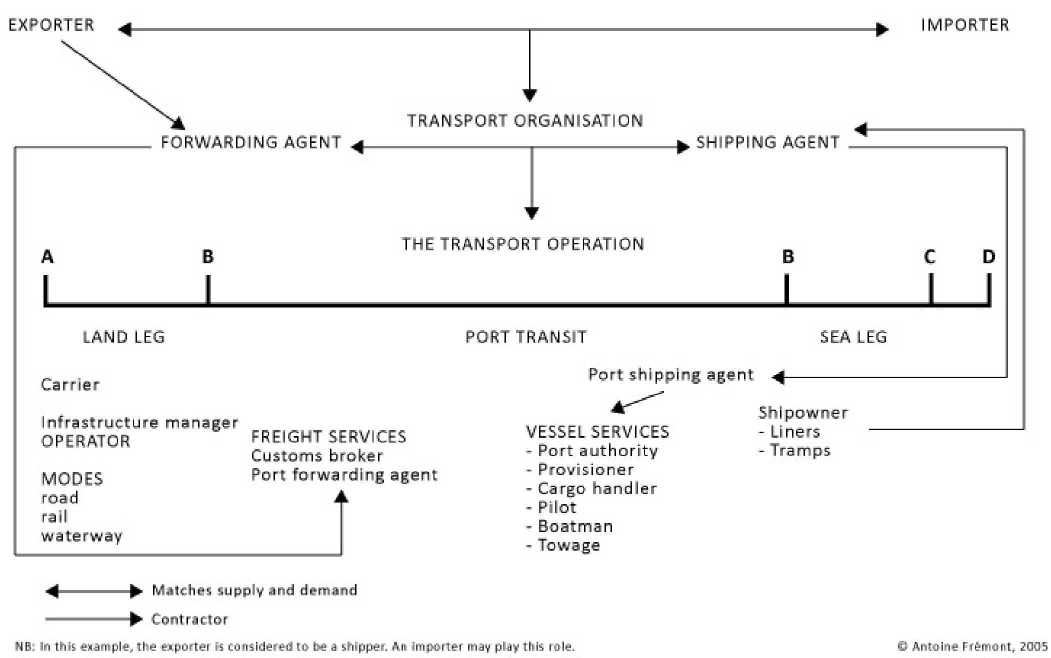
2. Global market (structure, global players) and trends

The market of independent shipping agencies is highly fragmented. Traditionally shipping agents are family-owned small companies that have been in the business for generation. These agents were usually active in only one port. In large international ports, shipping agency services are usually provided by 3 types of agents, (1) in-house agents with shipping lines setting up wholly-owned agencies in ports of interest, possible in most countries in the world[66] except cases such as Indonesia and Thailand[67], (2) partly in-house agents, as joint-venture with local shipping lines or shipping agencies in case of restrictive regulation or because of a shipping-line choice, and (3) third-party (outsourced) as independent shipping agencies, that are either individual companies or belonging to an international network. Advantages and disadvantages of in-house, joint-ventures and outsourcing are well documented by international literature.

3. Market structure/dynamics

There is a data availability gap in regards to the market structure of shipping agents in Indonesia. Interviews with international shipping agents, information from the Ministry of Transportation[68] and desktop research allowed the authors to draw the following picture.

Figure 29: Basic flow of waterborne transport organisation



Source: OECD/ITF Joint Transport Research Centre Discussion Paper, No. 2009-1

66 Vietnam and China recently opened up their markets to wholly-owned international shipping agencies.

67 This is illustrated by Happag-Lloyd's annual report 2014, that highlights the company's participation in its international subsidiaries.

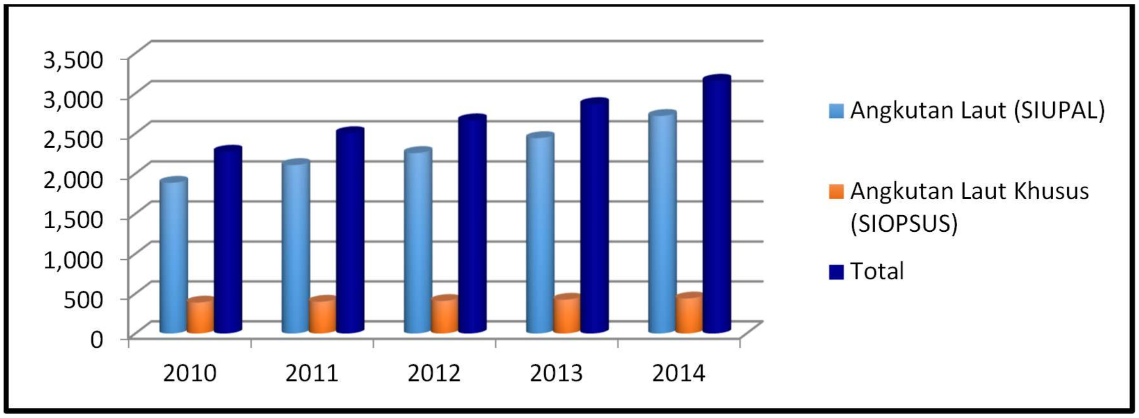
68 The Ministry of Transportation's Information and Documentation Management office. Pejabat Pengelola Informasi Dan Dokumentasi (PPID). http://ppid.dephub.go.id/

Shipping agents in Indonesia

Number of firms, Level of industry integration, Market share

The number of shipping agents in Indonesia is estimated at 220 and the number of companies holding a shipping license SIUPAL is 2,821 as of December 2015.[69] Based on Indonesian legislation, all companies holding SIUPAL are allowed to act as shipping agency for domestic and international shipping lines. Therefore, the 220 agents are included in the 2,821 SIUPAL holders. For special sea transportation another license called SIOPSUS[70] is needed. Below graph highlights the increase of SIUPAL and SIOPSUS holders between 2010 and 2014.

Figure 30: Evolution of number of shipping companies between 2010 and 2014



(Kementerian Perhubungan Republik Indonesia, 2014)

Many shipping agents in Indonesia are vertically integrated under shipping lines. Based on discussions with industry practitioners, the market is dominated by domestic shipping lines offering agency services, followed by subsidiaries of international shipping lines (in joint-ventures with domestic shipping agencies), and a smaller share of international or local independent ship agencies. Most independent shipping agents are perceived to be localized in remote ports where shipping lines do not have sufficient traffic to invest in own agencies. They are usually small businesses[71].

A sample [72]of shipping lines and their representatives in 7 ports in Indonesia highlights that shipping agencies are dominated by domestic shipping lines' agencies, followed by joint ventures with domestic shipping lines. There are very few independent shipping agents. The low coverage level reflects high market entry barriers for both domestic and international players, but also low volumes that fail to attract players (not economically viable).

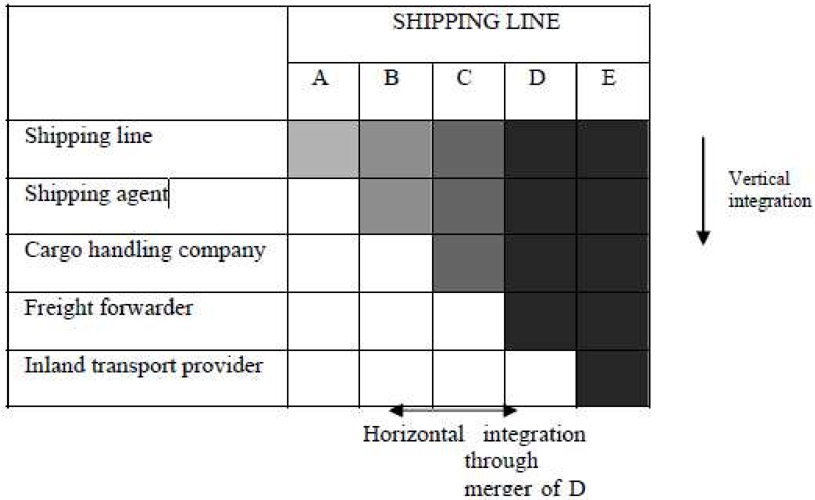
69 Email from PPID on 25-Apr-2016

70 This license covers the following sea transport activities, as listed Government regulation PP 20/2010: industry, forestry, tourism, mining, agriculture, fishery, salvage and underwater works, dredging, construction services, and research, education, and training. (Peraturan Pemerintah Republik Indonesia nomor 20 tahun 2010 tentang Angkutan Di Perairan. Chapter II, part 4 on Special Marine Transportation, Art 39, para 2)

71 Interview with an international shipping line in Jakarta

72 The sample included 154 shipping companies' agencies in E-sailings magazine72, covering the 5 main ports (Jakarta, Surabaya, Semarang, Makassar and Medan) and two medium sized ports (Banjarmasin and Balikpapan).

Figure 31: Transport chain integration based on shipping line examples



Source: OECD/ITF Joint Transport Research Centre Discussion Paper, No. 2009-1

Expenses and Revenues

Shipping agencies role as an intermediary comes with the responsibility to pay charges on behalf of the principal and cargo owner, and to collect revenues on behalf of the principal. Therefore, shipping agents need a strong bargaining power with suppliers and with customers, especially on payment terms, because this is vital to insure shipping agencies financial health.

Customers of shipping agents in Indonesia

Shipping agents represent ship owners (shipping lines) in selling sea transportation space to owners of goods (Beneficiary Cargo Owners (BCO)), or their representatives such as freight forwarders. Because the shipping industry is driven by economies of scale, the larger the potential volume of cargo shipped, the higher the bargaining power. Therefore, large international and local beneficiary cargo owners, in addition to large international and local freight forwarders hold a high bargaining power towards shipping agents and shipping lines.

Suppliers of shipping agents in Indonesia

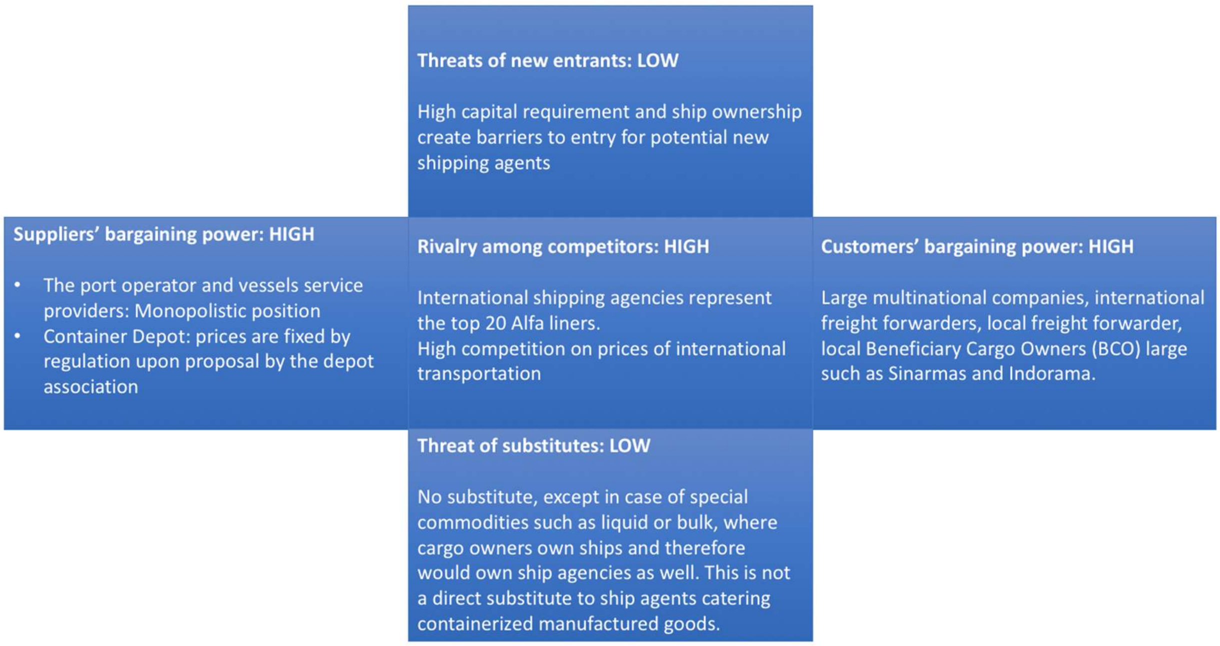
Suppliers of shipping agents are divided into three types, (1) vessel marine operations suppliers in the port waters, (2) container handling service providers on the land side, and (3) empty containers storage and maintenance depot operators. Port operators or port authorities maintain the entrance channels to the port against fixed port fees, and provide vessel marine operation services such as pilotage and towage[73]. Terminal operators provide container-handling services at the terminal. The third supplier, depot operators, store containers and perform necessary repairs. Based on discussions with an international shipping agency, given a monopolistic character of port operators and terminal operators, these suppliers have a high bargaining power. Nonetheless, in case of high availability of depots around large manufacturing areas, depot operators have a medium to low bargaining power with shipping agencies. Shipping agents are highly dependent on their principals[74], becoming "one same" entity when

73 In most commercial ports, including Tanjung Priok port in Jakarta, vessel services are offered by port operators' subsidiary companies.

74 Shipping lines represented by a shipping agent

facing market forces. Suppliers and customers' bargaining power influence both agents and liners. Rivalry among competitors also reflects market forces applied to both shipping agents and their principals. As a result, the Porter's Five Forces illustration below could be interpreted from both shipping agents and shipping lines' perspective.

Figure 32: A competitive analysis of shipping agents in Indonesia. Porter's five forces



Source: by the authors

4. Performance of Indonesia's service providers/ competitiveness

Despite their critical role in facilitating shipping lines' operations at port of calls, shipping agents' performance is not tracked. Therefore, there are no written sources that rate the competitiveness of services. Based on interviews with international shipping agencies, the availability of professional shipping agencies is limited.

5. Regulatory framework

The legislative framework regulating shipping agents in Indonesia is yet to be clarified. In Indonesia shipping agents were initially referred to as "General agent", a national sea transport company or national companies specially established to carry out shipping agency business, appointed by overseas sea transportation companies to manage the interest of its ships while in Indonesia (Shipping Law 17/2008, Chapter 1, Art 1-7). General agents can represent the interests of national and foreign sea transportation companies. The Government Regulation No. 20/2010 on Transport in Water restates the role of shipping agents to act as general agent or sub-agent of sea transport vessels, both domestic and international. Later the Ministry of Transportation regulation PM 93/2013 on operations and business of sea transport gives a more specific definition to shipping agencies ("Agen Kapal") as a business entity specifically established to conduct shipping agency activities. (Chapt. 1 art.1. 12). It can be:

- General Shipping Agency: A national shipping agency company established specifically for shipping agency activities to organize the needs of domestic and/or international vessel(s) needs while in Indonesian waters.
- National Shipping Company: An Indonesian shipping company (legal entity) that provides shipping services in Indonesia and/or in international waters.

Until 2016, shipping agencies were considered the same as shipping lines, as both needed to obtain a shipping license SIUPAL that requires ownership of a vessel. With the introduction of PM 11/2016 on Operations of Shipping Agencies, the Ministry of Transportation acknowledges the primary difference between the two business activities. The paragraphs on the regulatory framework will provide more details about this regulation and other legislative aspects regulating shipping agencies. The following legislations are key references to shipping agents:

- The Shipping Law No. 17/ 2008. *Undang-Undang Republik Indonesia No. 17 tahun 2008 tentang Pelayaran*
- The Presidential Regulation No. 44/2016 about the list of business fields that are closed to investment and business fields that are conditionally open for investment (DNI 2016). *Peraturan Presiden Republik Indonesia Nomor 44 tahun 2016 tentang Daftar Bidang Usaha Yang Tertutup Dan Bidang Usaha Yang Terbuka Dengan Persyaratan Di Bidang Penamanan Modal*.
- The Government Regulation No. 20/2010 on Transport in Water. *Peraturan Pemerintah Republik Indonesia nomor 20 tahun 2010 tentang Angkutan Di Perairan*.
- The Ministry of Transportation regulation PM 93/2013 on operations and business of sea transport. *Peraturan Menteri Perhubungan Republik Indonesia nomor PM 93 tahun 2013 tentang Penyelenggaraan dan Pengusahaan Angkutan Laut*
- The Ministry of Transportation regulation PM 45/2015 on Capital ownership requirements for Transportation Company. *Peraturan Menteri Perhubungan Republik Indonesia nomor PM 45 Tahun 2015 tentang Persyaratan Kepemilikan Modal Badan Usaha di Bidang Transportasi*
- The Ministry of Transportation regulation PM 11/2016 on Operations of Shipping Agencies. *Peraturan Menteri Perhubungan Republik Indonesia nomor PM 11 tahun 2016 tentang Penyelenggaraan dan Pengusahaan Keagenan Kapal*
- Bank Indonesia Regulation Number 17/3 / PBI / 2015 on the Obligations Penggynaan Rupiah On the territory of the Republic of Indonesia. *Peraturan Bank Indonesia nomor 17/3/PBI/2015 tentang Kewajiban Penggynaan Rupiah Di Wilayah Negara Kesatuan Republik Indonesia*

a) Supply chain process: Input, Production, Output

Input: Barriers in employing factors of production (capital, labor, licensing)

Capital

An interpretation of existing legislations shows that access to foreign equity is either limited to 49% or forbidden. Based on the recent regulation on shipping agents, this sector is not open to foreign investment (Ministry of Transport regulation PM11/2016). However, this regulation is not in line with the Negative Investment List 2016 which does not include shipping agency activities. Alternatively, foreign equity companies willing to perform shipping agency activity would need to operate as a shipping company, where foreign equity is restricted to 49% (DNI 2016).

Labor

Staff requirements are very high and unnecessary given the nature of shipping agencies' business. Other barriers in employing labor are applicable to most other economic sectors in Indonesia and are not specific to shipping agencies.

Interestingly as part of the licensing requirements, a shipping agent needs to employ at least one technical staff maritime transport and port management (D-IV) or nautical (ANT III) or technician (ANT III) or a bachelor (S1) transport management with at least 2 years' experience proven with a letter from a shipping company. This requirement is easy to fulfill for a national shipping company (P*erusahaan angkutan laut*) but general shipping agents generally do not employ such staff but rather staff with a background in sales & marketing, finance and business administration.

Licensing

Red tape and high market access barriers (high capital requirements) characterize licensing needs of shipping agencies.

Prior to the issuance of PM 11/2016 establishing a shipping agent license, shipping agencies were required to comply with the same license as shipping lines (transport operators). Furthermore, in cases shipping agencies want provide freight forwarding services to owners of goods, a freight forwarding license is required.

The first activity consists of supporting vessel owners through shipping activities. Shipping agents can choose between one of the two licenses:

- Business Licenses Marine Transport Company (SIUPAL)[75]: Technical requirements are ownership of Indonesian flag vessel of min. GT 175, except for joint ventures that require larger vessels (min 5000GT) and need to be manned by Indonesian nationals. Administrative requirements do not include capital requirement although all companies applying for a SIUPAL have to comply with PM45/2015 on Capital ownership requirements for Transportation Company, with a minimum capital requirement (IDR 50 billion). This license is renewable every year.
- Corporate Business License Shipping Agent (SIUPKK): a new license, introduced with PM 11/2016, allows a ship agent to operate without condition of Indonesian-flagged vessel ownership. However, it is currently restricted to Indonesian-owned companies and applies high minimum capital requirements of IDR 6 billion [76]minimum capital with paid up IDR 1.5 billion. The license is to be renewed every two years. In addition, technical requirements include minimum requirements on staff that deviates from international practices.

The second activity is related to the collection or delivery services to local customers on behalf of shipping lines. This includes inter-alia customs documentation and freight forwarding services. Current shipping license only allows to sell sea transportation, and to arrange documentation for shippers & receivers. In order to offer additional services to customers such as land transport or storage, a freight-forwarding license is required. However, legislations regulating freight forwarding licensing discourages investments

75 Surat Izin Usaha Perusahaan Angkutan Laut

76 EQUIVALENT OF USD 400,000

in freight forwarding activities due to excessive minimum capital requirements (IDR 25 billion for domestic and USD 10 million for joint ventures).

An accumulation of such binding requirements by these two types of license requirements makes it difficult for Indonesian shipping agencies to provide a complete set of services to their customers, from or to the door.

Production: Barriers in producing services

Costs of service "inputs"- services purchased by shipping agencies

The current regulatory framework leaves little room for shipping agencies to optimize costs of "inputs" as most tariffs are set by the government. Most inputs are dues and charges paid by a shipping agent on behalf of the principle, a shipping line. These include, *inter-alia*, port dues, port services fees (pilotage, towage, etc.) and terminal fees (loading and discharge). Inputs for a general shipping agent, as a company, is minimal and do not go beyond office appliances.

The main regulatory bottlenecks for shipping agents (as a representative of a shipping line) is that tariffs are set by the legislator rather than by market[77], and that business associations have the power to approve those tariffs on behalf of ship owners. For instance, the Indonesian National Ship Owners' Association (INSA) has the power to approve tariffs on behalf of all shipping lines. For instance, in the case of a newly implemented access channel fee in Tanjung Perak, INSA approved the USD 0.5/ GRT without consulting other shipping lines[78] which led to doubling of port charges. Within such context, shipping agencies can only negotiate payment terms with their "input" providers, as a way to optimize cash flow.

Availability and quality of services needed for production

Regulations applicable to shipping agencies suppliers, such as terminals (monopolistic), ship services (monopolistic), and container depot (open but subject to common pricing), lead to a low level of competition in these sectors. Whether services are available and in the required quality levels is not market driven, but is dependent on each supplier's decision.

Bureaucratic burden

BI regulation No. 17/3/PBI/2015 on the Obligation to Use Rupiah goes against international practice where all port and ship services are based on USD tariffs. This regulation is only increasing administrative burden to immediately convert amounts and may lead to losses due to currency conversion. The extra cost will eventually reflect on the prices passed on to the customer.

ICT system

The limited use of INAPORT, an internet-based port management system to track vessel and cargo flows, is a key bottleneck to ship operations and therefore to shipping agencies' performance. Shipping agencies face uncertainties in planning ships' movements without a functional software to coordinate (in real-time) vessel, cargo and documentation flows between the various stakeholders involved in vessel

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77 Every year, a Government Regulation is issued to set tariffs applicable by the Ministry of Transportation, the latest is PP 15/2016. (Peraturan Pemerintah Republik Indonesia nomor 15 tahun 2016 tentang Jenis Dan Tarif Atas Jenis Penerimaan Negara Bukan PaJak Yang Berlaku Pada Kementerian Perhubungan)

78 Discussions with shipping lines.

operations. Users include shipping agencies, port and terminal operators, port authority, harbor master, immigration and quarantine. Currently, Tanjung Priok is the only port where INAPORT is implemented (and only partly[79]). At the time of the study, a Ministry of Transport Regulation PM 157/2015 [80]on implementation of INAPORTNET in servicing ships and cargo in ports had still not been enforced.

Output: barriers in selling services or generating profitability in selling services

Price control policy has been reported as a strong regulatory barrier to shipping agencies outputs. A key source of income for shipping agents is the Bill of Lading fee (B/L)[81], which is capped to USD 7 / Bill of Lading [82] (IDR 100,000) whereas it ranges between USD 40 and USD 100 internationally. The other main source of income is a commission on the freight that is negotiated between the agent and the principle. There are no regulations that apply a cap to this.

b) Indonesia's commitment in AEC, AFAS compared to applied policies

The GoI did not make any commitments in regards to shipping agencies.

6. Learnings from international experiences

This study focuses on lessons learned in terms of removing barriers to Market Access and National Treatment.

a) International guidance

In the available literature at the time of the study, there is little guidance in regards to developing shipping agencies' activities. Most international guidance is focused on how to overcome development of maritime transport companies, principals of shipping agencies.

b) Country examples

At the time of study very few countries[83] do not authorize 100% foreign equity of shipping agencies, no country had a vessel ownership obligation for shipping agents, and no capital requirements were at the same level as Indonesia's. Examples of low capital requirements include Malaysia 12,900 USD (RM 50,000) (Ernest & Young, November 2015), Singapore USD 37,200 (SGD 50,000), and in China no more minimum capital requirements is applied since October 2015. China used to have the highest capital requirement in the world with USD 1,000,000 for 100% owned Foreign Investment Enterprises (FIEs) but relaxed its policy by removing capital contribution for 12 sectors including international shipping agencies. (Ernst & Young, November 2015)

7. Shipping agencies in a nutshell

As per the WTO definition and classification, Maritime Shipping Agencies are part of Auxiliary Services to all modes of Transport and are subject to the same guidance in terms of developing a competitive environment for the development of the market as freight forwarding. With Indonesia conducting multi-

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79 The Vessel Management System is fully implemented, whereas other parts of the software are in progress.

