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Internationalisation of Indonesian SMEs

A thesis
submitted in partial fulfilment
of the requirements for the Degree of
Doctor of Philosophy
in Economics

at
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by
Mohamad Dian Revindo

Lincoln University

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Abstract of a thesis submitted in partial fulfilment of the requirements for the Degree of
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Abstract

Internationalisation of Indonesian SMEs

by

Mohamad Dian Revindo

Indonesia faces rapid changes in its international trade policies and environment owing to its engagement in various bilateral, regional and multilateral free trade agreements. Free trade escalates business competition for small and medium-sized enterprises (SMEs) in the domestic market through cheap imported products and the increasing operation of foreign enterprises, but offers enormous opportunities for SMEs to export and venture abroad. However, Indonesian SMEs are less able to take advantage of foreign market opportunities than their large counterparts and only account for a small share of Indonesia's non-oil and gas exports, contradicting their important contribution to business establishment, employment provision and value added creation.

This study analyses the internationalisation of Indonesian SMEs, with focus on their direct-export activities. In particular, the study examines the characteristics of exporting and non-exporting SMEs in terms of export stimuli, export barriers, network relationships and participation in government's export assistance programmes. The study investigates the strategies and processes undertaken by SMEs to become exporters along with the factors influencing SMEs' export engagement, the determinants of SMEs' export intensity and the factors influencing SMEs' performance improvement due to export engagement. The policy measures to foster SMEs' exports are formulated based on the research results.

Primary data was obtained from survey questionnaires administered in April-August 2014 to SMEs in seven provinces in Java, Madura and Bali regions and central government agencies