80 Peraturan Menteri Perhubungan PM 157 tahun 2015 tentang Penerapan INAPORTNET Untuk Pelayanan Kapal Dan Barang Di Pelabuhan. 13-October-2015

81 A bill of lading (sometimes abbreviated as B/L or BoL) is a document issued by a carrier (or his agent) to acknowledge receipt of a shipment of cargo. It acknowledges that the goods are loaded, states the contract of carriage and serves as a document of title of the goods. The B/L is used to release the goods at the port of destination.

82 Surat persetujuan PR 302/1/14PHB2005 regulates BL fee and THC fee by setting a maximum tariff. Source: Discussion with shipping lines.

83 Based on the team's review of a sample of OECD and EAP countries, middle-income and high-income countries

lateral and bilateral trade negotiations, it is important to align sector definitions and to follow WTO guidance in removing entry barriers (market access and national treatment). The following summarizes this sub-chapter's challenges and opportunities for Indonesia's development of maritime shipping agency market.

a) Challenges

Difficulty to find a common definition

Maritime shipping agencies are among those sectors where there is a variance between Indonesian government's and international classifications. Furthermore, efforts need to be undertaken to align BKPM's descriptions with the Ministry of Transportation's.

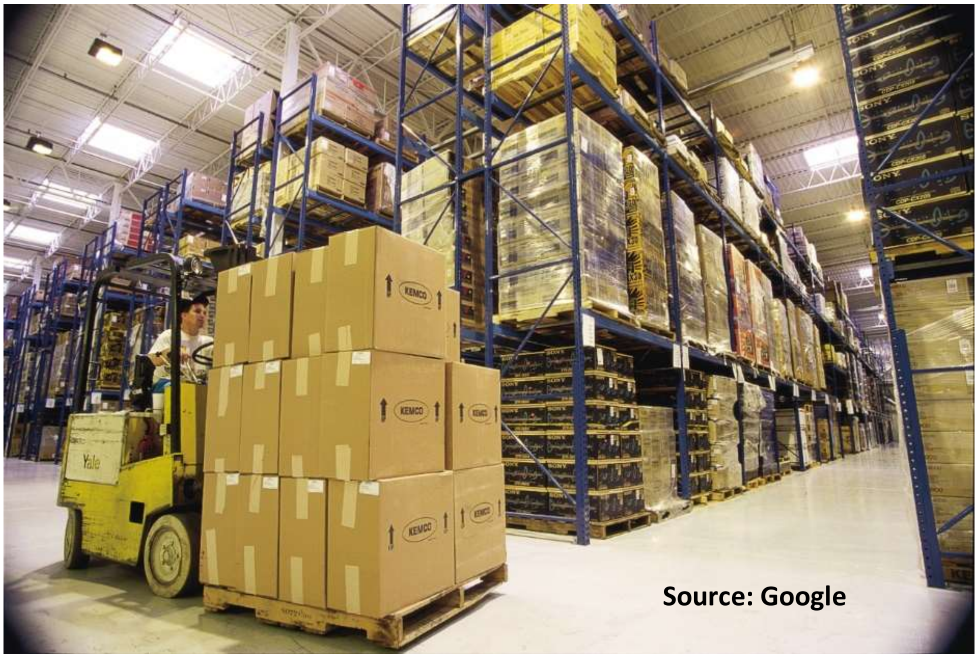
High statutory barriers

From a company-level perspective, the current regulatory environment would not encourage investment in the shipping agency sub-sector. Up to 2016, the distinction between shipping agencies and shipping lines has been blurry, as only companies with a sea transport license (SIUPAL) could act as a shipping agent. The M. of Transport regulation PM 11/2016 opened an opportunity for companies to operate as shipping agent only, removing the requirement of ship ownership. However, the new license came with "heavy chains" with limited access to capital (foreign equity limit 0%) and high minimum capital requirements. Furthermore, the legislative framework limits a shipping agent activities to only a part of the supply chain (between the port and the ship, rather than between the owner of goods and the ship). Given such barriers, it is unlikely that small-sized companies will enter the shipping agency market. Only established shipping companies (with SIUPAL license) or cash-rich companies would endeavor in applying for the shipping agency license.

a) Opportunities to develop shipping agencies

Despite being part of Freight Transport Agency Services a sub-section of Auxiliary services to all modes of transport, Maritime shipping agencies are not included in the AFAS 9. In order to better comply with the AEC Blueprint, the sector would need to be recognized as logistics services and gradually liberalized to reach 70% of foreign equity limitation. Directions recommended by the study are (1) to improve the clarity and transparency by defining the sub-sector as per WTO guidance and clearly stating the authorized foreign equity limit in the DNI, and (2) to enable competitiveness in the sector by attracting SME investment which goes hand-in-hand with a review of the minimum capital requirement in obtaining the license to improve the competitiveness of the sector.

Chapter 3: Warehouse and Storage (CPC 742)



I. General warehousing and storage

1. General facts about the sector

Efficient warehouse management not only cuts logistics costs, but also reduces the risks of misplaced/ damaged/ stolen goods, and keeps the goods in good condition thereby reducing waste. Warehousing services range from storing goods (storage), controlling the amounts of goods stored (inventory management), providing added-value activities such as sorting and labeling, managing goods on-forwarding and arranging transfer to several areas (distribution). Warehouses[84] used for such services, can be owned or rented by a warehouse management company, also known as warehouse operator or 3PL (when combining other activities).

From a manufacturing point of view, warehousing services are required at every stage of a product, ranging from component supply, to production (raw material to semi-finished and finished products) to dispatch[85], making it a critical part of the logistics system and in supply chains. Warehouses are managed either in-house (by owners of goods) or outsourced to 3PL or specialized warehouse management companies[86] that are located either close to manufacturing or to distribution areas. Several MNCs, such as international medical device producer, have fully outsourced their warehousing and distribution to 3PLs. [87]

84 Warehouses can be set up by private sector or by the government.

85 And also to return of a product in case of deficiency.

86 Which may or may not own a warehouse

87 Joint Eurocham-Amcham meeting to advocate against MOH regulation No 4/2014 on Medical Device distribution. The regulation prohibits outsourcing of warehousing and distribution of medical device, which is against best practice of international medical device producers. (March 2015).

Box 6: Why are Third-Party Logistics Companies (3PL) mentioned here?

Optimization of Transportation and storage of goods are key to supply chain efficiency. Companies that combine both services are called Third-Party Logistics (3PL), Contract Logistics or Supply Chain companies. 3PLs act as integrators of logistics services, and their offer includes a variety of services inter-alia transportation (land, air, sea, and rail) and related documentation, warehousing, and other supply chain functions such as order fulfillment. In a simplified manner, 3PL are freight forwarders that also offer warehousing and other added-value services, in order to provide owners of goods with supply chain efficiency (cost, time, quality). This is why efficient warehousing services are rarely disconnected from the 3PL concept.

3PLs or dedicated warehousing service providers' role cover[88]:

- Warehouse management includes (1) planning warehouse storage capacity, usage, assets [89]and workforce; and (2) operations include receiving goods, storing goods in a dedicated warehouse location, moving goods within the warehouse, and sending goods out of the warehouse.
- Inventory management includes (1) planning future needs for additional quantity and costs of goods (using measures of minimum and maximum stock levels), and (2) control of quantities and value of goods in the warehouse.

Each of these activities is subject to key performance indicators (KPI), metrics used to monitor performance. For instance, common KPIs required by manufacturers from their 3PLs include inventory accuracy, damage rate, and timeliness (delays in handling goods in warehouse, from receipt to exit).

Warehouses can be classified using various ways, inter-alia (1) by product category based on stage in the supply chain (raw materials, works in progress, finished goods), (2) by geographic coverage (regional or national), (3) by product specification such as perishables or dangerous goods, (4) by surface area (less or more than 100 sqm), (5) by storage and warehousing systems (ranging from manual, automated, to automatic where all functions are performed by robots), and (6) by ownership as private dedicated to one company, or public that can be used to store goods for multiple companies. (Farahani, Rezapour, & Kardar, 2011)

This study focuses on warehouse services using public warehouses, as they include the types of warehouses needed to support the export manufacturing chain, such as general merchandise warehouses and temperature-controlled warehouses.

88 In case distribution is also included their service portfolio, they may own or rent trailers to send out goods. However, distribution is not included in the scope of this study that is focused on export manufacturing outbound logistics.

89 Floor space, racks, handling equipment such as forklifts.

Box 7: Types of public warehouses

- General merchandise warehouses: large variety of products
- Temperature-controlled warehouses: for goods that require a certain temperature and that may be damaged due to temperature change such as perishable foods, pharmaceuticals and a certain type of electronics.
- Bulk Storage warehouses: to store "unpacked products" such as oil and grains.
- Bonded warehouses: are used to store goods for which taxes and duties are not paid. They are also used for consolidation of goods for ocean (LCL) and air freight.
- Special commodity warehouses: to store agricultural goods such as wood and grains.

Source: Logistics Operations and Management: Concepts and Models. By Reza Zanjirani Farahani, Shabnam Rezapour, Laleh Kardar. Chapter: 10.5. Types of Warehouses. 2011

Box 8: Reminder of definitions of warehouse and storage companies

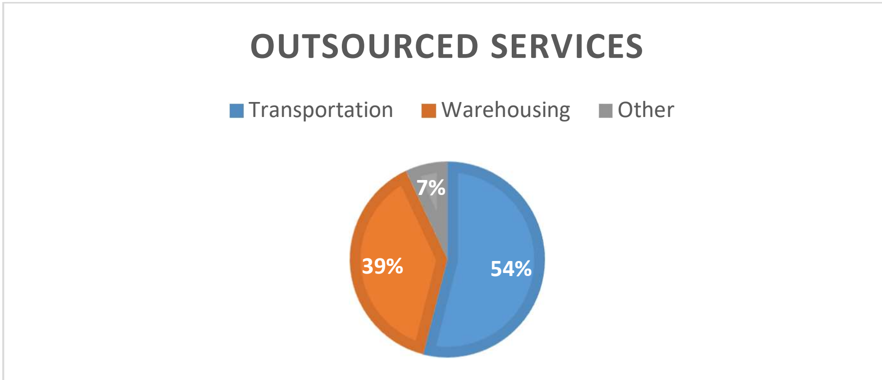
The authors identified a partial match between Indonesia's government agencies and the WTO. First, warehousing and storage are part of trade services or transportation services. Second, distribution is either included or excluded from warehousing and storage services.

	BKPM	Ministry of Trade	WTO	Comments
Storage and warehouse	Storage is part of Transportation and warehousing category.	Storage is part of trade services.	Storage is part of services auxiliary to all modes of transport.	**Partial Match:** only between BKPM and WTO
	Several types of storage activities. Distribution is not included in this category.	Several types of storage, in addition to distribution activities.	Several types of storage, in addition to distribution activities.	**Partial Match:** only between M. of Trade and WTO, not with BKPM

2. Global market (structure, global players) and trends

As mentioned in the sub-section on freight forwarding agencies, an increase of competencies of 3PLs and their global reach has encouraged MNCs to outsource to 3PLs "non-core activities" or those where they are not competitive. (Kopicki, 2009). *"MNCs are inclined to leave non-core activities or activities in which they enjoy little comparative advantage vis-a-vis their competition to local third party logistics service providers who have a local market track record and who specialize in supply chain management functions similar to those which the firm requires."* Beyond MNCs, shippers in general also appear to outsource more supply chain functions. An international study on Third-Party Logistics' outsourcing (C. John Langley & Capgemini, 2012) revealed, that logistics spending represents 12% of shippers' revenue, of which 39% were outsourced. Warehousing represented 39% of this spending.

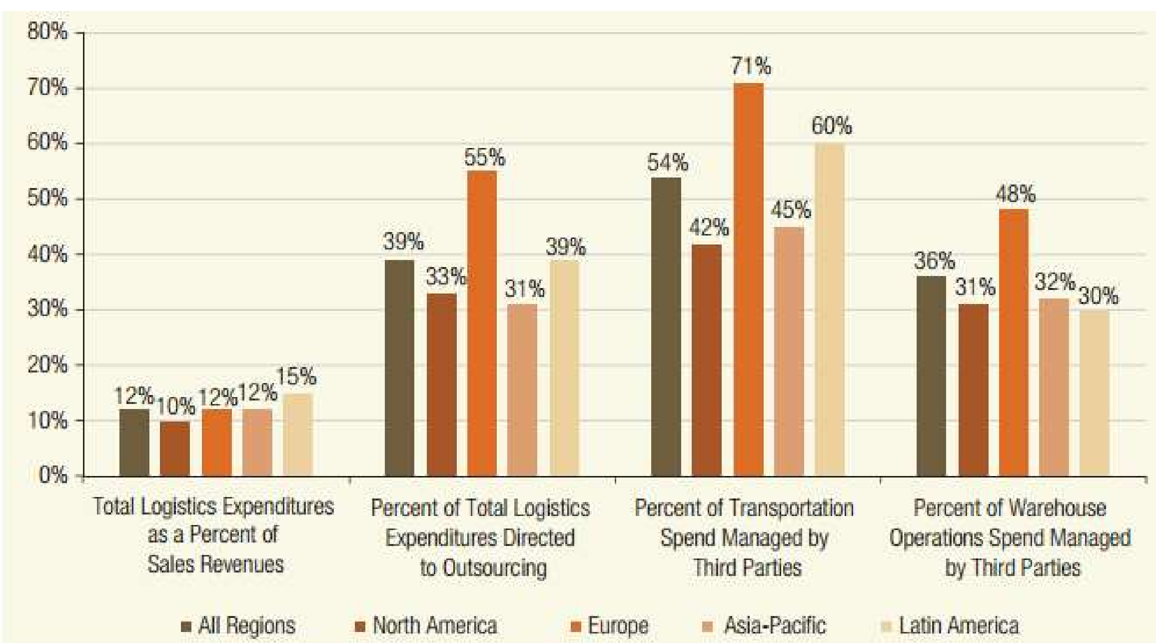
Figure 33: Warehousing has the largest share of outsourced logistics services



Source: (C. John Langley & Capgemini, 2012)

Globally, warehousing services are integrated into a bundle of other logistics services offered by 3PLs, such as transportation management (freight forwarding), customs brokerage, and supply chain consulting. Leading multinational companies, including automotive, electronics and healthcare outsource such activities to such logistics integrators. The table below lists examples of leading international 3PLs, their services, industries covered and key customers in the early 2000s.

Figure 34: In Asia Pacific, 30% of warehouse operations spent is managed by 3PL



Source: (C. John Langley & Capgemini, 2012)

Table 8: Examples of international 3PLs [90] and their MNC customers in the early 2000: all offered warehousing and distribution

Third-Party Service providers (3PLs)	Services	Industry	Key customers
Exel **(now part of DHL)**	**Warehousing and distribution (contract logistics),** air and ocean freight forwarding, supply-chain consulting, customs brokerage, transportation management, returns management, home delivery	Consumer goods, retail, computers and electronics, automotive, chemical, healthcare.	Adolph Coors Co., Apple Computer, BP, Compaq, Daewoo, Ford Motor Co., Hewlett-Packard, Home Depot, Honda, Intel, International Paper, Kodak, Maxtor, Miller Brewing, Mitsubishi Corp., Motorola, Nissan, Owens Corning, Pepsi Americas, PPG, Procter & Gamble, SC Johnson, Shell, Sony, Sun Microsystems, Unilever Bestfoods, Wal-Mart, Xerox
Panalpina	Air and ocean freight forwarding, transportation management, **warehousing and distribution**, oil and gas services	Automotive, computers and electronics, oil and gas, consumer goods, beverages, apparel, healthcare	Chevron, Delphi, Hewlett Packard, IBM, Philips Electronics, Robert Bosch, Shell Chemical, Sun Microsystems
Nippon Express	Air and ocean freight forwarding, **warehousing and distribution**, transportation management, supply-chain consulting, customs brokerage	Automotive, healthcare, computers and electronics, industrial	Apple Computer, Baxter Healthcare, DaimlerChrysler, Honda, IBM, Mitsubishi, Toyota

(Armstron, (n.d.))

3. Market structure/dynamics in Indonesia

The market is heterogenic, fragmented and dominated by small companies that are family owned, and cover its home market. There is a data gap in regards to third-party logistics service providers (market shares) and warehousing facilities in Indonesia. There is no official mapping of warehousing in Indonesia, the only data being that there are about 15,000 warehouses nationwide. International 3PLs and large domestic 3PLs mainly operate in Jabodetabek and in a few areas outside of this, around other manufacturing, trading or distribution hubs.[91] 3PL warehouses can be either dedicated to one customer, or to multiple users. A key difference between the Indonesian market and the global outsourcing trend is that manufacturers, traders and other owners of goods, still handle their warehousing and distribution in-house rather than through outsourcing.

- Manufacturing companies are not authorized to outsource their warehouse functions to 3PLs (see labor legislation in the paragraph on national regulatory framework).[92]
- A large number of traders and retailers choose to own and operate their warehouses. In some cases, they even own trucks. One large Indonesian retailer owns dedicated warehouses and trucks, and only uses 3PLs for long-haul shipments of its products (The World Bank, May 2015).

90 Many of these 3PLs are still world leaders. Refer to the TOP 50 3PL in the annex

91 Former staff of DHL Supply Chain in Indonesia

92 Discussion with ALFI 2015

Keeping trucking and warehouse in-house can be interpreted in two ways, either due to the lack of reliable 3PLS that offer competitive prices and reliable services, or that retailers may identify these activities as core competency.

As the background of this study is to facilitate export manufacturing in Jabodetabek area, the competitive analysis below focuses on the type of warehouses needed by manufacturers. [93]

Competition

Nowadays, many freight forwarders call themselves 3PLs as they can potentially offer warehousing services. In practice, 3PLs are those companies that offer both freight forwarding services and operate warehouses. In regards to the latter, the competition level in warehousing in Indonesia depends on the area, with higher competition around Jabodatebek's industrial and consumption areas, compared to those outside of the with low availability and basic warehousing facilities.

Threat of new entrants

To operate a basic warehouse [94]as a warehouse operator is easy market to enter. However, to operate a third-party logistics provider requires two licenses, a warehousing license and a freight forwarding licensing. In addition to much needed investment in state-of-the art warehousing equipment, software and training, 3PLs need also to comply with high minimum capital requirements linked to the freight forwarding license.

Customers of 3PLs, warehouse service providers or warehouse operators in Indonesia

Customers include freight forwarding companies and owners of goods, in need of warehousing and inventory management, such as traders and manufacturers, agribusiness, distributors, etc. Customers' bargaining power would depend on the size of the business provided, the larger a company's volumes (MNCs and freight forwarders) the stronger the bargaining power.

Suppliers of 3PLs/ warehouse service providers/ warehouse operators in Indonesia

Land or warehouse owners are key suppliers to warehouse operators, which either rent a warehouse and operate it, or rent a land then build a warehouse that they will operate. Due to limited warehousing space around key production and distribution areas such as Jabodetabek region, suppliers have a strong bargaining power towards warehouse operators. Large 3PLs, who need a warehouse, do have a strong bargaining power compared to smaller size warehouse operators and 3PLs because their presence often attracts other industries.

93 Therefore it excludes food manufacturing, and warehousing services of bulk cargo such as grains, or liquid cargo such as oil.

94 Warehousing ranges from basic storage (either open-air or closed building) where cargo is only manually handled and manually counted by unskilled labor.

Figure 35: Competitive analysis of warehousing services, through Porter's Five Forces

Source: by the authors

4. Performance of Indonesia's service providers/ competitiveness

Global trends show that international 3PLs offer added-value services in addition to core 3PL services that are warehousing and inventory management, transportation and distribution. Added-value services include assembly, quality control of goods, or repairing. In Indonesia, mainly international 3PLs offer such services, as these firms have knowledge & expertise gained in other markets such as the European and American markets where customers demand more than warehousing and distribution. Domestic companies remain focused on the core 3PL functions.

In terms of quality and availability of warehousing services, there is a need for modern facilities around production and consumptions zones such as greater Jakarta (Frost & Sullivan), [95] and for cold storage capacity, with only 50% capacity available (2014. ARPI).[96] Due to the absence of a holistic evaluation of Indonesia's performance in terms of warehousing, the box below intends to illustrate the performance of Indonesian warehouses in regards to pharmaceutical products.

95 "There are gaps in availability of state-of-the-art modern warehouse facilities in key locations around consumption and productions areas like greater Jakarta [JaBoDeTaBek - Jakarta, Bogor, Depok, Tangerang and Bekasi] plus limitations on services providers with respect to capability in warehouse management, IT support and suitable manpower in managing warehouses as real inventory, rather than just a store," he noted" by Gopal R. Frost and Sullivan (SupplyChains Magazine, 9 April 2015)

96 "The total capacity of cold storage facilities that were available to fisheries in 2014 was 7.2 million tons, insufficient for the nation 14 million tons of fish annually, based on Indonesia Cold Storage Association (ARPI) data." (The Jakarta Post, 02 January 2016; The Jakarta Post, 02 January 2016)

Box 9: Example of the state of warehousing in Indonesia: pharmaceutical products

1. Context

The Global Fund allocates grants to Indonesia in order to fight three diseases at national and sub-national level: Tuberculosis, HIV, and Malaria. It is Indonesia's "largest external donor" and is co-funded by the USA and Australia (8% and 7% respectively).

2. The report

The Global Fund's auditors surveyed 60 program sites in five provinces that represent 45% of Indonesia's population. Sites included inter-alia health facilities, warehouses and medical stores. The audit objective was to evaluate several risks including supply chain management of drugs and medications.

3. Key findings about warehousing and storage

- Warehouses have inefficient "drug-ordering processes": in 92% of warehouses

- Deficient forecasting and inventory control lead to drug "stock-outs" and drug expiry: 87% of warehouses

- One important drug is out-of-stock (at least): in 53% of warehouses

- Expired drugs were found: in 63% of warehouses

- Warehouses do not follow "good storage practices" which would damage drugs and impact their effectiveness: in 56% of warehouses.

- Lack of Standard Operating Procedures: in 54% of warehouses

Source: (The Global Fund, Office the Inspector General (OIG), December 2015)

5. National Regulatory Framework: Supply chain process, comparison with AFAS 9 and AEC

The Ministry of Trade regulates warehousing services. It is the second type of logistics services [97]not regulated by the Ministry of Transportation. Market access restrictions and red tape also affect this sector. Key legislations include:

- Trade Law No. 07/2014. *Undang-Undang Republik Indonesia Nomor 7 tahun 2014 tentang Perdagangan*
- The Presidential Regulation No. 44/2016 about the list of business fields that are closed to investment and business fields that are conditionally open for investment (DNI 2016). *Peraturan Presiden Republik Indonesia Nomore 44 tahun 2016 tentang Daftar Bidang Usaha Yang Tertutup Dan Didang Usaha Yang Terbuka Dengan Persyaratan Di Bidang Penamanan Modal.*
- Ministry of Trade Regulation No. 90/M-Dag/Per/12/2014 on Warehouse arrangement and Development (and its revision 10-M-Dag/Per/12/2015). *Peraturan Menteri Perdagangan Nomor 90/M-DAG/PER-12/2014 tentang Penataan dan Pembinaan Gudang. (dan revisi 10-M-Dag/Per/12/2015)*

97 Courier services are regulated by the Ministry of Telecommunications

This analysis focuses on general public warehouses. There is a separate subchapter dedicated to consolidators' warehouses that have a key role in export of consolidated cargo by sea.

a) Supply chain process: Input, Production, Output

Input: Barriers in employing factors of production (capital, labor, licensing)

Capital

Between 2014 and 2016, foreign equity limits moved from 100% to 33% (with exceptions) to 67%.in addition to acting as a market access barrier, it would also discourage companies from operating in Indonesia.

Up to 2014, there was no limit to foreign investment in this business sector. The DNI 2014 set a maximum foreign capital ownership limited to 33% for warehousing and distribution all over Indonesia, except for cold storage investments in Kalimantan, Sulawesi, Nusa Tenggara, Maluku and Papua where a 67% of foreign equity is authorized. The latest Indonesian Negative Investment list (DNI 44/2016) increases the limit on foreign equity in warehousing services at 67% and excludes cold storage from the negative list[98]. This equity limit would impact mainly new market entrants as the grandfather clause in the DNI provides insurance to incumbent foreign investors to keep their 100% wholly owned warehouse-related companies, and to open branches throughout the country. Below table shows the evolution of openness to foreign capital in the warehousing sector through the DNI.

Table 9: Concordance table on sectors' openness based on the DNI 2007 (PERPRES 76, 77, 111 of 2007), DNI 2014 (PERPRES 39 of 2014) and 2016 (PERPRES 44 of 2016).

	DNI 2007		DNI 2014		DNI 2016	
Sector	**Sector name**	**Foreign Equity Limit**	**Sector name**	**Foreign Equity Limit**	**Sector name**	**Foreign Equity Limit**
Warehousing	Not mentioned	-	*Pergudangan (sub of "Jasa Perdagangan")*	33%	*Pergudangan (sub of "Sektor Perdagangan")*	67%
General Distributor [99]	Not mentioned	-	***Distributor*** (sub of *"4. Jasa Perdagangan")*	33%	*Perdagangan Distributor yang tidak terafiliasi dengan produksi (sub of "H. Sektor Perdagangan")*	67%

98 Cold Storage was removed from the DNI 2016 which means that it's fully open to foreign investment

99 Besides "distributor", only 2 types of other distributors are mentioned in the DNI 2014 and 2016: (1) Maintenance and Repair of Motorcycles, except of those integrated with the sale of motorcycles (agents / distributors), and Repair of Personal and Household Goods (Industri Jasa Pemeliharaan dan Perbaikan Sepeda Motor kecuali yang terintegrasi dengan bidang usaha penjualan sepeda motor (agen/distributor) dan Industri Reparasi Barang-barang Keperluan Pribadi dan Rumah tangga); (2) Wholesale of alcoholic beverages/hard liquor (importers, distributors, and subdistributors) (Perdagangan besar minimum keras/beralkohol (importir, distributor, dan sub distributor)

	DNI 2007		DNI 2014		DNI 2016	
Cold Storage (a type of warehousing)	Not mentioned	-	*Cold Storage*	33% to 67% (conditions apply)	Not mentioned	-
Freight forwarding	Jasa Pengurusan Transportasi	49%	Jasa Pengurusan Transportasi	49%	Jasa Pengurusan Transportasi	67%

Labor

Similar constraints as other companies in Indonesia, such as limits on hiring foreign workers and outsourcing.[100]

Licensing

Besides specific challenges related to warehouse license, companies offering warehouse services and freight forwarding (3PLs) need to cumulate an additional license that is subject to a different legislative framework.

A warehouse operator (Manager) needs to obtain a business trade license (Trade Law 2014). In addition, the warehouse needs a Warehouse Registration Certificate (TDG), a proof of warehouse registration that can only be applied by the warehouse owner. This is applicable to all warehouses above 100 m^2. Based on Ministry of Trade Regulation No. 90/M-Dag/Per/12/2014, only warehouse owners can obtain such certificate. The issue is about the definition of the warehouse owner in the situation whereby a warehouse is built by a warehouse operator on land that has been leased. In this case who would be responsible for obtaining the TDG, the land-owner or the warehouse operator?

More importantly, the biggest issue is licensing of 3PLs, companies that act as freight forwarders[101] and provide warehouse services. Each activity falls under a different ministry, under different licensing regimes and are subject to different capital requirements and equity limits[102].

Production: Barriers in producing services

Bureaucratic burden

Ministry of Trade regulation 90/M-Dag/Per/12/2014 introduces reporting requirements considered as red tape and raises a number of challenges. [103]

First, the new monthly reporting requested from warehouse managers would lead to increased warehousing costs in locations where essential and strategic goods are stored. A dedicated team in each warehouse would be needed to monitor each customer's cargo, check whether the cargo is subject to the monthly reporting, and prepare reports. Additional warehouse staff leads to additional storage costs. Second, warehouse managers are bound by a confidentiality clause which may be breached if they were to report the details about goods stored. Finally, there are uncertainties over data collection, usage of the

100 Based on MANPOWER ACT NO. 13 OF 2003, ARTS. 64-66, only none core activities can be outsourced, which mean that are auxiliary to the core business, and that "may not inhibit production process". (Better Work Indonesia. 2012. INDONESIAN LABOUR LAW GUIDE.) Under the Labor Law, outsourced jobs can only include five categories of "peripheral work": "cleaning services, security, driving, catering and work relating to support mining". However, many companies breach the law and outsource core jobs. (http://jakartaglobe.beritasatu.com/archive/indonesian-workers-demand-an-end-to-outsourcing/)

101 Note that freight forwarding license allows to outsource warehousing service, but not to operate a warehouse.

102 This was the case between 2007 and 2016. Since the DNI 2016, equity limits for freight forwarding has been harmonized with warehousing services.

103 Discussion with a warehouse operator representing companies within the same sector. March 2015

collected data, control and monitoring of the data and their accuracy, and actions over the results of the data analysis.

The lack of clarity in the provision on maintaining administrative records may lead to "rent-seeking" behaviors. This requirement is in line with international practice as warehouses maintain administrative records, either under paper or electronic formats. However, it is for business use and not for supervision by the government. In the Indonesian case, it is unclear which government body is in charge of inspecting these records. Private sector warns that such a "grey area" may trigger rent-seeking behavior by potential inspectors. [104]

Barriers to the development of warehousing

For 3PLs to handle warehousing and other supply chain management activities for manufacturers and traders, the latter needs to be able to outsource this activity. However, the Ministry of Manpower does not authorize manufacturing companies to outsource warehouse activities[105], unless a manufacturer can provide *sufficient*[106] evidence to prove that those activities are non-core.

The development of the concept of third party logistics providers (3PL) includes the fact that manufacturing companies outsource their warehouse management to 3PL in Indonesia (when the warehouse is in the same premises as the manufacturing activity). Indonesian legislation only authorizes outsourcing of auxiliary service activities as defined below, of which warehousing is not part:

"What is meant by 'auxiliary service activities' or 'activities indirectly related to production process' are activities outside of the core business of the enterprise. Such activities include, among others, activities associated with the provision of cleaning service, the provision of catering service (a supply of food) to workers/ laborers, the provision of a supply of security guards, auxiliary business activities in the mining and oil sectors, and the provision of transport for workers/ labor." (Labour Act 2003, explanation of Article 66)

Furthermore, the Manpower and Transmigration Ministry Regulation on Requirements for Outsourcing No. 19 of 2012 differentiates between *labour outsourcing* and *business process outsourcing* activities, both of which can only be sub-contracted in case their interruption would not have an impact on production process (Chen, July 2013). Logistics, warehouse and inventory management are classified as a core activities of manufacturers, and therefore outsourcing is prohibited. The only non-core activities that are allowed are services such as security, cleaning, etc. (Ref. Permenater Trans n 19/2012 and Manpower Act 2003). By not allowing outsourcing of warehousing activities, this rule prevents the development of 3PL that is one of the key success factors of offshore manufacturing.

Output: barriers in selling services or generating profitability in selling services

Warehouse service providers do not suffer from any barrier to outputs.

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104 Discussion with a warehouse operator representing companies within the same sector. March 2015. Facts are confirmed by the Manpower legislations: Labor Act 2003.

105 Warehousing activities for manufacturers are considered as CORE activities, and are not AUXILIARY ACTIVITIES. Example of the latter of manufacturers include cleaning, maintenance and transportation (ILO & IFC, 2012). Employees working in a manufacturer's warehouse should be directly employed by the manufacturer. They cover warehouse managers and all other warehouse employees.

106 Based on a discussion with freight forwarders, manufacturers find it burdensome and lack the knowledge on how to demonstrate that warehousing is not part of their core activities. as a result, they'd rather just not outsource it.

b) *Indonesia's commitment in AEC, AFAS compared to applied policies*

Indonesia's regulatory framework for storage and warehousing services is developing towards achieving the vision of the AEC blueprint, however, other market access barriers act as severe bottleneck to the development of 3PLs in Indonesia.

The country seems to have exceeded its commitments through the latest Negative Investment List 2016 that increased foreign equity limit to 67%, in warehousing services and removing all restrictions to cold storage services. Furthermore, it harmonized the maximum equity limit for both warehousing and freight forwarding activities, both of which can have 67% access to foreign capital. Third party logistics providers can develop as they would be able to offer both activities. To increase FEL to 70% would constitute the last milestone for the government to fully comply with the AEC roadmap.

Nonetheless, other legislations still act as Market Access barriers, *inter-alia* the need for 2 licenses (a business trade license for warehousing and a freight forwarding license), high capital requirements and the barrier to manufacturers' outsourcing of warehousing activities.

The tables below highlight a comparison between the goals of the AEC, Indonesia's commitments in AFAS 9 and applied policies in regards to "Storage and warehousing services Outside Port Area and 1st Area for". However, it is unclear why Indonesia has separated AFAS 9 commitments in two [107]separate groups. Therefore, two tables have been prepared.

Table 10: Comparison of the AEC Goals, AFAS 9 and Indonesia's applied policies for Storage services of frozen or refrigerated goods (CPC 7421) and Other storage or warehousing services (CPC 7429).

GOALS OF AEC	AFAS 9	APPLIED POLICY
	(1) None (MA/NT)	(1) No regulation
	(2) None (MA/NT)	(2) No regulation
AEC Blueprint: not less than 49% by 2008, 51% by 2010, and 70% by 2013 for logistics services It is stipulated in the Roadmap for the integration of logistics services: "member country shall endeavor to achieve substantial liberalization of logistics services in Storage and warehousing services (CPC 748) by 2013	(3) Commercial Presence is permitted in the form of a limited liability company with foreign equity participation must not exceed 49 per cent of the registered capital. (MA) 3) Unbound except as indicated in Horizontal section (NT)	Limited Liability Company with foreign equity participation at the maximum of 67%. In addition, the new DNI has scrapped the limitation of foreign equity participation for cold storage. Warehousing companies that also offer freight forwarding services need to have a freight forwarding license, which

107 The numbers (1), (2), (3) and (4) refer to the four modes of supply: The four modes of supply: (1) Cross Border Supply, (2) Consumption Abroad, (3) Commercial Presence, (4) Movement of Natural Persons.

GOALS OF AEC	AFAS 9	APPLIED POLICY
		imposes high capital requirements (IDR 25 billion) A warehouse also needs Warehouse Registration Certificate (TDG) as a proof of a warehouse registration (MoT regulation No 90/2014)
		(4) No regulation

Table 11: Storage and warehousing services Outside Port Area and 1st Area for: Storage services of frozen or refrigerated goods (CPC 7421)

GOALS OF AEC	AFAS 9	APPLIED POLICY
	(1) None (MA/NT)	(1) No regulation
	(2) None (MA/NT)	(2) No regulation
AEC Blueprint: not less than 49% by 2008, 51% by 2010, and 70% by 2013 for logistics services It is stipulated in the Roadmap for the integration of logistics services: "member country shall endeavor to achieve substantial liberalization of logistics services in Storage and warehousing services (CPC 748) by 2013	(3) Joint venture with foreign equity participation up to 51 % (MA) (3) a. Subject to qualification and Licensing requirement and procedure including registration. b. Permitted only operate in the islands of Kalimantan, Sulawesi, Nusa Tenggara, Maluku and Papua. (NT)	Limited Liability Company with foreign equity participation at the maximum of 67%. In addition, the new DNI has scrapped the limitation of foreign equity participation for cold storage. A warehouse also needs Warehouse Registration Certificate (TDG) as a proof of a warehouse registration (MoT regulation No 90/2014)
		(4) No regulation

6. Learnings from international experiences

a) *International guidance*

Several countries adopted "*light-handed regulatory*" environment (Kopicki, 2009) **and have removed restrictions on FDI on third-party logistics providers (3PLs).** Relaxing market entry requirements for warehouse-related service providers, is proven to attract industries where supply chain management activities are outsourced to 3PL[108], with international manufacturers and traders requiring warehouse-

108 Such as those practicing just-in-time production (automobile, electronics, etc.)

related functions to be handled by a globally contracted 3PL. Electronics, automotive, and pharmaceuticals multinationals have been developing hand-in-hand with their 3PLs. Furthermore, developing quality and competitive 3PLs would also open the door to 3PLs of all sizes (not only large multinational firms). This would bring into the market small and medium 3PLs to support small and medium manufacturers.

b) *Country examples of enabling market access and national treatment*

Countries removed restrictions on foreign equity limits

The Malaysian government does not apply any equity restrictions to Ordinary Warehouses and Private Bonded Warehouses. Only Public Bonded Warehouses are subject to a maximum of 70% of foreign equity limit (*Bumiputera* equity of at least 30%) for national strategic motivations (Malaysian Investment Development Authority (MIDA), October 2012).

Countries removed minimum capital requirements

In addition to areas and countries that waived foreign equity limits (Hong Kong, Singapore, the European Union) on several service sectors, **Vietnam opened some "services auxiliary to all modes of transport"** services to 100% of foreign equity, including Storage and warehouse services (CPC 742) (Duane Morris LLP, 28 January 2014).

7. Warehousing and storage in a nutshell

In supporting off-shore manufacturing, third-party logistics providers (3PL) are key partners catering producers' supply chain management needs. Their services may cover a large scope of services, *inter-alia* warehouse and inventory management, freight forwarding activities, and added-value services such as labelling or re-packing. Efficient 3PLs run modern warehousing facilities on behalf of manufacturers that would focus on their core activity, namely production. Indonesia's legislative environment has prevented the development of 3PLs. Lessons learned from other countries would provide recommendations to support the development of warehousing services in the countries.

a) *Challenges*

The GoI has taken several initiatives to development warehousing services in Indonesia, and is on track to achieve the 70% foreign equity limit set in the AEC blueprint. Nonetheless, the current legislative framework highlights two opposite trends. On the one hand, the Negative Investment List 2016 increased foreign equity limit to 67% for warehousing and freight forwarding services, both of which are key activities for 3PLs. On the other hand, despite the fact that warehousing services are part of "services auxiliary to all modes of transport", they don't fall under the same legislative framework, under two different ministries. 3PLs would need to cumulate both a trade (for warehousing) and a freight forwarding licenses, the latter imposes high capital requirements that act as a market access barrier to the development of small and medium sized specialized 3PLs. Furthermore, between 2007 and 2016, foreign equity limits for each of these two licenses were different, making it impossible for new entrants to develop into 3PLs. As a result, a 3PL would need to have two different companies, one dedicated to warehousing operations and one to freight forwarding activities.

More importantly, despite international practice based on which 3PLs support manufacturers' supply chain management functions, the labor legislation prevents manufacturers from outsourcing warehousing activities as these are considered CORE activities.

b) Opportunities

International guidance suggests that light-handed legislative framework and removal of foreign equity restriction are advised to support the development of 3PLs, a key service provider to manufacturers. Country examples, including those known to limit foreign equity such as Vietnam, removed restrictions to foreign investment in all auxiliary services including warehousing and storage.

II. Bonded warehouses to support export manufacturing supply chain: overview of Consolidation Warehouses

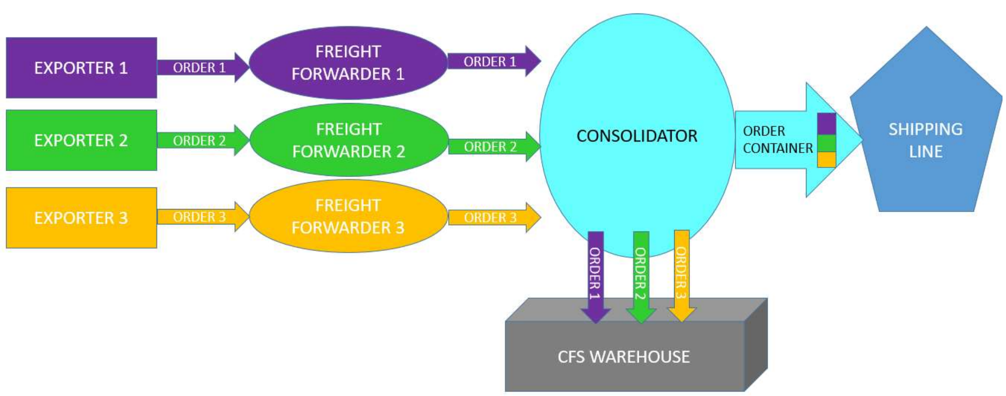
Goods that are not time-sensitive and/or do not have high value, are exported by sea, either sea in full containers (FCL) or in Less than Container Loads (LCL).

About 90% of world trade is seaborne, with medium to large-scale manufacturers using full containers, whereas small-scale manufacturers may not secure required volumes to fill a full container. Therefore, these companies would ship by LCL, which means that their goods will be added to other exporters' goods and shipped within one full container. For LCL exports, bonded warehouses designed for consolidation are a key node in the export supply chain.[109]

1. Overview of LCL export consolidation in Indonesia

LCL export consolidation[110] involves (1) a manufacturer, (2) a freight forwarder to help a manufacturer arrange logistics services, (3) a consolidator that arranges a container to carry the manufacturer and other manufacturers export cargo, (4) a CFS warehouse, where consolidation take place, and (5) a shipping line to carry the container from an Indonesian port to a port of destination.

Figure 36: A simplified illustration of LCL consolidation.



Source: by the authors

109 This section focuses on LCL exports and will not address consolidation of airfreight cargo. Based on Indonesian legislation, only airline warehouses are allowed to consolidate airfreight cargo. This theme is part of the chapter on airfreight cargo handling.

110 A trucking company is also included to move cargo from the manufacturer's premises to the consolidators' CFS, then move the container (that contains those goods) to the port terminal.

Consolidators are freight forwarders specialized in consolidation. Their customers are freight forwarders catering owners of goods, such as manufacturers and traders. Consolidators are divided into domestic and international consolidators. They may operate own CFS warehouse or outsource this activity. CFS are usually located close to ports. In West Java, they are located in Cakung, Marunda, Tanjung Priok area and Cikarang Dry port. There is still need for higher quality CFS warehouses, with only a few complying with best practice. In order to compensate insufficient quality and reliability, consolidators dispatch dedicated teams to supervise CFS operations when loading their cargo into a container. [111]

2. Key regulations

a) *Input: Barriers in employing factors of production (capital, labor, licensing)*

Capital

Consolidators are considered as freight forwarders, and therefore are subject to the same market access restrictions in terms of capital requirement. Whereas some countries have a special status for export consolidators that can operate a CFS warehouse under one license, Indonesia does not have such status. Consolidators should have freight forwarding licenses and warehouse license to operate a CFS warehouse. Freight forwarding license and Bonded warehouse license are subject to different limits in foreign equity investments. Since 2007, freight forwarding companies were limited to 49% foreign equity, only recently has the limit been increased to 67% with DNI 2016. Bonded warehouses do not have such limits.

Labor

Similar constraints as other companies in Indonesia.

Licensing

Due to national and sub national legislations, four licenses are required for companies to operate a consolidation warehouse, a trade business license (warehouse), a customs warehouse status, a CFS license and a container depot license. These legislations are as follows:[112]

- National:
  - Trade Law No. 07/2014, *Undang-Undang Republik Indonesia Nomor 7 tahun 2014 tentang Perdagangan*
  - Law Number 10/1995 on Customs as Amended by Law 17/2006. *Undang-Undang Republik Indonesia Nomor 17 tahun 2006 tentang Perubahan atas undang-undang No 10 tahun 1995 tentang Kepabeanan*
  - Ministry of Finance Regulation Number 145/PMK.04/2007 on Customs Provision on Export. *Peraturan Menteri Keuangan Republik Indonesia Nomor 145/PMK.04/2014 Tentang Perubahan Atas Peraturan Menteri Keuangan Nomor 145/PMK.04/2007 Tentang Ketentuan Kepabeanan Di Bidang Eksport*
  - Directorate General of Customs & Excise Regulation Number 40/BC/2008 on Customs Implementation on Export à related to Export Cargo Consolidation. *Peraturan Direktur*

111 Discussion with an international consolidator

112 Information provided by an international consolidator based in Jakarta

Jenderal Bea Dan Cukai Nomor P-40/BC/2008 Tentang Tata Laksana Kepabeanan Di Bidang Ekspor.

- Sub-national:
  - Governor of DKI Jakarta Regulation Number 119/2011 on Management & Cultivation of Container Depot à related to Container Depot Business License (SIUDPK). *Peraturan Gubernur DKI Jakarta Nomor 119 Tahun 2011 Tentang Penyelenggaraan Dan Pengusahaan Depo Peti Kemas*.

b) Production: Barriers in producing services

Bureaucratic burden

Indonesia's legislation sets strict rules for cargo circulation between CFS warehouses, preventing consolidators from a much needed flexibility. Consolidators work with one of multiple CFS warehouses, and may use their own container or other consolidators'container. In case a consolidator does not have space in own container, goods can be stuffed into another consolidators' container (which may be located in another CFS). Such practice requires „free circulation" of cargo between CFS warehouses. Based on consolidation experts, the required documentation to allow goods to flow between CFS warehouse is complicated and consolidators prefer to avoid it. This was described as a bottleneck to smooth LCL exports, with some exporters' cargo delayed due to lack of space in their consolidator's container.

c) Output: barriers in selling services or generating profitability in selling services

There is no price control of CFS warehouse services. PP 11/2015 on regulated tariffs by the ministry of Transportation only includes one item of bonded warehouse ("Gudang Tertutup") in ports (Jasa Penumpukan di Pelabuhan) where tariffs per tons and m^3 are set depending on a port class (class I to III). There have been attempts by the government to regulate CFS services to prevent abusive practice by CFS operators for imported LCL cargo.

3. Country examples

CFS warehouses usually subject to strict regulations, as these are bonded warehouses. However, these CFS warehouses are vital in the export chain of low value/low volume cargo. Countries have chosen several methods to support the development of LCL consolidators in order to support small exporters that mainly ship in LCL.

a) License simplification

In countries such as Malaysia, only one license is needed to operate a private bonded warehouse. The license allows the performance of several activities, inter-alia consolidation, warehousing, re-packaging and re-labeling of imported goods. (Malaysian Investment Development Authority (MIDA), October 2012)

b) Consolidation status simplification

In the USA, companies can have a freight forwarding and a consolidation license. By creating an "export consolidator status", the American market has a limited number of consolidators which allows to better control the LCL market and a higher benefit for the exports. The consolidators can have their own warehouses.[113]

113 Discussion with an international consolidator with a subsidiary in the USA

Chapter 4: Cargo handling Services (CPC 741)

I. Cargo handling in ports and terminal operators

The focus of this study is on logistics services as supporting services to the manufacturing industry and therefore only the category of port facilities providers will be further explored from a regulatory perspective. The rationale is that manufacturers use international ports as gateway that handles volumes in numbers that justify exploiting a dedicated container terminal. For example, the port of Tanjung Priok's hinterland, such as the industrial parks in Cikarang and Cikampek, generate enough volume to justify the development and expansion of the port of Tanjung Priok.

1. Container Terminal operators in Indonesia: basic functions

Definition

Container terminal operators specialize in moving container on and off the ship therefore being one of the last shackles in the export chain because once on board the goods will move across the border towards the port of destination. This study focuses on the logistics services related to export of manufactured goods. Manufactured goods are primarily shipped in containers compared to raw materials from the extraction industry or large estate crops such as crude palm oil. There is a significant difference between terminal operators for containers compared to many other export/import products. In contrast to terminals for extractive industries none of the cargo owners ship thus large volumes to justify investing in a container terminal. A 25.000 DWT ship may carry CPO for only a handful of clients while a containership of a similar weight class carries over 4.000 containers with hundreds or even thousands of owners. Therefore, container terminals perform by business-nature an intermediary role compared to extractive industries whereby the port function is part of the overall business and can even be loss making if needed.

Box 10: Reminder of definitions of maritime cargo handling

Extract from Chapter 1: comparing Indonesian government's definition with WTO's

	BKPM	**Ministry of Transportation**	**WTO**	**Comments**
Maritime Terminal cargo handling	Loading/ unloading of goods, including Maritime Cargo Handling Services. In cases where this activity is performed by a terminal operator, it becomes part of another activity "port facility provider/ Provision of harbor facilities", which includes provision of port / terminal facilities and providing Maritime Cargo Handling services are included.	Business activity of loading and unloading of goods to and from ships in ports including stevedoring activities, Customs Clearance and receiving / delivery. Business activity of Port Business Entity allows to operate terminals and to handle maritime cargo.	Handling services of containerized (CPC 7411) and non-containerized cargo (CPC 7419)	**Partial match between WTO and Indonesia's definitions only for stevedoring services, not for terminal operators.**

2. Global market (structure, global players) and trends

With the maturity of containerization, global players have emerged that have dedicated their business to handling containers. Since the 1990's volumes of containers have grown exponentially and port operations traditionally executed by Port Authorities (Service Port Model) faced difficulties in keeping up with technology and investments for container handling facilities. The vast majority of large and medium sized ports have moved to the landlord model whereby container-handling activities are "concessioned" to container terminal operators on land provided by the Port Authority. Similar to trends in the container shipping industry, through mergers and acquisitions, major international operators have emerged. The majority of these have merged either out of shipping lines such as APM, Cosco, MSC, Evergreen and CMA-CGM or out of traditional port operators from the era of the Service Port model such as PSA, DP World and HHLA. Table 12 presents the 20 largest container terminal operators in the world. Combined these operators control 66.8% of the global container terminal market in 2009.[114]

Table 12: Top 20 largest container terminal operators 2011

	Name	Economy	Country Type	Throughput (millions of TEU)	World Percentage	Terminal Capacity (millions of TEU)	World Terminal Capacity as a percentage
1	HPH	China, Hong Kong SAR	DC	64.2	12.2	93.0	12.5
2	APMT	Netherlands	IN	56.9	10.9	105.4	14.0
3	PSA	Singapore	DC	55.3	10.5	84.4	11.2
4	DPW	United Arab Emirates	DC	45.2	8.6	63.1	8.4
5	Cosco	China	DC	45.2	8.6	63.1	9.1
6	MSC	Switzerland	IN	16.4	3.1	23.6	3.1
7	Eurogate	Germany	IN	11.7	2.2	21.1	2.8
8	Evergreen	Taiwan	DC	8.6	1.6	16.6	2.2
9	SSA Marine	United States	IN	7.7	1.5	18.0	2.4
10	CMA-CGM	France	IN	7.0	1.3	14.5	1.9
11	Hanjin	Republic of Korea	DC	6.0	1.1	15.8	2.1
12	NYK Line	Japan	IN	5.2	1.0	19.0	2.5
13	HHLA	Germany	IN	5.0	1.0	9.2	1.2
14	Dragados	Spain	IN	4.9	0.9	9.1	1.2
15	APL	Singapore	DC	4.6	0.9	7.7	1.0
16	K Line	Japan	IN	4.3	0.8	8.7	1.2
17	OOCL	China, Hong Kong SAR	DC	4.2	0.8	5.5	0.7
18	Yang Ming	Taiwan	DC	4.1	0.8	7.9	1.1
19	ICTSI	Philippines	DC	3.6	0.7	7.4	1.0
20	MOL	Japan	IN	2.7	0.5	5.7	0.8
Total				350.1	66.8	604.7	80.4
World				524.4	100.0	751.9	100.0

Source: (UNCTAD, 2011)

3. Market structure/dynamics (in Indonesia)

Containerized cargo has grown rapidly over the last decade and so the need for efficient terminal operations. In Tanjung Priok the volumes grew from 4.6 million TEU in 2010 to 5.7 million TEU in 2014[115]. The Port Master Plan for Tanjung Priok forecast volumes to reach 18 million TEU by 2030.[116] Overall by 2030 it is expected that Indonesian ports will handle 29.4 million TEU in international cargo (SMEC & AUSTRALIAN AID, March 2012). With high demand for container terminals, the Government of Indonesia through its SOE's has taken action to bridge the infrastructure gap for container terminals. Pelindo 3 has developed Terminal Teluk Lamong with a capacity of 1.6 million TEU in East Java, Makassar New Port is developed with 400.000 TEU in phase 1A with potential to expand to 3.5 million TEU by the end of phase

114 Note: Calculated volume based on % of participation. Example 49% of the volume in JICT and KOJA is attributed to HPH.

115 Website Branch Tanjung Priok

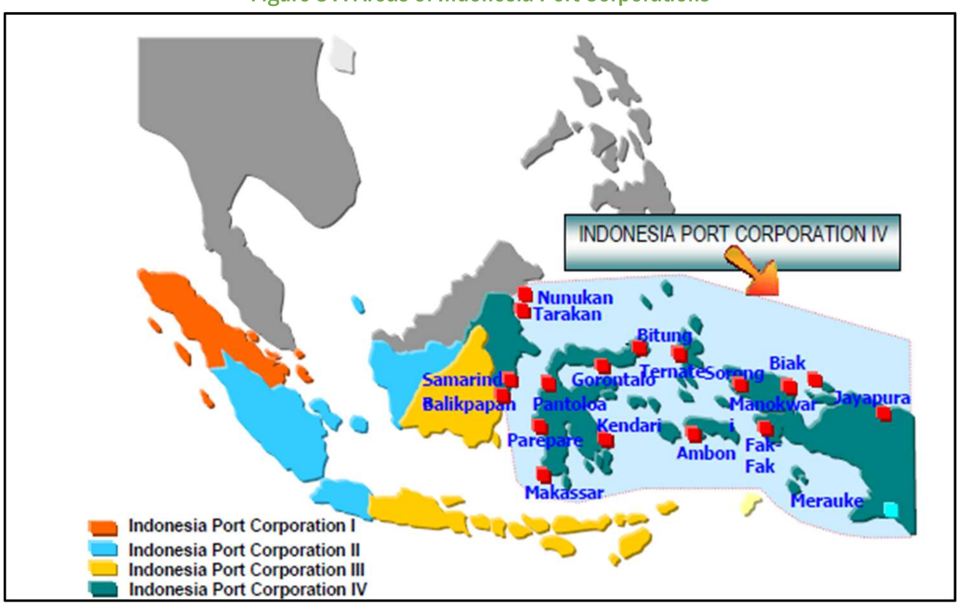
116 Peraturan Menteri 38 tahun 2012 (on the master plan of the port of Tanjung Priok)

2 and the New Priok Container Terminal 1 with a capacity of 1.5 million TEU is ready to be officially opened in September 2016 with two additional terminals already in the reclamation phase. All these projects will contribute to providing sufficient container terminal capacity to absorb growth.

Number of firms, Level of industry integration, Market share

Public commercial ports' terminal operators are mostly wholly owned by State-Owned Port Operators (Pelindo 1, IPC, Pelindo 3 and Pelindo 4), with a limited number of jointly owned with international terminal operators, or owned by a domestic companies. Indonesia is home to over 2.000 ports of which the majority are special ports, ports dedicated to support a particular industry such as energy, mining or forestry. About 800 hundred ports are public ports that fulfill an important intermediary role for the public. Of these 800 ports, 111 public ports are considered commercial and are assumed to be commercially viable. Dedicated container terminals are found in commercial public ports and in particular in the main ports that attract the largest cargo volumes. Most medium size ports handle volumes that are insufficient to justify operating a dedicated container terminal whereby facilities are shared with other flows such as general cargo and passengers.

Figure 37: Areas of Indonesia Port Corporations



Source: Pelindo IV

The largest container terminals in Indonesia are the Jakarta International Container Terminal (JICT) and KOJA in Tanjung Priok and Terminal Petikemas Surabaya (TPS), all of which are joint ventures. JICT and KOJA are operated in joint venture between Pelindo II and HPH while TPS is operated in joint venture between Pelindo III and DP World. Other medium sized terminals in Indonesia such as Belawan International Container Terminal (BICT), Terminal Peti Kemas Semarang (TPKS), Terminal Petikemas Makassar (TPM) are operated fully by the responsible Pelindo. A few medium size domestic ports container volumes are sufficient to operate a dedicated container terminal on a small scale such as in Samarinda, Balikpapan, Bitung, Palembang, Pontianak and Teluk Bayur. Domestic container volumes are expected to grow rapidly over the next decade and many domestic terminals will have to develop dedicated container terminals soon. Some of these terminals may accommodate both domestic liner services as well as international. (PPIAF, 2015)

Expenses and Revenues

As the main responsibility of terminal operators is to handle the containers between a truck/rail/barge and a ship, the main revenue is from container handling charges, commonly known as Container Handling Charges (CHC), Terminal Handling Charges (THC) and storage charges. These are considered as operating income, and are supposed to cover terminal operator's expenses such as contract services (such as stevedoring manpower), repair and maintenance costs, and direct manpower costs.

<u>**Customers of Container Terminal Operators in Indonesia**</u>

Shipping lines and their shipping agents develop long term partnerships with terminal operators. Their bargaining power depends on volumes provided, and on their capacity to find alternative terminals. Shipping agents, representing shipping lines, are terminals' main customers. Multinational producers and traders (or their freight forwarders' agencies) may also have a direct contractual relationship with container terminals in case they have large volumes. However, direct terminal-cargo owner relationship is more common in case of non-containerized cargo, such as break-bulk cargo.

Container terminal operators have long-term relationships with their customers. While contracts between shipping lines and container terminals typically have a duration of one year, in practice these relationships generally last much longer, even decades. In terms of bargaining power, shipping lines tend to either negotiate directly with terminal operators or through their association INSA (Indonesia Ship Owners Association). This latter represents mainly Indonesian ship owners. Many tariffs are set by regulation, following discussions between port operators (Pelindos), INSA, and the ministry of transportation. But tariffs are only one part of the negotiation, other components include discounts and berthing slot allocation. With the launch of the new container NCTP 1 in the New Priok, shipping lines' bargaining power in Tanjung Priok port will increase significantly.

<u>**Suppliers of Container Terminal Operators in Indonesia**</u>

Providers of terminal land (Port Authority or Pelindo), equipment (such as cranes and software, etc.), labor, utilities (water and electricity), are considered as terminal operators' suppliers. Their importance and bargaining power depends on whether they are a public entities or private, and whether they are in limited or unbound supply. Below is an example of these suppliers' bargaining power vis-à-vis the terminal operators' in Tanjung Priok port:

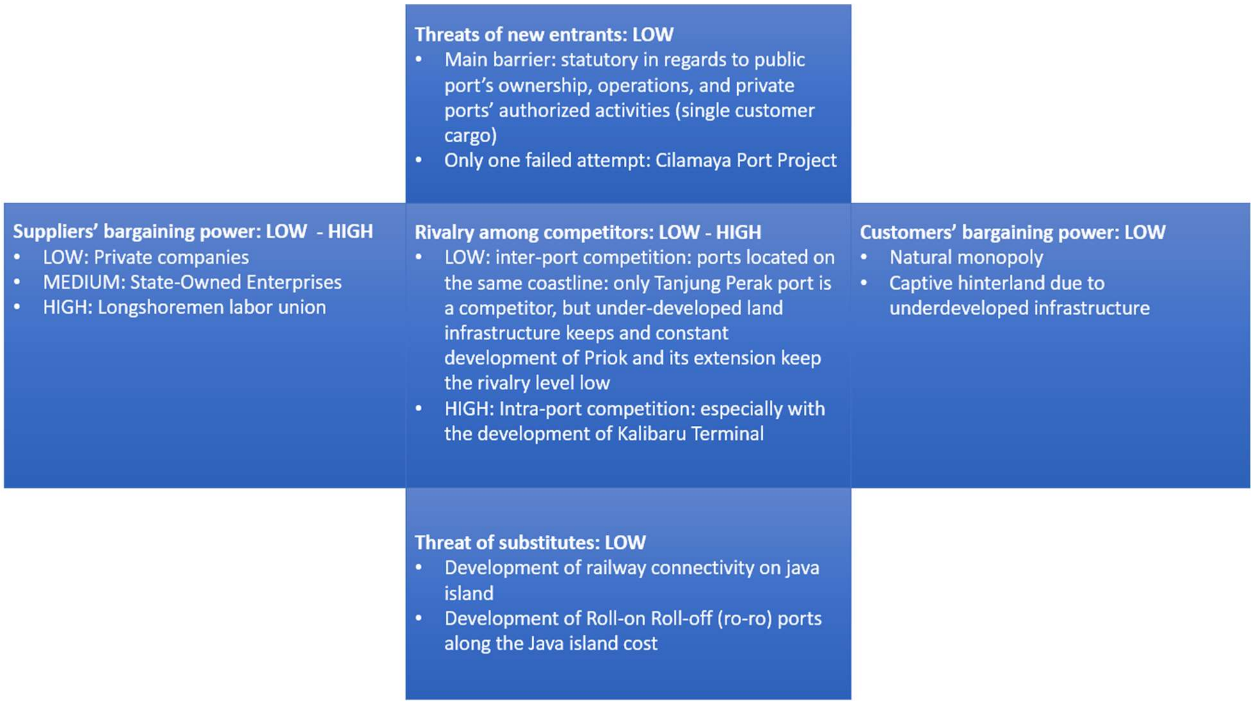
- High pressure from longshoremen union: this union's monopolistic situation applies high pressure on terminal operators, as the union is highly protected by the law, regardless of workers performance. All stevedoring workers need to be sub-contracted by a stevedoring cooperative (TKBM).[117]
- Medium pressure from State-Owned Companies (SOEs): a large number of ports supplies are controlled by SOEs, including basic utilities such as water and electricity. Major projects are also to be managed by SOEs, for instance infrastructure construction projects are tendered to SOEs,

117 Ministry of Manpower and Transmigration Regulations PM 60 year 2014, 53 year 2015 and 93 year 2015

which then outsource to private companies. It is likely that the pressure is political, rather than commercial.

- Low pressure from private companies: In regards to sectors open to private companies, such as equipment and equipment maintenance, there is a strong competition from local and international players. Therefore, terminal operators would benefit from a strong buying power.

Figure 38: A competitive analysis of terminal operators in Tanjung Priok port. Porter's five forces



Source: the authors

4. Performance of Indonesia's service providers/ competitiveness

> *"The performance of ports and terminals can significantly affect a country's trade competitiveness. One chief economist even cited port congestion as the new barrier to international trade (Van Marle, 2015)."* (UNCTAD, 2015)

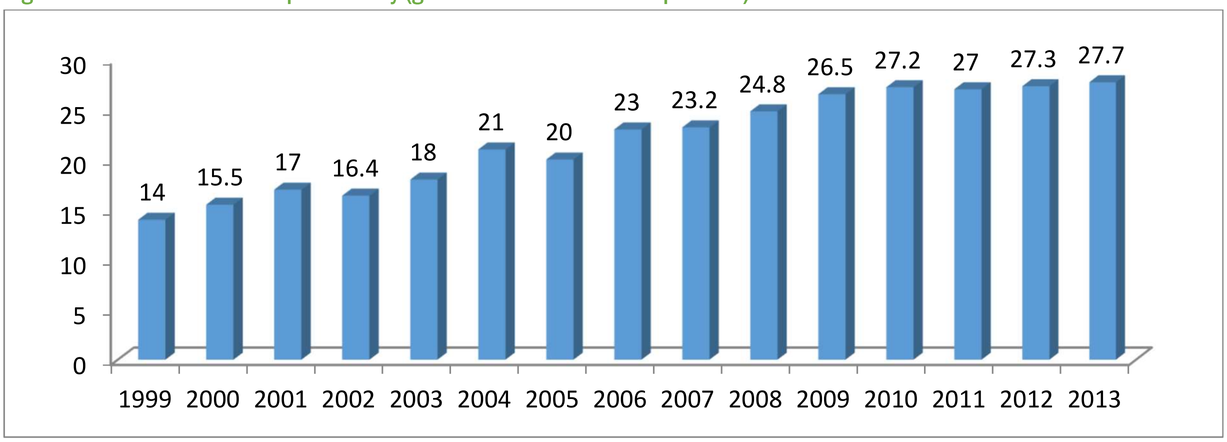
The competitiveness of container terminal's operations is determined by the quality of the infrastructure, terminals' facilities and the external infrastructure. Their performance is measured in terms of each aspect of terminal operations, ranging from gate to water-side operations. Container terminal operations are pure play infrastructure business and have some of the following key characteristics:

- High barriers to entry due to the high capital requirements, regulatory requirements and limited land availability
- Coordinated hinterland transportation connections requiring local governments receptive to development
- New terminal development often constrained by local planning procedures and regulations

- Long lead times for project execution due to the involvement of many stakeholders in the process
- Limited competition partially due to geographical constraints

A container terminal is a crucial link in the wider logistics chain. The water, rail and road hinterland connections and logistical services provided in the port, including warehousing and customs processing, make up the logistics chain in which the ports operate. Additionally, high quality inland transport links is a key element in the success of a container terminal. Container terminal operators' performance is determined through gate operations, yard operations, and waterside operations' performance. Each area with own key performance indicators, most of which are related to throughput, container capacity, container moves per hour, asset utilization and dwell time. The main performance indicator in rating container terminals' performance is berth productivity[118], which is counted in terms of number of container moves per ship, per hour, on all vessel sizes. Tanjung Priok and Tanjung Perak's container terminals reach an average of 30 moves per hour (gross crane moves/ hour). In comparison, Malaysia's Tanjung Pelepas' performs at 35 moves per hour (Gross crane moves).[119] In terms of throughput, Jakarta is the 19th largest container port in the world.

Figure 39: Evolution of JICT's productivity (gross crane rate in moves per hour)



Source: Presentation (PT. Pelabuhan Indonesia II (Persero), 10 December 2015)

5. National Regulatory Framework

The Indonesian legislative landscape for container terminal operators mainly showcases market access restrictions and red tape. Key legislations affecting container terminal operators include the following:

- The Shipping Law No. 17/2008. *Undang-Undang Republik Indonesia No. 17 tahun 2008 tentang Pelayaran*
- The Presidential Regulation No. 44/2016 about the list of business fields that are closed to investment and business fields that are conditionally open for investment (DNI 2016). *Peraturan*

118 Definition of berth productivity by JOC.COM " Berth Productivity is defined as the number of total container moves (on-load, off-load, and re-positioning) divided by the number of hours during which the vessel is at berth (time between berth arrival, or "lines down" and berth departure, or "lines up"), without adjustments for equipment and labor down time. The productivity metrics contained in these rankings are the average berth productivity for all validated and standardized vessel calls in the database for each port or terminal during calendar year 2012." http://www.joc.com/sites/default/files/u59196/Whitepapers/Port_productivity/portProductivity_whitepaper.pdf

119 http://www.ship-technology.com/projects/tanjung-pelepas/

Presiden Republik Indonesia Nomor 44 tahun 2016 tentang Daftar Bidang Usaha Yang Tertutup Dan Didang Usaha Yang Terbuka Dengan Persyaratan Di Bidang Penamanan Modal.

- Ministry of Transport Regulation No 51/2015 on Port Providers (Port Authority and UPP) *Penyelenggaraan Pelabuhan Laut*
- Ministry of Transport Regulation No. PM 45/2015 on Capital Requirements for Companies in the Field of Transport. *Peraturan Menteri Perhubungan No. PM 45 Tahun 2015 tentang Persyaratan Kepemilikan Modal Badan Usaha di Bidang Transportasi*
- The Ministry of Transport regulation PM 95/2015 on "Guidelines for setting the selling price (charge) harbor service operated by a business entity harbor". *Peraturan Menteri Perhubungan Republik Indonesia No PM 95 tahun 2015*
- Government regulations Republic of Indonesia No. 11 /2015, regarding Type and Tariff on Non-Tax Revenues Applicable within the Ministry of Transportation. *Peraturan Pemerintah Republic Indonesia No. 11 tahun 2015, tentang Jenis dan Tarif atas Jenis Penerimaan Negara Bukan Pajak Yang Berlaku Pada Kementerian Perhubugan.*
- Bank Indonesia Regulation Number 17/3 / PBI / 2015 on the Obligations Penggynaan Rupiah On the territory of the Republic of Indonesia. *Peraturan Bank Indonesia nomor 17/3/PBI/2015 tentang Kewajiban Penggynaan Rupiah Di Wilayah Negara Kesatuan Republik Indonesia.*

a) Supply chain process: Input, Production, Output

Input: Barriers in employing factors of production (capital, labor, licensing)

Capital

In regards to container terminals, there is a lack of clarity in regards to the applicable foreign equity limit. The identification of the right KBLI is essential. It is unclear which KBLI applies to container handling, whether 52240 for stevedoring services or 52221 for port facility provider that includes container terminal. The understanding of the authors is that the latter is directed towards the building and operating of entire terminals while stevedoring services apply to smaller ports without dedicated container terminals.

The GoI recently increase foreign equity limits for stevedoring to 67%, a big step from the DNI 2014 although container terminal facility provider remains capped at 49%. In reality this means that container terminals remain operated for at least 51% by a Pelindo subsidiary whereby it is questioned whether real competition exists between terminals. The recently opened New Priok Container Terminal 1 will show whether it will compete heads on with JICT.

Labor

A monopolistic stevedoring union forces is statutory, with terminal operators having a legal obligation to either employ stevedoring workers through the union and to pay for a stevedoring fee. Based on Indonesian legislation, all stevedoring worker can only be hired by a stevedoring cooperative[120] (trade union) called TKBM[121] and sub-contracted to port operators. TKBM have therefore a monopolistic position in regards to port labor. Further, based on an interpretation of provisions included Minister of

120 A cooperative is an organization owned and run jointly by its members, who share profits or benefits

121 Referred to in Indonesian as Tenaga Kerja Bongkar Muat, or TKBM.

Transportation Decree no. 14/2002 and SKB/2011, TKBM charges stevedoring fees even when a terminal operator would hire own staff.[122] For other types of employees, companies need to comply with the same legislation as other Indonesian companies that prevent flexible hiring policies and state types of functions open to foreign workers. (Please refer to chapter on shipping agencies).

Licensing

Red tape and high capital requirements affect terminal operators' licensing.

All container terminal operators need to obtain a concession from the Port Authority (OP) or Port Authority and Harbor Master (KSOP)[123], a Port Business License (Izin Badan Usaha Pelabuhan) from the Director General of Sea Transportation, and an operations license from the Director General of Sea Transport. The requirements to operate a dedicated container terminal are in line with global requirements except for the high capital requirements put forward in Ministerial Decree 45 of 2015. Capital requirements to operate in a main port are 1 trillion rupiah or the equivalent of USD 75 million. The license is only valid for 5 years while the actual concession covers a much longer period. The regulation is unclear whether capital requirement amount needs to be guaranteed at all times during the period of the license and when the license needs to be extended. To put the amount in perspective a ship to shore container crane is priced at around USD 8 million and various yard equipment at USD 1 million or less, therefore USD 75 million is sufficient to equip a medium sized container terminal. It is unclear whether container terminals with a Izin BUP still require a separate stevedoring license. Anecdotal evidence suggests that a separate stevedoring license is not required for container terminal operators.

Production: Barriers in producing services

Costs of service "inputs"- services purchased by terminal operators

Prices of all public utilities including water and electricity are set by the Indonesian government.

Availability and quality of services needed for production: manpower

There is a growing awareness about longshoremen's role in slow port performance started since 2012. Indonesian longshoremen, employed exclusively by monopolistic port cooperatives, are over-supplied, with an ageing workforce (60% employees over retirement age), and perform poorly in their duties. Port cooperatives do not upgrade their employees' skills through training and education. However, they always charge stevedoring fees to port stakeholders, even when works are not performed by their employees. There is still no solution at the national level. Each port operator negotiates with the local longshoremen cooperative. (Journal of the Indonesia Infrastructure Initiative. Prakarsa. Issue no. 10, April 2012)

Bureaucratic burden

BI regulation No. 17/3/PBI/2015 on the Obligation to Use Rupiah goes in contradiction with the practice all port and ship services are based on USD tariffs. This regulation is particularly cumbersome for international container terminals. This service provider is often able to secure loans with competitive international interest rates mainly because the activity directly generates foreign currency.

122 Source: Prakarsa April 2012

123 It depends on a port's class branch

Output: Barriers in selling services or generating profitability in selling services

Revenues: barriers in collecting revenues

Indonesia's caps the maximum for terminal operators to 25%, way below international standards. The Ministry of Transport regulation PM 95/2015 on "Guidelines for setting the selling price (charge) harbor service operated by a business entity harbor" sets considerable barriers to terminal operation investors. In its chapter on "Maximum Selling Price of harbor services", a limit of maximum 25% [124]of profit margin is set on port services, way below international practice.

> *"Peraturan Menteri Perhubungan Republik Indonesia No PM 95 tahun 2015*
> *Tentang Pedoman penetapan harga jual (charge) jasa kepelabuhan yang diusahakan oleh badan usaha pelabuhan*
> *BAB IV: Batas Harga Jual Jasa Kepelabuhan*
> *Badan usaha pelabuhan dapat menerapkan harga jual (charge) terhadap pelayanan jasa kepelabuhan paling tinggi sebesar Biaya Pokok Produksi ditambah margin keuntungan sebesar maksimal 25% dari biaya per unit jasa kepelabuhanan yang diberikan atau disediakan"*

Price control

Port terminal tariffs are regulated in PP 11/2015 on Type and Tariff on Non-Tax Revenues Applicable within the Ministry of Transportation. Under the section Sea Transport Enterprise ("Jasa Transportasi Laut"), subsection Cargo Service Enterprise ("Jasa Pelayanan barang"), terminal handling fees are set based on port's classification I to III. Although by regional standards THC are not high due to scale and relatively low labor costs but Indonesia could have lower THC's.

b) Indonesia's commitment in AEC, AFAS compared to applied policies

Similarly, to other logistics service providers, lower market access restrictions in regards to foreign equity limit are replaced by other market access restrictions. With the amended Negative Investment List 2016, the Indonesian government completed partly its AFAS 9 commitment by increasing foreign equity limit for all ports to 67% (rather than the initial 60%), and allowing investors from ASEAN to participate up to 70% in 4 ports. However, high minimum capital requirements and capping of terminal operators' profits have been identified as strong barriers to both domestic and foreign investment.

Table 13: Comparison of Indonesia's applied policy with the AEC goals and AFAS commitments (Maritime Cargo Handling)

GOALS OF AEC	AFAS 9	APPLIED POLICY
	1) Unbound* (MA/NT)	(1) No regulation
	(2) None (MA/NT)	(2) No regulation
AEC Blueprint: **not less than 49% by 2008, 51% by 2010, and 70% by 2013 for logistics services** **It is stipulated in the Roadmap for the integration of logistics**	(3) Joint venture shipping company with foreign equity participation: - Up to 60 per cent for other areas, maximum foreign. - Up to 70 per cent is permitted only for port in Bitung, Kupang, Ambon,	(3) Joint venture port facility provider with foreign equity participation: - Up to 49 per cent and subject to a special permits from the Ministry of Transportation for the minimum

124 Given the large amounts of investments required in terminals, international terminal operators expect around 40% to 50% profit. Source: Discussion with a World Bank staff, previously employee of an international terminal operator.

GOALS OF AEC	AFAS 9	APPLIED POLICY
services: "member country shall endeavor to achieve substantial liberalization of logistics services in Maritime cargo handling services (CPC 741) by 2013	and Sorong. (MA)	capital requirement (For companies strictly involved in stevedoring services, foreign equity participation up to 67 per cent and subject to a special permits from the Ministry of Transportation for the minimum capital requirement. Applicable only for ASEAN countries in 4 (four) ports of the territory of eastern Indonesia, i.e Pelabuhan Bitung, Pelabuhan Ambon, Pelabuhan Kupang, and Pelabuhan Sorong) (3) High minimum capital requirements
	(4) As indicated in the Horizontal Section (NT)	(4)

In fact, maritime cargo handling services have been opened up but sector regulation still restrict investments in cargo handling terminals. In Indonesian legislation container terminals and stevedoring are separate activities and the recent change in DNI will only present opportunities in smaller ports while the big terminals remain untouched.

6. Learnings from international experiences

a) International guidance

Port competitiveness is measured by its performance. Key performance indicators are used by shipping lines, international freight forwarders and other port users to select ports as a gateway. Empirical evidence shows that competition among port service providers helps foster ports' overall performance, through more competitive prices and increased quality of services. Intra-port competition and intra-terminal competition[125] are proven to increase port performance, encourage "specialization" and "innovation" (Palli & De Langen, (n.d.)). Many countries, such as European Union countries, have led port policy reform to increase attractiveness of their ports to the private sector investment.

b) Country examples

Many countries around the world adopted the landlord model and delegated terminal operations to specialized terminal operators to foster intra-port competition and increase the overall performance of a port. Prime examples include the port of Rotterdam where there are 5 large container terminals competing with price and performance in addition to 6 smaller terminals that handle short-sea vessels. Another well-known example is Hong Kong that allows for built-operate-transfer schemes to develop

125 'Intra-port competition refers to a situation where two or more different terminal operators within the same port are vying for the same market. In this case, the terminal operator has jurisdiction over an entirely terminal area, for berth to gate and competes with other terminal operators'; 'Intra-terminal competition refers to companies competing to provide the same services within the same terminal'. (World Bank 2000, Module 6, p. 5-6, cited http://econwpa.repec.org/eps/io/papers/0510/0510003.pdf)

container terminals with ample competition between the various operators. Sri Lanka and Myanmar are currently applying similar BOT schemes.

Market access

Restrictions on foreign equity, minimum capital requirements that are inconsistent with the industry level and attempts to regulate private sector profits can all be classified as market access and entry barriers. Following traditional transshipment hubs such as Hong Kong and Singapore where policies do not set limits to foreign investment in most sectors, other countries are removing market access barriers.

Tariff

Terminal operators and other port service providers should be allowed to set own prices, that is the result of market mechanism and negotiations between users and providers. Only in situations whereby cargo volumes are low and only one operator is feasible, should there be ways to monitor excessive pricing and regulations to sanction monopolistic behavior, but still no price setting regulations.

7. Cargo handling in ports in a nutshell

Within the context of the maritime highway and an overall budget review forecasting lower budget for infrastructure project, Indonesia is in pressing need for private investment in ports. The Indonesian government has set a clear framework for PPP and even enabled “availability payment mechanism” to encourage private BOT investment in secondary ports. A bird-eye view on challenges and opportunities for terminal operators would help support the government’s plan to attract private investment to ports.

a) Challenges

Indonesia’s applied policy in regards to cargo handling is more restrictive than the country’s commitment in AFAS 9. Despite foreign equity limits in all ports are higher than AFAS 9 (67% instead of 60%), the 70% share allowed in 4 ports is restricted to only Asean countries’ investors. Additional market entry and market access barriers are said to deter investors from the sector. High minimum capital requirements, capping of profits combined with tariffs pre-set by the government are contrary to the best practice in the sector. In addition, cargo handling only covers stevedoring services (KBLI 52240), the actual operation of container terminals (52221) is restricted to 49% and this is where the appetite of international terminal operators is.

b) Opportunities

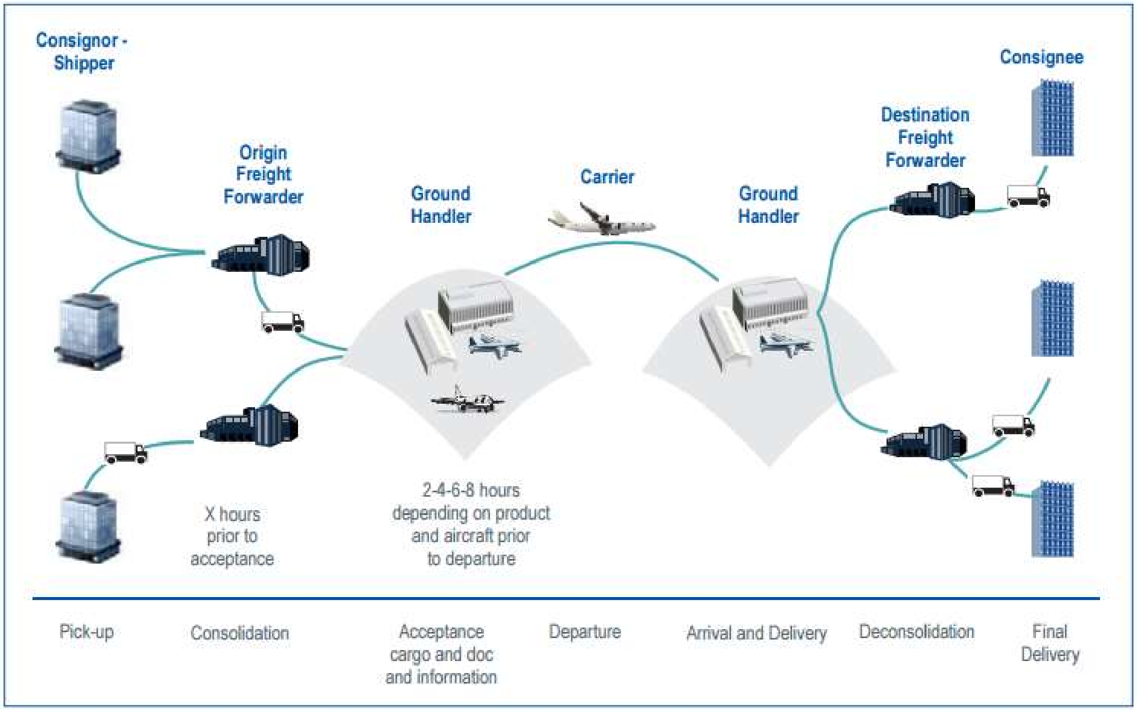
Examples from leading port terminals show that fostering investment in container terminals through investor-friendly BOT schemes, and enabling intra and inter port competition are key success factors for efficient and globally competitive ports.

II. Cargo handling in airports: Ground Handling Agencies

1. General facts about cargo handling in airports

Airfreight, cargo movement by air is a preferred mode of transport for manufacturers whose cargo is time-sensitive (such as live fish and flowers) or are of high value, where security and reliability is priority rather the price. Certain electronics, and automotive parts are typical commodities transported by airfreight. In order to achieve its objectives of high level of security- reliability- time efficiency to cargo owners, airfreight industry relies on a network of service providers to support the airlines aircrafts, including those on the ground, at the airports.

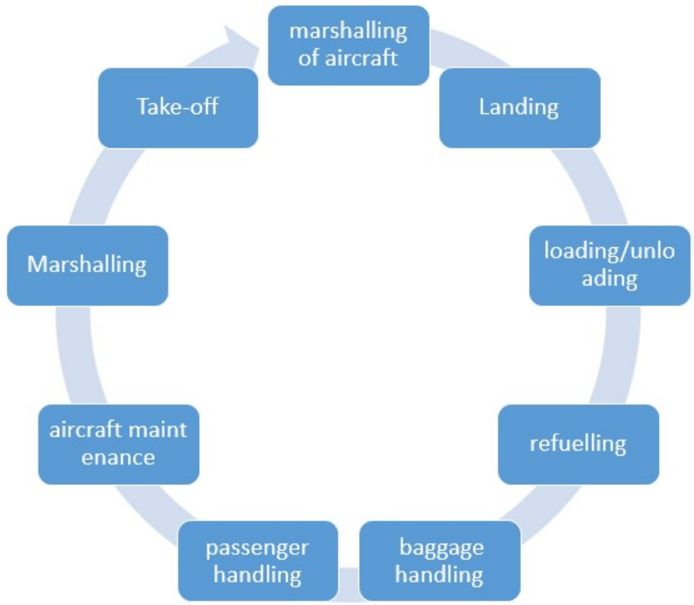
Figure 40: Ground Handlers in the Supply Chain



Source: *(ICAO & World Customs Organisation, 2013)*

IATA defines ground handling as "an integral part of airline operations". It provides supporting services to airline operations, from landing to departure. Figure 41 describes several roles of ground handling companies.

Figure 41: Cycle of ground handlers' support for aircrafts



Source: Extracted by the authors (CAPA, 18-Nov-2014)

Ground handling activities are divided into two areas of activity:

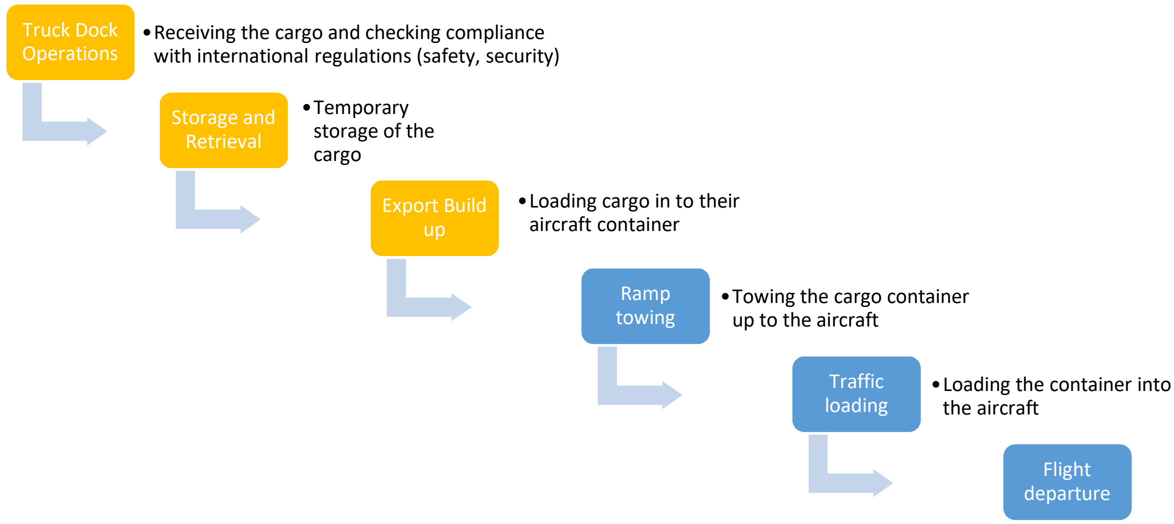
- "Above-Wing": related to passenger operations, those are "what we see" as a passenger, *inter-alia* from passenger check-in to entering the plane.
- "Below-Wing": ground handling operations, which include aircraft towing, cargo and baggage handling.

In terms of business activities, ground handling covers 5 sectors: cargo handling, catering, engineering, ramp operations, and passenger handling.[126]

Airfreight is a time-driven modality, one single delay may interrupt an entire cargo flow and lead to big losses. From a manufacturing export perspective and focusing on cargo handling, the activity of ground handlers' start at the moment cargo is delivered to the GHA's warehouse until a plane's departure. For instance, any delay before this step, many of which due document processing, would impact GHAs operations. For example, a GHA plans space for a cargo in its warehouse and for loading onto an aircraft and the cargo needs to arrive no later than 4 hours before departure (cut-off of 4 hours). If there is a delay due to document processing or other event, GHA's planning is disrupted, space booking on airline is cancelled or in countries where possible, GHA looks for a replacement cargo upon airline request.

126 Interview with a ground handling company in Indonesia.

Figure 42: GHA's responsibility starts from receiving cargo in their warehouse up to the flight departure.



Source: By the authors[127]

In order to comply with international standard requirements of efficiency, security and reliability, ground handlers rely on international certified equipment which enables them to also achieve short turnaround times and optimized handling costs. (CAPA, 18-Nov-2014)

127 Source: discussion with Ground Handling Agent in Indonesia.

Box 11: Reminder of definitions of Ground Handling Agents

Extract from Chapter 1: comparing definitions

The Government of Indonesia has been making efforts to comply with international definitions and standards related to the aviation industry. For example, BKPM, the investment board, whereas including ground handling into general cargo handling code (together with that in ports), it has made a special reference to this in the latest negative investment list.

By exploring definitions used by the Ministry of Transportation compared to the Investment board and with ICAO (international regulator for aviation), the definition of ground handling is harmonized, whereas the concept of regulated agent is not yet.

	BKPM in DNI 2016	**M of Transportation**	**International organizations: ICAO**	**Comments**
Ground Handling Agent (for cargo handling)	Air Transportation Supporting Services : passenger and cargo ground handling	Services related to airports that include two types of cargo handling activities	Support services on behalf of freight forwarders or aircraft operators, including cargo handling and warehousing	**Match**
Regulated Agent	Not addressed	Cargo agent, freight forwarder or other field that is certified for security checks by the M. of Transportation	A freight forwarder or other entity such as ground handlers that is certified for security check by relevant authority.	**No match** in considering RAs as ground handlers. The Indonesian legislation only considers them as freight forwarders or cargo agents

2. Global market (structure, global players) and trends

Given the large amount of investments required for ground handling, specialized ground handlers dominate the global market. An analysis on airport ground handling provides an overview of the global market in 2014 for ground handling. The global ground handling industry has reached an estimated turnover value of USD 80 billion in 2013 according to the Airport Services Association (CAPA, 18-Nov-2014)**.** Ground handling is undertaken either internally by airlines (self-handling), or is outsourced to another airlines ground handling, or a specialized ground handling provider. Due to the large investment requirements and as it is not a core business for airlines, 95% of international airlines prefer to outsource ground-handling activities.

Economies of scale are needed in this sector that is characterized by high capital costs and low profit margins. As a result, consolidations in the ground handling industry have been developing (see annex on consolidations). Despite this trend, the market remains fragmented and diverse, with the largest share of ground handling companies still small sized, often family owned companies with a solid reputation in one or more airports. For instance, Swissport the largest ground-handling operator only handled 4.1 million tons (out of 100.4 million tons in 2014).

More recently in 2013, in order to improve security of air cargo and mail supply chain, ICAO prescribed guidelines[128] that led to the concept of a new type of GHAs, Regulated Agents (RAs).

"*A regulated agent is a freight forwarder or any other entity, (e.g. ground handler) that conducts business with an aircraft operator and provides security controls that are accepted or required for cargo or mail by the appropriate authority."* (ICAO & World Customs Organisation, 2013)

The objective was to relieve airlines from the obligation to scan 100% of cargo prior to aircraft loading, as such operation sometimes created bottlenecks (in terms of time) and represented risks as cargo was sometimes not properly scanned due to airline's pressure to depart on time. RAs are agents trained to ensure that ICAO's secure cargo and mail processes. As a result cargo marked by a certified RA would not require to be scanned at airline's GHA prior to loading into the aircraft. Rather than capital intensive, RAs would appoint scanning facilities and transport companies to ensure that cargo is secure at all times and throughout the route to the aircraft.

Table 14: Distribution of stations – main Ground Handling companies

Operator	Number of stations	Europe	N America	Asia & M.E	Asia & M.E % of total station	Other countries	GH	Cargo	Other
Swissport	195	64	43	7	*3.6%*	81	Y	Y	N
Menzies	136	50	53	3	*2.2%*	30	Y	Y	N
Servisair	121	56	32	3	*2.5%*	30	Y	Y	N
WFS-Aviapartner	155	75	60	6	*3.9%*	14	Y	Y	N
SATS (Singapore)	10			9	*90%*	1	Y	Y	N
DNATA (Dubai)	18	4		8	*44.4%*	6	Y	Y	N
Fraport	13	5		5	*38.5%*	3	Y	Y	N
Celebi	35	33		2	*5.7%*		Y	Y	N
Average					***23.8% (9.4%)***				

Source: CAPA – Centre for Aviation, KPMG (CAPA, 20 November 2014)

As for other sub-sectors of airline industry, ground handler's activities have been positively affected by innovation. While "Above-Wing" operations, such as check-in and ticket verification at gates, have become more electronic than "Below-Wing", which remain heavily dependent on manual labor.

128 ICAO set a regulatory framework and clearly states roles of each stakeholder involved in air cargo supply chain.

Figure 43: "Below-Wing" operations, the most profitable activity, is largely dependent on labor force compared to "Above-Wing"

	"Below-Wing"	"Above-Wing"
Definition	Ground handling, except passenger handling.	What is visible for a passenger, such as the check-in, verification of passengers' tickets, etc. includes passenger handling.
Level of innovation	Despite innovative steps, it remains manual, ranging from moving boxes, checking cargo, etc.	Advanced, with electronic ticketing and other.
Profitability	The most profitable part of cargo handling and the highest share of revenue 50% to 60%.	

Source: By the authors

Box 12: Comparing Soekarno Hatta to top airports in terms of cargo handling volumes

- In 2014, the estimated global cargo traffic (loaded and unloaded) in airports reached 100.464 million metric tons. Half of the fourteen world busiest airports are in Asia and include inter-alia:
    - Hong Kong covering 4.3 million metric tons (No. 1)
    - Singapore 1.8 million metric tons (No. 8)
    - Bangkok 1.1 million metric tons (No. 14).

  Source: Annex tables: world's busiest airports, worldwide airport traffic (Extract from ACI 2015).

- Jakarta Soekarno Hatta airport handled 741,000 metric tons in 2013.

Source: *Air Cargo Capacity on Cargo Terminal Development Plan. Article by Ricardianto, Kuntohadi, Rifni from STMT Trisakti: Published in Jurnal Manajemen Transportasi & Logistik (JMTransLog) - Vol. 01 No. 02, Juli 2014*

3. Market structure/dynamics (Indonesia)

Indonesian's airfreight landscape is still in development, with several airports being expanded, upgraded or newly constructed. In 2015, the country counted 27 international airports of a total of 296 airports operated by state-owned companies (Angkasa Pura I and II) and the Ministry of Transportation's Directorate General for Aviation. Indonesia's airports handled 1,160,818 tons cargo, of most of which is handled in Soekarno Hatta airport. Cargo volumes have been increasing by 10% between 2010 and 2015. (KPMG Indonesia, 2015)

Number of firms, Level of industry integration, Market share

The ground handling industry in Indonesia is fragmented, PT JAS, a leading ground handling company in Indonesia caters only 17 out of 296 airports in the country. Furthermore, few companies are showcase vertical integration, offering at least 5 ground handling activities[129]. For example in Soekarno

129 1 Cargo handling, 2 catering, 3 engineering, 4 ramp operations, and 5 passenger handling.

Hatta airport, there are about 5 or 6 cargo handlers, 2 engineering companies, and 2 or 3 passenger handling companies. Very few offer bundled services, such as cargo and aircraft services and passenger handling. Only PT JAS (Joint venture between SATS and PT JAS), GAPURA (Garuda Airlines handler), and UNEX Aviation services were mentioned by industry experts as "integrated" ground handling agents. In Soekarno-Hatta's international terminal, PT JAS caters 90% of international airline carriers, followed by GAPURA, and UNEX Aviation services. In terms of passengers Soekarno-Hatta is amongst the busiest airports in the world and by comparison to airports handling similar number of passengers should have more ground-handling firms.

In regards to Regulated Agents, they are either owned by GHAs, such as the case of (PT FAS for JAS and PT. GAPURA, or independent companies such as freight forwarders. There are 7 regulated agents in Soekarno Hatta, two of which are certified RA3[130], PT. FAS and GAPURA. A third player, PT ANUGERAH TANGKAS TRANSPORTINDO (ATT) the top local agent for perishable cargo, is preparing for RA3 certification.[131]

<u>**Competition among Cargo handling agencies in Indonesia**</u>

Given the small number of players, the intra-terminal competition level is perceived as insufficient to provide airlines with competitive service levels and pricing. This is especially the case for incumbent GHAs.

The larger the number of players the more likely the quality level and pricing to improve. However, there is a risk that competition levels will be further reduced. There is a serious risk is that Angkasa Pura I and II will not extend leases to GHAs and would take GHAs business. Internationally, the role of SOEs are generally to facilitate the economy of a country in particular sectors, not to pursue profit maximizing. If more GHAs enter the market airlines have a larger choice and can switch providers in case the services are not up to expectation. Competition fosters efficiency and quality of GH services. Airports attract more businesses, which creates benefits for the overall economy. However, airport operating SOEs are increasingly perceived as "for-profit" companies due to several cases that recently appeared. Airport operators lease land to GHA and to Regulated Agents, or to use the land for own subsidiaries activities. Angkasa Pura set up own GHA and Regulated agent business, competing with existing private companies, to which land is leased. Based on some market "rumors", in Makassar airport, SOE pushed away local companies from Ground Handling, and in Surabaya airport, the SOE may not renew GHAs lease and appoint own GHA to provide this service in the airport. By reducing or removing competition, a situation currently evolving in the ground handling sector, could compromise price and service standards.
Inter-terminal competition is fiercer in regards to obtaining land lease by the airport operator. GHAs operating in international terminals try to get their land lease extended, rather than allocated to other GHAs. The limited land available in Soekarno Hatta airport is a particular issue for several GHAs.

Expenses and Revenues

130 A status of trusted agent to send cargo to Europe.

131 Discussion with an international airline agent

Among all ground handling activities, cargo handling is the most profitable, thus the most attractive for private sector investment.[132] This is the case both in Indonesia and internationally. For GHAs offering multiple ground handling services, cargo handling represents 50% to 60% share of revenue. This activity covers "Truck Dock Operations", "Storage and retrieval" and "Export Build Up". In Indonesia, the storage costs are perceived to be the highest source of income due to trade facilitation issues. From an import perspective, dwell time due to documentation processing requires long period of storage (5-6 days) compared to international standard (a few hours to 1 day). [133]From an export perspective, storage fees also do occur. In Indonesia, documentation processing is challenging as it is still largely manual and could interrupt a cargo export chain. Delays may lead to a late arrival of the cargo to the cargo handlers' warehouse, and may miss the intended flight. Cargo is then stored waiting for the next space availability.[134]

Threats of new entrants

High entry barriers, including the need to lease land from airport operator and high capital requirements[135], are key factors behind the low competition level.

Customers of Cargo handling agencies at airport in Indonesia

GHAs customers:

Airlines and logistics integrators (such as DHL, FedEx, TNT and UPS) [136]are the main customers of GHAs. Their representatives enter in a contractual relationship with GHAs for a certain time period. Their bargaining power is low in regards to pricing as they are fixed by the government. Nonetheless, large scale airline and logistics integrators negotiate with GHAs in terms of Service Level as they hold large volumes needed for GHAs to achieve economies of scale. Freight forwarders are also their customers, in a way that they would have to pay invoices issued by GHAs for cargo handling (including storage) on behalf of owners of goods.

Regulated agents' customers:

Airlines and logistics integrators (such as DHL, FedEx, TNT and UPS) are also main contractual customers of airlines, as they become their trusted partners to perform security checks of all cargo. In the same manner as the GHA case, freight forwarders are liable to pay for regulated agents services on behalf of owners of goods.

Suppliers of Cargo handling agencies at airport in Indonesia

The main supplier of ground handling agencies, with the strongest bargaining power is the "land" supplier, Angkasa Pura I and II, state-owned airport operators and managers. Based on a concession agreement between the land owner (Indonesian government) and Angkasa Pura I and II, this latter leases land for passenger and cargo terminals, for bonded warehouses, or other types of business sectors. Land is currently a big issue as the airport operators have shown signs that they won't renew the lease of GHAs or regulated agents in key Indonesian airports. Examples include GHAs lease in Surabaya airport that may

132 Discussion with a ground handling company in Indonesia

133 Interview with a manufacturer of electrical equipment that imports several intermediary materials used for production in its plant in Cikarang area.

134 A storage fee is applied, beyond the maximum number of free storage days

135 The price of an x-ray machine to scan cargo ranges from IDR 4 and 14 billion. Source: APINDO's chairman. (Article in Industri Bisnis.com , 23 August 2016)

136 (The Geography of Transport systems, (n.d.))

not be renewed and Bonded warehouse areas in Soewarna area in Jakarta Soekarno-Hatta airport as the Terminal 3 taxiway will go through it. Freight Forwarders and RAs need to find new locations to relocate their warehouses.

Other suppliers include, utilities (electricity and water) and ground handling equipment producers and maintenance. The latter have a medium to high bargaining power, as internationally recognized ground handling equipment that is approved by international airlines is provided by a limited number of international companies. For instance, the X-ray machine that was initially required by the Ministry of Transport for Regulated Agents was only provided by a handful international companies.

Figure 44: A competitive analysis of GHAs in Indonesia. Porter's five forces

Source: by the authors

4. Performance of Indonesia's service providers/ competitiveness

Indonesia's leading international airport Soekkarno Hatta has seen several improvements in the past years, however cargo flows are still not streamlined and key performance indicators of speed, security, reliability and cost-effectiveness remove below producers' expectations.

In terms of speed, Soekarno Hatta airport still suffers from long "dwell time", with 2.5 days [137]for export and 5 days for import cargo, whereas international practice counts "dwell time" in terms of a few hours. However, such "dwell time" is largely influenced by customs documentation flows and does not reflect strictly efficiency of ground handling companies. [138]

137 Information provided by a freight forwarder handling airfreight business. He mentioned that 2.5 days is an average in 2016 for export dwell time. Other discussions with freight forwarders informed that the average for 2015-2016 was 5 days import dwell time.

138 Based on information given by ALFI's person in charge of airfreight, the term "dwell time" is not used in airport terminals.

In terms of security and reliability, a recent European Union inspection of Soekarno-Hatta Ground Handling and regulated agent facilities, revealed that safety and security levels are not respected. Airlines fear that an embargo on cargo from Indonesia to the European Union may be placed in case such concerns are not addressed. The study highlights that warehouses in both in line 1 and 2 do not comply with international safety requirements for cargo. RAs do not have safety and security systems in place to pass airlines safety and security protocol. The RA's are located outside of the airport terminal (line 1) and the journey between the RA's and the apron is not 100% sterile. Even line 1 warehouses are not compliant and they may lose the RA3 agent status (by EU). As a consequence of PM 153/2015, airline cargo has to be checked twice, at RA warehouse and then at the GHA warehouse in line 1 which is within the terminal area (bonded). Airfreight experts highlight two risks related the RA regulation, (1) Safety and security of the cargo, and (2) commercial due double scanning costs. The regulation on supply chain security (PM 153/2015), although it aimed at enforcing safety and security in airports, raised several concerns due to the lack of readiness of supply chain actors. In terms of costs, the new regulation raises the cost of cargo screening by 816%, from IDR60/kg to IDR550/kg, such minimum tariff is high and different from best practice where prices are set by market forces, based on negotiation between demand and offer.

5. National Regulatory Framework

Red tape, lack of clarity and market access are key characteristics of air cargo handling companies' legislative framework. GHAs fall under several legislations of which the following have been identified:

- The Aviation Law No 01/2009, chapter 10 on air transport. Undang-Undang Republik Indonesia nomor 1 tahun 2009 tentang Penerbangan
- The Presidential Regulation No. 44/2016 about the list of business fields that are closed to investment and business fields that are conditionally open for investment (DNI 2016). *Peraturan Presiden Republik Indonesia Nomor 44 tahun 2016 tentang Daftar Bidang Usaha Yang Tertutup Dan Didang Usaha Yang Terbuka Dengan Persyaratan Di Bidang Penamanan Modal*.
- The Ministry of Transport Regulation No. PM 56/2015 on Airport Management Activities and its amendment 187/2015. *Peraturan Menteri Perhubungan No. PM 56 tahun 2015 tentang Kegiatan Pengusahaan Di Bandar Udara*
- The Ministry of Transport Regulation No. PM 45/2015 on Capital Requirements for Companies in the Field of Transport. *Peraturan Menteri Perhubungan No. PM 45 Tahun 2015 tentang Persyaratan Kepemilikan Modal Badan Usaha di Bidang Transportasi*
- Government Regulations No. 11 2015, regarding Type and Tariff on Non-Tax Revenues Applicable within the Ministry of Transportation. *Peraturan Pemerintah Republic Indonesia No. 11 tahun 2015, tentang Jenis dan Tarif atas Jenis Penerimaan Negara Bukan Pajak Yang Berlaku Pada Kementerian Perhubugan.*
- Bank Indonesia Regulation Number 17/3 / PBI / 2015 on the Obligations Penggynaan Rupiah On the territory of the Republic of Indonesia. *Peraturan Bank Indonesia nomor 17/3/PBI/2015 tentang Kewajiban Penggynaan Rupiah Di Wilayah Negara Kesatuan Republik Indonesia*

a) *Supply chain process: Input, Production, Output*

Input: Barriers in employing factors of production (capital, labor, licensing)

Capital

Ground handling services, as part of "air transportation supporting services" have only been recently open to 67% of foreign equity investment (DNI 2016) from 49%. Regulated Agents are not mentioned in the DNI, however as they are defined as freight forwarders or other agents in the legislation, the authors assume that they are subject to the same restrictions of FIE. Below table is extracted from the DNI 44/2016:

Business Field	KBLI	Conditions
Air Transportation Supporting Services/ Jasa penunjang angkutan udara		
• **Passenger and cargo ground handling/ pelayanan di darat untuk penumpang dan kargo/ground handling**	52240	Maximum Foreign Capital Investment 67%
Jasa pengurusan transportasi / Freight forwarding services	52291	Foreign investment: Max. of 67%

Labor

General constraints for all Indonesian companies in general that are barriers to employing staff apply. It includes limits to the barriers to employ foreign workers and to outsourcing. Although outsourcing of labor has not been signaled as a specific issue by airfreight practitioners.

Licensing

Ground Handling agents are classified as airport enterprises and are subject to high capital requirements. They are required to obtain an Airport Business Entity License, followed by an operations certificate (PM 56/2015). High minimum capital requirements are imposed on such enterprises with 350 billion rupiah for domestic 1000 billion for international airport, with 30% paid-up capital. It is unclear whether the paid-up capital can be replaced by equipment or other types of assets. It may be that such high capital is not an issue for large Indonesian and international ground handling companies. However, it is a clear barriers for the smaller-sized cargo handlers that usually populate GHA markets, especially in secondary airports with less passengers and cargo.

Licensing requirements for the other type of GHA, Regulated Agents, are beyond their role as security control company. Regulated agents are also subject to high capital requirements, with IDR 25 billion, with 25% paid-up capital but this can also be in the form of facilities, equipment and land (The regulation on supply chain security (PM 153/2015[139], art. 36, 3). Another barrier in regards to technical requirements for RAs, is the requirement to own facilities and equipment: "at a minimum of: i) facilities for receiving, consolidating and inspecting goods; ii) minimum two X-ray machines; iii) explosive detector; iv) hand held metal detector; v) walk-through metal detector; vi) testing equipment for security equipment such as LTCTP and OTP: vi) mirror detector; vii) fence for the security area; viii) at least 6 CCTV cameras."[140]

139 Ministry of Transportation Regulation No. PM 153/2015 on supply chain security for cargo and post. Peraturan Menteri Pehubungan republic Indonesia nomor PM 153 tahun 2015 tentang Pengamanan Kargo Dan Pos Serta Rantai Pasok (Supply Chain) Kago Dan Pos Yang Diangkut Dengan Pesawat Udara

140 Translation of PM 153/2015, courtesy from Eurocham

Furthermore, strict requirements are set for the minimum number of employees (art. 37, para a). No other countries make such requirements as it is up to the RA to get be equipped in such a way that it can ensure security and pass international security standards. In the case of regulated agents, good procedures are as important as security equipment.

Production: Barriers in producing services

Safety and security

The main barrier to production identified was the safety and security issues. Security measures are not enforced. The latest regulation on supply chain security is not implementable at this stage as GHA and Regulated agents warehouse are not up to standards set by ICAO, EU and other organization.

Cargo documentation processing

The lack of an efficient document processing for cargo creates bottlenecks for GHAs and for their airline partners. Even though the beginning of GHA's responsibility starts at the moment cargo is delivered to its warehouse, any barrier to cargo flow before this step impacts the GHA. The Government of Indonesia is making good progress on this through INSW.

Bureaucratic burden

Concessions are signed between the airport operator and GHAs, however, there is no guarantee that the operator would renew their operations license every 5 years. GHAs sign a concession contract with the airport operator Angkasa Pura. However, they still need to renew their operation certificate every 5 year (PM56/2015, art. 38, para 2 to 4). This issue is just an observation by the authors, but did not come up as an issue by practitioners. Note that GHAs and regulated agents are excluded from BI regulation on the use of the rupiah. This contrasts with other logistics service providers such as freight forwarders. This regulation is therefore not a barrier to the aviation industry.

Output: Barriers in selling services or generating profitability in selling services

Price control

The presidential decree PP 11/2015 sets tariffs for several modes of transport and transport nodes, such as airports.[141]

- Ground Handling: ground-handling services' tariffs are set within the Air Transportation Services fees. It ranges from aircraft landing services to cargo storage. For instance, export cargo storage tariffs are clearly defined, and range from USD 0.0255/ kg between the 1st and 3rd day, and USD 0.0300/ kg between the 4th and 10th day.
- Regulated agents: a service fee is set to a minimum tariff for security inspection of IDR 550/kg instead of IDR 60/kg. (Article 46). In the short term, this setting actually beneficiary for regulated agents as it guarantees a minimum income, which may give confidence to RAs to invest in high cost equipment. However, in the longer term, such a high price would increase the exporting logistics costs by air, and therefore may discourage exporters.

141 This regulation also includes concession tariffs. For instance, the use of airport infrastructure and facilities.

b) *Indonesia's commitment in AEC, AFAS compared to applied policies*

By amending the DNI in 2016, the Indonesian government is getting closer to its commitments within the AEC blueprint of 70% FEL. However, the country did not put any commitment in AFAS 9 in regards to GHAs.

6. Learning from international experiences

Box 13: Guidance for the liberalization of ground handling services

Extract from a White Paper on: A New Regulatory Model for Foreign Investment in Airlines.

The WEF 2016

"*Over the past few decades, countries have increasingly allowed their airports to be transformed from cash-starved, sate-owned monopolies to privatized entities open to global investors. The change has brought in much-needed capital for infrastructure investments and allowed airports to reap the benefits of world-class management expertise and efficiencies of scale, resulting in improved financial performance*."

A recent report by the World Economic Forum "A New Regulatory Model for Foreign Investment in Airlines" tackled the issue of "nationality rule" and of "capping" foreign equity limits in airlines.

Liberalization of airport services is used to illustrate that countries that open their airports to international investors have attracted much-needed (1) capital to upgrade to upgrade infrastructure and (2) and international management expertise that helped airports achieve operational and financial efficiency. Therefore, removing restrictions to foreign investment in airlines would help decrease capital costs.

Source: http://www3.weforum.org/docs/IP/2016/MO/WEF_AT_NewRegulatoryModel.pdf

a) *International references*

Encourage competition between ground handling agents

The global trends have seen a wave of liberalization of the ground handling sector, to foster competition and improve quality of ground handling services (CAPA, 18-Nov-2014) **.** However, depending on countries or regions, the World Bank highlights three models (The World Bank Group, 2009) used in regards to ground handling, either (1) the airport operator nominates cargo handling company and tend to give "exclusive rights" to national carriers, in small airports in particular; (2) the government grants "exclusive rights" to one company, either domestic or international; and (3) the government liberalizes the GH market to increase competition, by setting a minimum number of operators based on airport size. For instance, the European Union sets minimum of two core GH and two self-handlers in airports catering more than 15 million passengers annually (CAPA chapter 1)

Based on the World Bank analysis of the airport cargo operations, taking into account the importance of efficient services, the right balance between airports operators' own cargo handling facilities or outsourcing to third parties is matter of volumes. For airports with small volumes of cargo, it is common that airport operators or select a single GHA. The larger the volumes, the largest the investment needed to develop terminals and the higher the stake of efficiency (time and cost). Therefore, it is important to attract several type of airport industry players, such as GHA, airlines and freight forwarders that would invest in needed structures (warehouses, certified modern equipment, etc.). Sub-contracting airport cargo operations and concessions were proven to enable efficient cargo operations.

Importance of self-consolidation: support the development of a sustainable Regulated Agent, Known Consignor and Known Shipper regime

Air freight is designed for cargo that is time-sensitive, and therefore, even its packing has to be prepared to preserve it, for instance "Temperature-sensitive perishables". The Regulated Agent, Known Consignor and Known Shipper regimes help insure security and grant cargo's integrity, whereas optimizing cargo flow between a shipper or its warehouse to the aircraft. Shippers or their freight forwarders should be allowed to package the cargo on its own pallets and ULD containers, to avoid putting cargo at unnecessary risk during inspections (The World Bank Group, 2009). At the same time, due to the high safety and security issues of aircrafts, every air cargo should be inspected.

Advantages of attracting international ground handlers

International GHA contribute to bringing additional skills, international standards and technological tools to countries that open their GH market to international investment. They may potentially attract additional businesses. As GHAs usually cooperate closely with international carriers and freight forwarders, there is potential for a larger economic benefit by attracting companies from other fields, including owners of goods. Their expertise can be valuable to domestic owners of goods. These international GHAs do need to comply with the domestic regulatory environment. International GHAs presence can be under majority, minority or partnership formats.

The importance of international or local certification as a quality requirement

Countries, regions or international organizations developed a series of certifications that ground handling companies can obtain, as a proof of the quality of their processes. RA3, or Known Shipper regimes are part of such certifications.

b) Country experience

In several countries, there are no legal restrictions for companies to invest in the GHA or regulated agency sector, such as minimum capital requirements or limits to foreign equity. For example, Hong Kong does not apply minimum capital requirements. Logistics services are part of trade services that its government is developing. The only state-owned activity it the control of infrastructural assets limiting foreign investment due to national strategic interests. For example, a limited number of sectors limit foreign ownership, such as broadcasting and cables restrict foreign ownership to 49%, and strategic sector such as the railway and state-revenue collection from public transport infrastructure (toll). (Practical Law:, A Thomson Reuters Legal Solution, 01-Mar-2016)

Instead, GHAs need to comply with a set of minimum standard operating procedures following international standards and certifications set by international organizations. In the particular case of ground handling and regulated agents, IATA and ICAO are the international regulators of the aviation industry. They set minimum standards and specific certifications related to all stakeholders, which countries such as Hong Kong, Singapore, Malaysia and Indonesia are working to include in local regulations.

7. Cargo handling in airports in a nutshell

Ground Handling Agents and Regulated Agents need a set of conditions, that both (1) business friendly to foster their performance and (2) compliant with international air cargo security standards set by ICAO and the WCO. These companies operate in a key node in the supply chain of high-value and time-sensitive cargo. Furthermore, cargo handling is not only critical in terms of usual performance indicators (cost, time, reliability) but, mostly importantly, is an important component of supply chain security.

Challenges and opportunities are briefly described below following a review of regulatory bottlenecks preventing the development of the sector combined with learning from international practice.

a) Challenges

Indonesia's regulatory environment for GHAs and RAs highlights opposite trends in regards to the AEC Blueprint's vision. An even more pressing issue is cargo security in airports that threatens to prevent direct exports from Soekkarno Hatta airport to key export markets such as the European Union.

Although Indonesia did not include air cargo ground handling into its AFAS 9 commitments, Indonesia recently increased the foreign equity limit of this sector from 49% to 67% (DNI 2016) getting closer to fulfilling the vision of the AEC round map of 70% foreign participation in logistics services. However, high capital requirements for GHAs create an even greater market access barrier than FEL. Regulated Agents [142]face the same situation, on the one hand openness to higher foreign equity limit but on the other hand a discouraging minimum capital requirement. High minimum capital requirements may be perceived as a way to "naturally" select candidates to fields – reliability, long term, however, it is mainly a market entry barrier that creates an unfriendly business environment with monopolistic or oligopolistic position and that is only accessible to large companies.

A rather structural and more urgent problem is the security issue. Recent investigation by the European Union identified weaknesses in cargo handling processes and facilities in Soekkarno Hatta airport. The commission advised against the implementation of the RA regime [143]due to the security failures of cargo handling companies. If security is not addressed, airlines may be prevented from flying directly from Indonesia to the European Union or the USA.

142 Based on a definition by the Ministry of Transport, Regulated Agents are freight forwarding companies certified to ensure security of air cargo. Therefore foreign equity limits and minimum capital requirements are the same for both types of companies.

143 Set up by the legislation on supply chain security of air cargo

b) Opportunities

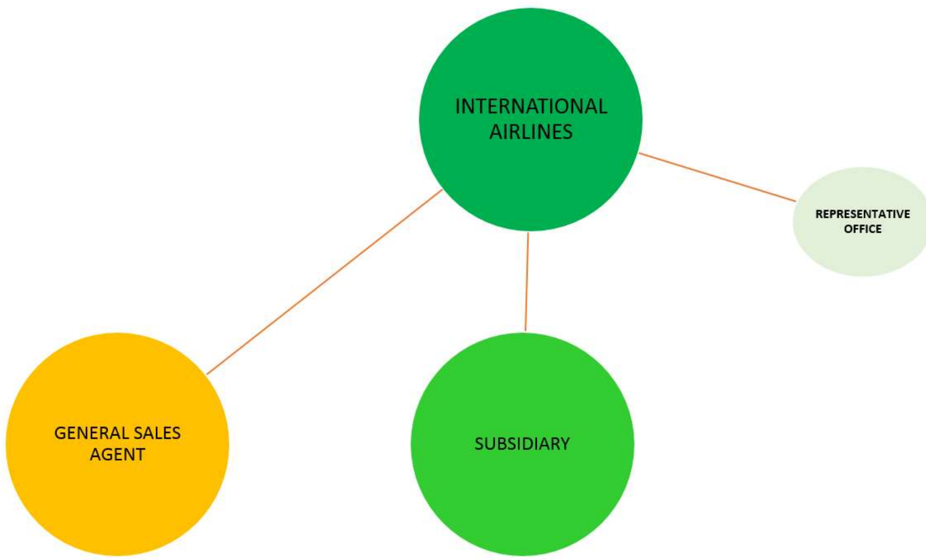
Enabling intra-airport competition by removing market entry barriers, attracting international expertise by annulling restrictions to foreign equity investments, and following ICAO's guidelines for air cargo supply chain security would help provide secure, reliable, competitive and efficient air cargo supply chain management in Indonesian airports.

Chapter 5: Airfreight Agencies

1. Background/ General facts about airfreight agencies.

When an international airline starts operating in a country it can be represented in three forms, either through its own representative office, own subsidiary or by outsourcing to a General Sales Agent (GSA). These companies may handle both freight and passenger related activities[144]. Those dedicated to airfreight are airfreight agencies. Their role would either strictly consist of administrative and operational support (Representative office) or extended activities including the airline's aircraft operations (authorizations, licensing, selecting service providers to handle ground handling operations), marketing and sales.[145]

Figure 45: Types of airline representations



Source: the authors

The main difference between a subsidiary and a GSA is that, the first is owned by the airline, whereas the latter is another private company entering in a contract with the airline. The private company thereby hires all employees.

144 Except in Indonesia where GSAs should either focus on freight or passenger business

145 Note: Representative offices are not allowed to sell services inside Indonesia, to Indonesian companies or individuals

Box 14: Reminder of definitions of airfreight agencies

Extract from Chapter 1: sector definitions

	BKPM	Ministry of Transportation	WTO	Comments
Airline representative office	Represent the interests of an overseas company and or of its subsidiary companies	Representative to manage administrative and operational side of airlines	A marketing device" for a company's "commercial presence"	**No match**
General Sales Agent (GSA)	Business to make reservations and sale activity.	Representative to carry out marketing and sale activities for an airline	Representative to carry out marketing and sale activities for an airline	**Match:** between Ministry of Transportation and WTO. **No match** with BKPM: the activity of "making reservations" is an operational activity that is not included in GSA's activity scope as defined by the M. of Transportation

2. Global market (structure, global players) and trends

There is no tangible global market of airfreight agencies and GSAs. These service providers are part of the airline industry. The choice of opening own airline representative office or subsidiary, or contracting a GSA, depends on volumes generated in the country. The practice of having GSAs is for airline companies that are planning to develop cargo business in a country without investing in its own office. [146]This is a low risk option for companies to explore cargo business in a country. Once cargo business is developed airlines tend set up own subsidiary. There is a global trend whereby international airlines appoint a GSA for a country or geographical region that do not generate enough volumes to justify maintaining a subsidiary. Other airlines, such as Emirates, apply an international strategy of only appointing GSAs rather than opening own subsidiaries.[147]

3. Market structure/dynamics

Number of firms, Level of industry integration, Market share

In Indonesia, many international airlines are represented by GSAs, mainly due to insufficient cargo volumes from/to Indonesia. Other reasons include to difficulty of doing business in the country, or

146 Discussion with industry practitioners

147 Interview with an airline representative

because it's part of the company's strategy.[148] GSAs in Indonesia are local companies, many of which are joint ventures with Singapore and Malaysian partners.

Expenses and Revenues

GSAs depend on cargo volumes as they receive a commission (x%) based on revenue per tonnage. When represented by a subsidiary that handles both passenger and cargo, around 80% of revenue is generated by passenger and only 20% by cargo. The only exception is for companies that operate freighter aircraft, whereby a 100% of revenue is generated by cargo.

Customers of airfreight agencies in Indonesia

Most customers are freight forwarders (known as "Cargo Agents"), followed by direct shippers. Example, an international airline mentioned that 70% of its customers are international freight forwarders, followed by local freight forwarders and then a few direct shippers of fruit and vegetable. Mainly high value cargo and time-sensitive cargo is shipped by airfreight and includes amongst others electronics, automotive parts, pharmaceuticals, live tropical fish and flowers.

"*As local freight forwarding companies are still in development, most of which handle customs documentation only (rather than packing, handling certification, trucking and other), a category of shippers would have an-in-house freight forwarding business, especially in perishables such as fishery*."
Source: discussion with international airline agency in Indonesia.

Manufactured industrial products are largely catered by international freight forwarders and joint-ventures, whereas the perishable market is dominated by local freight forwarders using various international airlines. (Fish, flowers, live tropical fish – high value cargo).

Suppliers of airfreight agencies in Indonesia

148 Interview with an airline representative

Airlines representatives and GSAs rely on ground handling agents and regulated agents to support their aircraft operations, including cargo handling and aircraft support. These service providers will be addressed in the chapter on airport cargo handling operators. Below is a brief introduction of their main characteristics, from an airfreight agencies perspective.

- Ground Handling Agents (GHAs) offer services to aircraft such as ramp and catering, and to cargo. Currently, only two GHAs cater international shipments (oligopoly):
    - PT JAS: Joint-Venture between SATS and PT JAS, handles 90% of international carriers
    - GAPURA: Garuda Airlines ground handler, branch of SOE.
- Regulated Agents (RAs) are responsible for scanning and marking all cargo before loading it into aircraft, using an x-ray machine. Whereas this activity used to be strictly under GHA warehouse responsibility, RAs were introduced to relieve the latter from congestion, before loading the cargo into aircrafts. RAs are part of new safety and security procedures in airports. At the time of the study, there were seven RAs in Soekarno Hatta, with only two companies in line 1, GAPURA and JAS that have RA3 status:[149]
    - PT. FAS (RA3 for PT JAS)
    - PT. GAPURA

If cargo is certified by RA3 agents, cargo can be loaded directly into aircraft bound to Europe. If not, the airline should scan all cargo prior to loading, an activity handled by GHAs.A limited number of certified GHAs and RAs puts pressure on airfreight agencies in terms of quality of service.

Figure 46: A competitive analysis of GSAs in Indonesia. Porter's five forces

Threats of new entrants: LOW - MEDIUM

- MEDIUM: GSAs: there are no major barriers to GSA except for foreign equity investment limited to 49%
- LOW: Airline subsidiaries: due to low volumes vs. high statutory barriers such as a minimum capital requirement, and sabotage principle (in case foreign airlines)

Suppliers' bargaining power: HIGH

A limited number of ground handlers in the international terminal (2) puts a high pressure on airlines' GSAs and subsidiaries.

Rivalry among competitors: HIGH

Both GSAs and airline representatives are in fierce competition, due to the economic slowdown and to the limited size of the passenger and airfreight market compared to the country's potential.

Customers' bargaining power: LOW TO HIGH

Airfreight rates are set by market mechanisms, where prices depend on volumes. Small exporters benefit from a low bargaining power, compared to the large ones.

Threat of substitutes: LOW

The archipelago character of Indonesia makes it impossible to have a substitute to international air transport, especially for high value, time-sensitive cargo. (The same case for passengers)

Source: by the authors

149 A status of trusted agent to send cargo to Europe.

4. Performance of Indonesia's service providers/ competitiveness

The Indonesian air transport market is still in development, and so is the case of airfreight agencies. Several factors lead international airlines to appoint GSAs rather than setting up own subsidiaries. However, GSAs currently lack knowledge of airline, focus on selling cargo space only rather than developing added-value offers to cater to the needs of Indonesian manufacturers.

One of the factors behind the slow development of air freight transportation and of GSAs is the lack of transshipment regulation which prevent Indonesia from becoming an air transport hub. Based on industry practitioners, transshipment would bring additional volumes especially on routes Australia-Indonesia-Malaysia or China. [150]As a result, there is a missed opportunity for airlines with regular large aircraft, with large bellies able to handle cargo, fly through Bali and continue to other destinations, with only passengers and no cargo.

5. Regulatory Framework

While maritime shipping agencies had an activity-specific regulation[151], the regulatory framework of airfreight agencies is embedded in the modality regulation for air transport. This section mainly focuses on legislations impacting General Sales Agents and Airline Representative Offices in supporting international air transport of freight. Airline subsidiaries (for airlines that do not operate air transportation within Indonesia) are considered as General Sales Agents[152]. The following are key legislations impacting airline agencies:

- The Aviation Law No 01/2009, chapter 10 on air transport. *Undang-Undang Republik Indonesia nomor 1 tahun 2009 tentang Penerbangan*
- The Presidential Regulation No. 44/2016 about the list of business fields that are closed to investment and business fields that are conditionally open for investment (DNI 2016). *Peraturan Presiden Republik Indonesia Nomor 44 tahun 2016 tentang Daftar Bidang Usaha Yang Tertutup Dan Didang Usaha Yang Terbuka Dengan Persyaratan Di Bidang Penamanan Modal*.
- The Ministry of Transportation Decree No. KM 51/2000 on about Airline Representatives and GSAs of foreign airlines. *Keputusan Menteri Perhubungan nomor KM 51 tahun 2000 Tentang Perwakilan Dan Agen Penjualan Umum (General Sales Agent/ GSA) Perusahaan Angkutan Udara Asing*
- Bank Indonesia Regulation Number 17/3 / PBI / 2015 on the Obligations Penggynaan Rupiah On the territory of the Republic of Indonesia. *Peraturan Bank Indonesia nomor 17/3/PBI/2015 tentang Kewajiban Penggunaan Rupiah Di Wilayah Negara Kesatuan Republik Indonesia*

a) Supply chain process: Input, Production, Output

Input: Barriers in employing factors of production (capital, labor, licensing)

- **Capital**

150 Reminder: GSAs' revenue depends on volumes.

151 With a clear separation between their ship-supporting activities and potential logistics activities, each of which requires a license.

152 Airline that set up a branch in Indonesia to operate air transport within Indonesia are subject to legislation for air transport operators. Such companies are not addressed in this study.

The limit on foreign capital depends on the type of representation. Airline General Sales Agents (GSA), *Agen penjualan umum (GSA) perusahaan angkutan udara asing* (KBLI 79112) are included in the DNI 2016 and are limited to 67% of foreign equity limit. Representative offices are open to 100% foreign equity.

- **Labor**

Besides labor restrictions that are also applicable to other sectors in Indonesia, no specific statutory requirements for employees of GSAs and airline representative offices were identified (KM 51/2000). In regards to airline subsidiaries, only aircraft crew are subject to certifications but not staff working in the office and that perform functions such sales or operations (Aviation Law No. 1/2009). In addition to statutory requirements under Indonesian legislation, all international airlines are bound to follow ICAO instructions for staff certification.[153]

- **Licensing**

No specific bottleneck were mentioned in regards to licensing during interviews. GSA license conditions are stipulated in KM51/2000, and there is no license required to set up an airline representative besides KPPA license (a Foreign Representative Office).

Box 15: Minimum capital requirement for Limited Liability Companies in Indonesia

Unless mentioned in sector-specific regulation, the minimum capital requirement for a PT (limited liability company) should comply with Law No. 40/2007 that states the following:

- Minimum authorized capital requirement is set at IDR 50,000,000 (Article 32 paragraph 1), equivalent of 3700 USD
- Minimum paid in capital requirement is set at 25% of the authorized capital or a minimum of IDR 12,500,000 (Article 33 paragraph 1)"

Production: Barriers in producing services

- **Operating licenses**

Whether one operating license is enough to cover both passenger and cargo activities, and whether a separate license is needed for each activity is still unclear. First of all, it is important to note that all licenses secured by airlines' representatives or GSAs cover both their passenger and cargo activities, as licenses related to air transport of passenger also covers cargo. It was reported that licensing of air transport in Indonesia is ambiguous compared to other countries. In Indonesia, several licenses are required to secure international airlines operations. Requirements include inter-alia the CASR 129 (Civil Aviation Safety Regulation) on Validation and Surveillance of Foreign Air Operators and Foreign Operators of Indonesian-registered aircraft (PM 85/2015[154]). However, it was reported that GSA were not allowed to cumulate both passenger and cargo activities, and that each activity should be handled under a separate business entity. [155]

153 Discussion with a former staff of an international airline, currently working for an Indonesian Ground Handling Agency (GHA)

154 Ministry of Transport Regulation No. PM 85 Year 2015 About Civil Aviation Safety Regulations Part 129 (Civil Aviation Safety Regulations Part 129). Peraturan Menteri Perhubungan Republik Indonesia nomor PM 85 TAHUN 2015 Tentang Peraturan Keselamatan Penerbangan Sipil Bagian 129 (Civil Aviation Safety Regulations Part 129)

155 Discussion with legal experts in the aviation industry

- **Safety and security:**

Constraints reported by industry actors mainly refer to safety and security due to the regulation on Regulated Agents (RAs). PM 153/2015 on supply chain security for cargo and post (amendment of PM 32/2015) makes it compulsory to use RAs to scan all cargo, whereas putting all safety and security responsible on airlines in providing an x-ray machine and training the RAs. Any safety breach is under the airline responsibility.

Box 16: Another tool to improve fluidity and security of air export

Indonesia does not allow Freight Forwarders to consolidate air cargo. In most countries, a freight forwarder with a "trusted agent" status is allowed to consolidate cargo from the different customers into own warehouse, then directly transfer it to airlines warehouses, without additional checking by the airlines. A "trusted agent" may receive several exporters' cargo, then stuffs the cargo in air cargo container (ULD), and proceeds to the airlines' warehouses in airports. However in Indonesia, only airline warehouses (in line 1) are allowed to stuff the air cargo container. This is perceived as barrier to optimize space and cost of airfreight shipments.

- **Bureaucratic burden/ red tape:**

The biggest issue reported is BI regulation No. 17/3/PBI/2015 on the obligation for the use of Rupiah. This is problematic for international airline representatives. International trade transactions were excluded from that regulation, such as passenger airline business, and oil, gas & mining. However, international cargo business handled by international airline representatives needs to comply. For one international airline, the cost to comply with the new regulation reached USD 6 million of losses, and it took the company 6 months to switch to the new information system, where no invoices could be issued.

Box 17: Specific barriers to imports and transshipment

- Different requirements between Directorate General of Civil Aviation (DGCA) and Customs in regards to the Inward cargo manifest result in delays in import. The inward cargo manifest is provided by the airlines and contains a list of goods imported into Indonesia. Customs authorities would use this cargo manifest to compare importer's information with the one on the House Air Way Bill (provided by freight forwarders). Due to different information systems used by airlines and freight forwarders, minor changes in the name or address of the importer cause delays in imports because the DGCA allows margins of errors but customs not and uses this as a trigger for inspection.
- There is no transshipment regulation in Indonesia, all cargo transshipped is required to be imported and re-exported.

Output: Barriers in selling services or generating profitability in selling services

There is no limit on profit or selling rates.

b) *Indonesia's commitment in AEC, AFAS compared to applied policies*

Despite being includes in the AEC blueprint's targets, Air Transport services are not included in AFAS 9 commitments. By 2010, all restrictions applicable to trade in four service sectors (ASEAN, 2008)[156]were supposed to be removed in implementing the vision of a Single Aviation Market. "Selling and Marketing" are part of sub-sectors covered by AFAS commitments (Milo, 2015). However Indonesia did not include it in its AFAS 9 commitments.

6. Learnings from international experiences

a) *International guidance*

Airfreight agencies (subsidiaries and GSAs) are little documented within the air transport industry. General guidance on air transport services is used to illustrate the need to reduce market access restrictions in this sector. Air freight agencies are key to (1) efficient coordination of airline business at the airport, by arranging licensing, and supporting aircraft operations by outsourcing to qualified service providers, and (2) to its financial viability in a country as these firms handle marketing and sales of cargo space (and of passenger tickets), which is the dominant source of airlines income. As part of Air Transport services, GSAs should benefit from the same international guidance of fostering their development through competition to improve the quality of services and reduce logistics costs as prescribed. Foreign equity limits are restrictions to such competition.

b) *Learning from other countries*

Countries that are major air transportation hubs, such as Singapore and Hong Kong, do not apply any restrictions foreign investment in the airline passenger and cargo sector. Instead, countries focused on fostering their competitiveness by upgrading the skills of their human resources. Several trainings are available by IATA, especially in regards to safety and security. For many international airlines, their office staff need to have Dangerous Goods and Safety certifications. [157] Knowledge of other countries' legislation is also a key skill for GSAs' employees.

Another way for countries to upgrade their air transport sector is by increasing efficiency of their air freight supply chain. Many countries adopted E-Freight (IATA, 2015), a paperless air transport integrated system. Documentation across every step of the air cargo supply chain is digitized, ranging from shippers (invoice, packing list, Dangerous goods declaration) to customs authorities (declarations) and to airline documents (airway bills). In 2011, 44 countries had implemented e-freight in at least one of their airports. Thailand, Malaysia, Singapore, Hong Kong are part of these implementers. A case study by IATA on E-Freight provides an illustration on how E-Freight could bring large cost-savings for the pharmaceutical industry in Indonesia (World Economic Forum, 2013).

Furthermore, some countries like Hong Kong, Singapore and UAE have developed efficient transshipment processes.

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156 Four Priority sectors: air transport, e-ASEAN, healthcare and tourism. The 5th sector is logistics.

157 Discussion with a former staff of an international airline

7. Airfreight agencies in a nutshell

Airfreight agencies are the backbone of international airlines, supporting their administrative, operational and marketing and sales needs. As agencies, they act as intermediaries between their principals (airlines), their sub-contractors (cargo terminals, other), and cargo owners. Their profitability relies on volumes of cargo handled, on safety and security, and on supply chain efficiency.

a) Challenges

Despite no major issues in licensing, Indonesian legislation prevents airlines or specialized international general sales agent from access to foreign capital by limiting foreign equity to a maximum of 67%[158].

Safety and security arise as a major concern for airfreight agencies, as a new regulation on regulated agents puts them responsible for air cargo safety and security, whereas parties undertaking safety and security checks are not compliant with international safety and security procedures.

b) Opportunities

Learning from countries where the airfreight industry is developed, upgrading employees' skills and ensuring high level of safety and security conditions in international airports' facilities are key factors of success in developing as an efficient hub of air transport. Furthermore, efficient transshipment processes and digitization of air cargo processes can help generate economies of scale by increasing the amount of cargo processed through the country and optimizing the costs.

158 This excludes airline branches set to start operating in Indonesia that are subject to 49% of Foreign Equity Limit.

Chapter 6: Road Transport Companies (CPC 7123)

1. Background/ General facts about the sector

Through the lens of an export supply chain, road transport companies provide a key service to transport finished goods between manufacturers (or their outsourced warehouses) and international gateways (ports and airport).

Road freight, also known as trucking, is a "primary form" of cargo transportation for domestic and international shipments. A key transport mode for production and distribution, it is dependent on consumer demand and "manufacturing output". Efficient road freight services may have an economic impact on the development of manufacturing and distribution in a country. When such services are efficient, it can support manufacturers and distributors competitiveness through achieving logistics efficiency, or "*act as nontariff barriers to trade*" if generating traffic congestion, cause delays, and increase logistics costs (The World Bank - DFID, 2009).

Source: Meeuws, 2014

The World Bank classifies road transport into three types of service providers: *ancillary providers*, *independent freight forwarders*, and *hire-and-reward operators*. (The World Bank - DFID, 2009).

- *Ancillary providers*: Road transport services to carry own goods. For example, a manufacturing company that owns trucks to carry its output.
- *Freight forwarders*: road transport services are provided to owners of goods, mainly by hiring hire-and-reward subcontractors. In some cases, freight forwarders may operate own trucks with own employees.
- *Hire-and-reward operators:* road transport services are provided to owners of goods or their freight forwarders, by using own fleet of trucks. Such companies can be either "owner-drivers" or "fleet-owners".

Box 18: Reminder of definitions of Freight Transportation Agencies

Extract from Chapter 1: concurring definitions

Indonesia's definitions are consistent with international guidance.

	BKPM	Ministry of Transportation	WTO	Comments
Freight Transportation	Road transport for goods, is divided into general items and for special items.	Road transport for goods, is divided into general items and for special items.	Freight Transportation includes domestic and international road freight transportation services. Several sub-sectors are included	**Match**

2. Global market (structure, global players) and trends

From a global perspective, the road transport industry is considered as "the backbone of the real economy".[159] However, in contrast with sea or air transport, it is challenging to find an international ranking of top trucking operators, as these seem to be mainly local or regional at best. The World Bank identifies striking differences between the small and large operators. Emerging trends have been identified with tendency of industry integration to reach efficiencies, but a market that remains fragmented with a large number of independent operators, and dominant market share of large companies. (The World Bank - DFID, 2009)

Market structure

The road transport industry is heterogenic and fragmented, over 70% of the fleet belongs dominated by "owner-drivers" and small-sized independent truck operators (*Hire-and-reward operators)* (The World Bank - DFID, 2009). In contrast, the markets cargo volumes are dominated by large trucking companies that are technology-oriented and that have the necessary capital and "managerial resources" to achieve efficiencies and match the markets demand for quality transportation services. Such companies are more resilient to economic downturn compared to their smaller counterparts. The international market is witnessing a growing trend of:

- Vertical integration between truck fleet operators (owners), transporters and freight agents which generated efficiencies
- Outsourcing of road transportation to *Hire-and-reward operators.*

Companies' performance

As for all transport logistics companies, trucking companies' performance is based on the capacity to provide flexible, fast and reliable services, at a competitive cost.

159 "70 percent of the land freight service at origin and destination points by interconnecting business to world markets." WB TOOLKIT ROAD FREIGHT

Assets: vehicles

In terms of truck fleet, small-sized and owner-driver companies tend to have small and old rigid vehicles that are not fuel-efficient. In low and middle income countries, the majority of trucks are rigid (2 or 3 axle) 15-20 years old with a load capacity ranging between 5 to 10 tons. In contrast, in the European Union, the average trucks not exceed 8 years (European Environment Agency, (n.d.)) and modern trucks (rigid and articulated) using advanced technology are capital intensive.

Figure 47: Difference between old truck models (rigid) and modern truck models (articulated).[160]

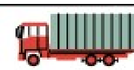
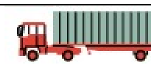
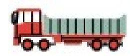
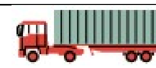
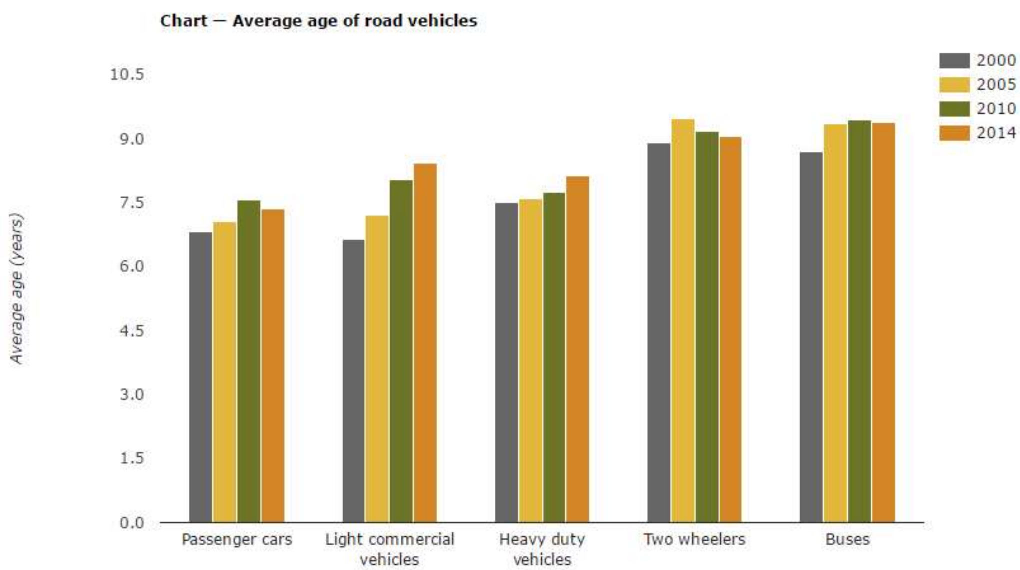
3-axle rigid truck	
3-axle articulated truck	
4-axle rigid truck	
4-axle articulated truck	

Figure 48: Average age of road vehicles in the EU[161]



160 (Department of Transport of the United Kingdom, October 2003)

161 (European Environment Agency, (n.d.))

Box 19: ASEAN Highway

The ASEAN Highway Network is part of the Asian Highway (AH) project, also known as the Great Asian Highway, a cooperative project among countries in Asia and Europe and the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), to improve the highway systems in Asia. The ASEAN Highway Network is vital for mainland ASEAN member states (Myanmar, Thailand, Malaysia, Cambodia, Laos and Vietnam) because land transport is an important modality for trading with neighboring ASEAN member state countries or non-member states that requires transit through member states.

Besides investing in hard infrastructure and creating seamless border procedures, the ASEAN road transport corridors require trade in road transport services negotiations. There are sound motivations to open markets to foreign companies to facilitate trade. An interesting example is the application of vehicle standards. Thailand applies the Euro 4 standard for trucks while neighboring countries Myanmar, Laos and Cambodia do not yet apply such high standards, the result is that Thai trucks can easily operate in neighboring countries while trucks from neighboring countries cannot operate in Thailand as these trucks are most likely not equipped with Euro 4 engines.

Trade in road transport services is and will be an important area for negotiations in logistics services. As an archipelago Indonesia will face less effect from outside trucking firms trying to enter the market due to very limited land border crossing activities (Indonesia-Malaysia border in Kalimantan). Nonetheless it is important to track the developments as roll-on/roll-off ferry services have potential to be introduced between Indonesia and Malaysia and Indonesia and the Philippines.

<u>Assessment of road transport companies level of service</u>

Besides the freight rate, shippers would use several criteria to select a road transport company, and include: *(1) transit time, (2)* timeliness *(reliability of meeting expected times), (3) likelihood of loss, damage and theft, (4) availability of capacity, and (5) convenience of departure times and frequency of service*. The importance of each criteria is weighted against cargo type and value, transport type (less than container loads, boxes, bulk, refrigerated truck/container, etc.), and shipment frequency. For instance, export manufacturers consider freight cost and timeliness as key attributes, compared to other criteria. Freight forwarders, on the other hand, rank risk of loss or theft first, freight rate comes second, followed by capacity availability.

3. Market structure/dynamics in Indonesia

Despite its characteristic as an archipelago, road freight transport in Indonesia handles 90% of Indonesia's total domestic freight, whereas short-sea shipping and rail transport remain marginal. The main driver for this is intra-Java traffic and the high volumes of cargo still moved by truck between Java and Sumatra. A World Bank study reveals the following findings (Meeuws, 2014).

<u>Competition</u>

With over 1 million companies, the Indonesian road freight transport sector is fragmented with small companies dominating the market. The road freight transport market is divided into (1) transportation between ports and areas where goods are stored, and (2) urban and regional transportation. The first is dominated by small companies (in terms of numbers, not in terms of capacity) whereas the second is covered by companies of all sizes. Competition level is very high where all companies compete mainly on price, rather than on the service level. The table below illustrates characteristics of road freight transport companies operating from and to Tanjung Priok. Assuming that small operators own 1 to 5 trucks (The World Bank - DFID, 2009), 34% of companies (1-4 trucks) handle only 4% of trucks, whereas 3% of companies (101-1508) handle 32% of trucks.

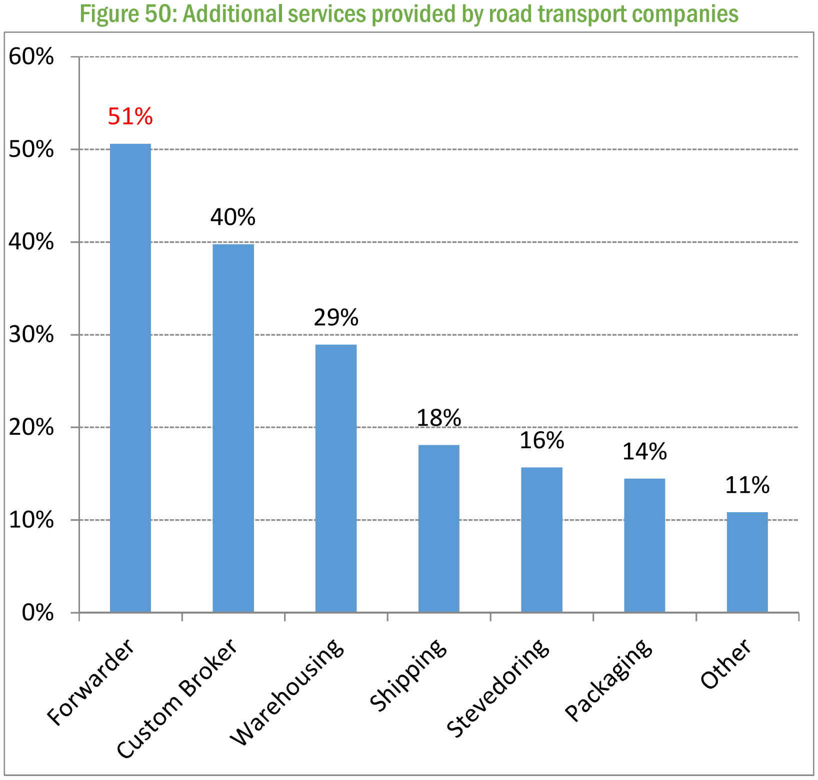
Among companies surveyed, the majority stated that they offer additional services besides trucking such as freight forwarding (51%) and customs brokerage (40%). Only one third reported that trucking is the only service provided.

Figure 49: Structure of companies performing trucking services in Tanjung Priok

Classification by no. of trucks per company	1-4	5-10	11-20	21-50	51-100	101-1508	Total
total number of trucks	457	875	1620	3307	1816	3878	11953
% number of trucks	4	7	14	28	15	32	100
number of companies	199	130	108	101	27	17	582
% number of companies	34	22	19	17	5	3	100
average number of trucks per company	2	7	15	33	67	228	21

Source: (The World Bank, May 2015)

Figure 50: Additional services provided by road transport companies



Source: (The World Bank, May 2015)

Companies' performance

The industry reflects two trends, one of financially struggling small companies and that of modernizing large companies. Small companies have high operational costs (due to traffic congestions and empty returns) compared to short distances covered. In order to compensate losses, such companies do not renew their truck fleet and tend to overload trucks (at the cost of road safety). On the other hand, larger companies, due to revenues generated from long-haul trips (80,000 to 120,000 KM), are increasing their service level quality including investment in new trucks and the use of technology. [162] For instance, a major road freight transport company with 450 trucks, uses 24-hour GPS tracking system for each truck and a computerized management system to monitor operations.

Assets: trucks

In 2014, 7 million vehicles were registered, including 50% with a load capacity exceeding 7.5 tons. In the Jakarta region, the truck fleet is relatively new with 51.85% of trucks between 0 and 5 years, and 27.1% between 6 and 10 years.

Employment

Generally in developing countries there is a lack of qualified drivers and this is linked to several reasons, such as that there is no salary differentiation between experienced and non-experienced drivers[163], and the education and training system is not prepared to increase drivers competencies. Also the companies often offer no competency training. It is common practice in Indonesia that the driver gets a fixed fee for his labor and to cover fuel expenses. Therefore the drivers are not employed by the companies and can easily be replaced. This also incentivizes drivers to overload or drive without sufficient rest-periods which could result in dangerous situations and potentially damage cargo.

Assessment of road transport companies' level of service

As it is the case in the global market, shippers' level of service requirements depend on the type of commodity, of transportation, etc. Shippers need to balance between their freight rate targets and service quality. A World Bank manufacturers' survey in 2014 revealed that reliability of logistics services is a top priority for these companies, followed by timeliness, then cost. However, in practice, shippers still request the lowest price.[164]

Customers of Road Transport companies in Indonesia

In Indonesia, owners of goods such as traders and manufacturers tend to hire trucking companies [165]directly and do not require support from freight forwarding companies. Freight forwarders act as customers of trucking companies, mainly on behalf of multinational companies that outsource their transportation logistics services to a freight forwarder. As it is the case of several other logistics services, the negotiation power highly depends on the volume of the cargo provided by an owner of goods. But overall, customers hold a high bargaining power due to the fragmentation of the trucking market.

Suppliers of Road Transport companies in Indonesia

Truck manufacturers, importer traders of new trucks and second-hand truck domestic traders [166]were reported to be the main suppliers of road freight transport companies. Alternatively, trucking

162 They replace truck that have operated 8 years

163 Meeting with ABMT, August 2014

164 Discussion with practitioners

165 Trucking companies may include independent truck operators, or freight forwarders with own truck fleet, or driver-owner

166 Second-hand trucks that are not newly imported.

companies can directly import second-hand trucks by themselves. The power of negotiation of these suppliers is assumed to be medium, as it depends on the type of trucks, whether trucking companies require less or more than 8 years-old trucks. However, a new legislation has been reported to allow traders to import second hand motor vehicles. Therefore an additional volumes of trucks may enter the Indonesian market[167]. Further research is needed to verify the impact of this change and to quantify such information. Automotive parts suppliers and automotive repair companies also constitute suppliers.

Given the high level of market fragmentation, the team only attempts to proceed to a competitive analysis in below porters' five forces figure.

Figure 51: A tentative competitive analysis of trucking companies in the Greater Jakarta area, through Porter's Five forces

Source: by the authors

4. Performance of Indonesia's service providers/ competitiveness

Based on a trucking survey conducted by the World Bank in 2014,[168] key findings reflect high inefficiency of trucking companies with 62% of return trips being empty and high costs with an average costs from the port Tanjung Priok to factories in the greater Jakarta area with US$ 3.59 per km, compared to an international average of US$ 1.00 (The World Bank, (n.d.)). A more recent discussion with the truckers' association in Jakarta estimates that a roundtrip cost in 2016 for a 20' foot container is IDR 1.8 million, which amounts to US$ 2.30 per km.[169]

167 Discussion with an international motor vehicle manufacturer. February 2016

168 The survey covered containerized and non-containerized road transportation, licensed in greater Jakarta, and covered 83 trucking companies.

169 The authors used the distance between Tanjung Priok port and Cikarang industrial area for the distance of 60km, and used the exchange rate of IDR 13.000 per USD, as per Bank Indonesia's exchange rate on October 7th, 2016.

5. National Regulatory Framework

The World Bank study concluded that the main challenges in the regulatory environment of road freight transport are the weak law enforcement and the lack of implementing by-laws. For instance, truck overload issues are not addressed. [170]Key legislations in regards to road freight transport include:

- Law Number 22 Year 2009 regarding Traffic and Road Transportation. *Undang-Undang Nomor 22 Tahun 2009 tentang Lalu Lintas dan Angkutan Jalan*
- The Presidential Regulation No. 44/2016 about the list of business fields that are closed to investment and business fields that are conditionally open for investment (DNI 2016). *Peraturan Presiden Republik Indonesia Nomore 44 tahun 2016 tentang Daftar Bidang Usaha Yang Tertutup Dan Didang Usaha Yang Terbuka Dengan Persyaratan Di Bidang Penamanan Modal.*
- Government Regulation No. 74 Year 2014 on Road Transport. *Peraturan Pemerintah Nomor 74 Tahun 2014 tentang Angkutan Jalan*. [171]
- Government Regulation No. 11 Year 2015 regarding Type and Tariff for Non-Tax Revenues Applicable within the Ministry of Transportation. *Peraturan Pemerintah Nomor 11 Tahun 2015 tentang Jenis dan Tarif Atas Jenis Penerimaan Negara Bukan Pajak Yang Berlaku Pada Kementerian Perhubungan*.
- Decree No. KM.69 of 1993 on the Implementation of Road Goods Transport. *Keputusan Menteri Perhubungan No. KM.69 Tahun 1993 tentang Penyelenggaraan Angkutan Barang di Jalan*.

a) Supply chain process: Input, Production, Output

Input: Barriers in employing factors of production (capital, labor, licensing)

Capital

Market access through limited foreign equity of 49% is maintained in the 2016 Investment Negative List (DNI 44/2016).

English Description	Indonesian Description	KBLI 2015	DNI 44/2016
Land transport for goods	Angkutan darat untuk barang	4943	
Road transport for general merchandise	Angkutan bermotor untuk barang umum	49431	*Foreign investment Max. of 49%*
Road transport for special items	Angkutan bermotor untuk barang khusus	49432	*Foreign investment Max. of 49%*

Labor

Besides general labor requirements in Indonesia that are applicable to all companies, the government regulation PP 74/2014 does not add specific requirements in regards to labor employment by trucking companies. The previous regulation PP 93/1993 specified that the "The operating crew is a permanent employee that meets the requirements and comply with both the working time and rest time regulations

170 Trucking companies are not allowed to carry 2 x full 20ft due to weight issues.

171 This regulation replaces Government Regulation No. 93 Year 1993

for the driver" (article 38). This would be consistent with labor legislation preventing outsourcing of core activity employees.

Licensing

There are no restrictions in regards to the type of companies authorized to operate a trucking companies. SOEs, regionally owned companies, limited liability companies and cooperatives are illegible. (PP 74/2014 art. 79). Furthermore, unlike other logistics service providers, no specific minimum capital requirement applies to trucking companies other than the company law No 40/2007 with IDR 50 million.

In regards to administrative and technical requirements, none were included in the latest 2014 regulation. This is a contrast compared to the previous regulation PP 93/2013 where the following conditions were linked to obtaining the operation license (art. 36)

- possession a transport business license;
- possession or control of a motor vehicle that is roadworthy;
- possession or control of a motor vehicle storage facility;
- possession or control of a motor vehicle maintenance facility.

Based on interviews during the World Bank study on reducing logistics costs (The World Bank, May 2015), there was also a minimum number of 5 trucks required. However, none of the above restrictions was enforced and therefore the licensing process was not perceived as problematic for companies.

Production: Barriers in producing services

Availability of trucks

Regulations limiting imports of used trucks by traders [172]represent a barrier to production for trucking companies, as it reduces the scope to source newer trucks cost-effectively. Road transport providers would then purchase either new trucks (imported or produced locally) or used local trucks. No comparative of truck prices was available at the time of the study, but imported trucks Completely Built-up (CBU) are subject to 45% import duty ((United States Department of Commerce International Trade Administration Office of Transportation and Machinery, December 2015) .[173]However, based on the Indonesian Automotive Industry Association (Gakindo) in 2014, there is illegal import of used trucks and in average 2,000 trucks per year. (Tempo.co, 30 October 2014). The Indonesian government tries to attract automotive companies to manufacture spare parts in Indonesia, such as waiving import duties on raw components and machineries by the Ministry of Finance in 2012 (KPMG, 2014).

Truck maintenance and spare parts

Similarly, to used trucks (and all other vehicles), the import of used spare parts is also regulated.
Truck inspection is compulsory on a yearly basis (Law No. 22/2009), and is regulated by the government regulation on non-tax revenue (PP 11/2015) under "testing services for motor vehicles". It is unclear whether such services include maintenance.

172 The Philippines also prohibits the import of used vehicles, except a limited list that includes several types of trucks such as truck tractors. (United States Department of Commerce International Trade Administration Office of Transportation and Machinery, December 2015)

173 (United States Department of Commerce International Trade Administration Office of Transportation and Machinery, December 2015)

Costs of service "inputs"- services purchased by the service provider

For several years the Indonesian government has subsidized fuel. This is perceived as positive by trucking companies. After abolishing fuel subsidies for public transportation and fisheries, the question is whether the Indonesian government will do the same with trucking companies?

Bureaucratic burden

Sub-national level licenses are not in line with national level, which adds burden for companies. In order to operate, a trucking company should apply for an operating license for special or heavy freight transportation, valid for 5 years. In addition, sub-national governments apply additional permits, such as truck-related permits (such as loading and unloading permit) and road-use permits. For instance, Jakarta local regulation (Perda DKI No. 5 year 2014[174]) sets 10 years as a maximum age for trucks. Despite the positive impact of such regulation on the environment and on trucking efficiency (with newer trucks that are modern, and which suffer from less breakdowns), there are no clear government initiatives to help trucking companies finance the fleet renewal. Another sub-national issue is the different type of licenses needed per province. Trucks from Cikarang to Tanjung Priok pass both West Java province and DKI Jakarta with deviating local regulations for trucks. The box on the next page describes some of the permits required by local governments.

Constraints to efficiency

The lack of compulsory certification of truck drivers in the legislation may be perceived as a regulatory barrier to trucking efficiency, including safer and economical driving.

Output: Barriers in selling services or generating profitability in selling services

There is no tariff setting for transport of goods, it is to be agreed between the service user and the company transporting the goods. (PP 74/2014, art. 106).

174 Peraturan Daerah Provinsi Daerah Khusus Ibukota Jakarta nomor 5 tahun 2014

Box 20: Extract from the World Bank Study on reducing logistics costs in Indonesia, Section on road transport

Types of permits that may be required by local governments

1. Truck-related permits

a. Loading and Unloading Permit (Ijin Bongkar Muat)

Trucking firms/owners may need to get this permit from district/city governments in order to be able to load and unload goods.

b. Parking user charge (Retribusi parkir)

This permit may also be required by some district/city governments, based on the parking location, whether at a specific truck parking lot or on a public street.

2. Road-related permits

a. Route Permit (Ijin Trayek)

Route permits for trucks, although not specified by the national government, are sometimes issued by the district/city and provincial governments. This type of permit also goes by some other names. In Makassar, South Sulawesi, the city government issues an operational permit.

b. Road Use Permit (Ijin Penggunaan Ruas Jalan)

Road use permits are issued at the district/city level. The idea of this permit is that all trucks which pass through a district/city must pay the local government to use their roads.

c. Border Crossing Permit (Ijin Lintas or Retribusi Ijin Pengoperasian Mobil Barang Lintas)

This permit may be required to cross district or provincial borders. Similar to the road use permit, this permit is not common and is rarely used by the local government.

3. Commodity permits

Commodity permits are sometimes required for transporting some commodities, especially natural resource based products, such as forestry products. These permits are governed by specific sectoral ministries, such as the Ministry of Agriculture or the Ministry of Forestry. Commodity permits vary across regions and commodities.

4. Business permits

In addition to the above operational permits, trucking firms also have to obtain general business permits, which are issued by the district/city governments.

a. Trade permit (Surat Ijin Usaha Perdagangan)

This is one of the most common permits in use across Indonesia.

b. Business registration (Tanda Daftar Perusahaan)

Business registration is required of all companies, after they have received the trading permit.

c. Other permits

Depending on the type of company, trucking firms, especially the bigger ones, may need to get other business permits, such as the nuisance permit or warehouse registration.

By: René Meeuws, 31 August 2014

b) Indonesia's commitment in AEC, AFAS compared to applied policies

Indonesia's policy matches its AFAS 9 commits, but remains far from the targets set by AEC blueprint.

Table 15: Comparison of the AEC Goals, AFAS 9 and Indonesia's applied policies for road transport operators

GOALS OF AEC	AFAS 9	APPLIED POLICY
	(1) None (MA/NT)	(1) No regulation
	(2) None (MA/NT)	(2) No regulation
AEC Blueprint: not less than 49% by 2008, 51% by 2010, and 70% by 2013 for logistics services It is stipulated in the Roadmap for the integration of logistics services: "member country shall endeavor to achieve substantial liberalization of logistics services in International road freight transport services (CPC 7123) in beginning 2008	(3) Joint venture company with foreign equity participation up to 49% (MA) (3) As indicated in the horizontal Section (NT)	(3) Joint venture company with foreign equity participation up to 49% (MA)

6. Learnings from international experiences (based on Indonesia's key regulatory bottlenecks)

a) International guidance

As all other logistics services, road freight services follow the same international principles in terms of fostering competition, improving quality and reducing overall logistics costs. In terms of market access, countries differ in the approach to opening road freight services for foreign investment, either lowering or completely removing limits to foreign equity investment in all or specific road freight services.

b) Country examples for market access

Malaysia: partly removal of limits to FIE

The Malaysian government applies the same limit on Foreign Equity Investment of 49% maximum for companies that carry goods on behalf of a third party (such as hire-and-reward operators). In contrast, courier companies are allowed to have 100% of FIE. No minimum capital requirement applies to third party road freight providers. (Malaysian Investment Development Authority (MIDA), October 2012)

Hong Kong: no FIE limit and simplified operations

Similarly to most of economic sectors in Hong Kong, no foreign equity limit is applied to investment in road freight transportation services. No minimum capital requirements are set either. Furthermore, licensing is straightforward, with the following requirements[175]:

- "Business Registration Certificate
- Vehicle / Trailer License

175 Hong Kong. Support and Consultation Center for SMEs (Retrieved from: https://www.success.tid.gov.hk)

- Vehicle Registration Document
- Potentially needed: Certificate of Incorporation"

7. Road transport in a nutshell

Road transport companies, commonly known as trucking companies, are another key service provider in an exporter' supply chain carrying cargo from a company's premises to an international port or airport. They performance impacts all other logistics service providers, inter-alia freight forwarders, cargo handling companies, shipping line and airline agencies. A World Bank Study in 2014 reveals that the trucking is highly fragmented and diversified (The World Bank, May 2015).

a) Challenges

Road transport has still not been liberalized, and key challenges for these companies are red tape, harmonization across provinces, and law enforcement. The maximum foreign equity limit matches with the country's AFAS 9 commitment, but is not in track to accomplish the AEC blueprint 70% threshold. Other regulatory bottlenecks include (1) a large number of permits required at national and sub-national level, (2) contradictory regulations across provinces, and (3) weak law enforcement.

b) Opportunities

Removing market access barriers, upgrading the trucking sector and facilitating integration of other logistics services would be valuable opportunities to support the development of the trucking industry in Indonesia. International guidance highlights the importance of removing market access barriers, such as limits to foreign equity. A brief competitive analysis of trucking sector reveals that there is a high level of competition between industry players, with a highly fragmented market leading to competition over price rather than quality.

Existing regulations include strict requirements for safety, security, set a maximum age for trucks and a carriage limit. However, such legislations are not respected. Law enforcement would help develop the quality side and identify aspects for the government to support a structural upgrade of the trucking industry.

Furthermore, the World Bank study in 2014 reveals that some trucking companies [176]evolve towards offering logistics solutions (a package) rather than only trucking. Looking at logistics service providers as a whole, rather than modality, would help streamline the legislative framework across the supply chain.

176 For example, 51% of trucking companies interviewed for the study offer freight forwarding services.

Conclusion

Given the importance of efficient logistics service providers as necessary companions to trade, this study explored a number of key logistics service providers that intervene at several steps of the export supply chain. These providers include those specialized in one mode of transport (shipping agencies, or cargo handling at ports and airports) or across supply chain functions (such freight forwarders and third-party logistics providers 3PLs).

A first glance at Indonesia's regulatory framework shows improvements in market openness allowing the country to honor its AFAS 9 commitments. With the latest Negative Investment List 2016, foreign equity ownership in several sectors has been increased to match or exceed many of the AFAS 9 commitments. This would help attract investment and bring know-how to support the development of logistics in Indonesia.

Nonetheless, under the surface uncovers several domestic regulations that act as bottlenecks to the development of logistics service providers[177]. A restrictive regulatory environment in terms of international trade restrictions (MA, NT) and domestic regulations would not protect domestic LSPs from large multinational logistics providers[178]. It would rather put the country's SMEs at loss.

To improve quality and cost of logistics services, the study recommends a change in policy focus (1) to encourage a diversity and competition among LSPs by opening up all logistics sub-sectors, especially services auxiliary all modes of transport, (2) to support the development of small and medium and large LSPs, instead of regulations to which can comply only can SOEs and large companies (domestic and international), and (3) to promote processes and people's skills ("*logistics are about people*") rather than asset ownership.

Diversity and competition to improve logistics performance

By facilitating market entry of logistics service providers (domestic and international), countries enable competition within the sector, which drives costs down and improve the overall quality of service providers. Respecting AFAS 9 commitment is an important achievement for Indonesia's integration in the ASEAN, but action on licenses that undermine logistics service providers' development is necessary to fully implement the country's commitments, albeit this being largely dependent on other ministries than the Ministry of Trade, such as the Ministry of Transport, Ministry of Finance and Ministry of Labor and Transmigration.

Logistics, a Small and Medium Enterprises business

Private sector evidence shows that SMEs are best serviced by SMEs. Large international or domestic logistics providers target large manufacturers and other owners of goods, and do not provide much-

177 By looking at these companies as producers of services (Services as a manufactured product).

178 Most of large multinationals are already present in Indonesia.

needed support and competitive pricing needed by small and medium manufacturers. According to Bank Indonesia, 99.9% of businesses in Indonesia are SMEs, 98% of which are micro enterprises.[179]

Processes and people's skills (rather than assets or licenses)

Evidence from best practice shows a *light-handed* regulatory framework allows logistics service providers to evolve based on the needs of their customers. Countries rarely apply minimum capital, asset or licensing requirements to their logistics service providers (except to transportation asset-owning companies, such as road, ocean and air transport). Searching for the best practice in terms of freight forwarding licenses, the authors did not find any such license in most leading logistics country examples. Instead, efforts to improve the skills of the labor force and to upgrade the overall industry are undertaken.

In looking for asset requirements for cargo handling operator or Regulated Agents (in airports), no evidence of such requirements was found. Best practice shows that the quality of a service provider is rated based on processes implemented by them. International and local/regional certifications are available for logistics service providers as a proof of compliance to required processes. In order to obtain such certification, companies are audited whether service providers and their sub-contractors' processes are compliant with regulation. Furthermore, owners of goods and other users of logistics services are then free to choose service providers with or without such certifications. For instance, airlines transporting cargo to Europe require ground-handling agents to have RA3 certificate, and companies exporting goods to the USA require their logistics service providers to be C-TPAT. Similar thinking applies to airport ground handling companies that require all core staff to have a series of certifications to handle dangerous goods.

In conclusion, by creating the right conditions for the sector, countries give an opportunity for (1) new micro and small companies to enter the market, enabling job creation, and (2) benefits the overall economy by supporting incumbent firms and perhaps some of which would venture out into other countries. At this moment there are few domestic LSPs able to deliver quality services that would make them competitive to establish presence in foreign countries. In addition, most neighboring countries in East Asia have already relaxed access to their markets leaving little room for further trade negotiation.

179 Opening speech by the Deputy Governor of Bank Indonesia, Mr. Halim Alamsyah, at the "Capacity Building and Training Workshop on Financing SMEs: Sharing Ideas for Effective Policies" on 15-16 October 2014

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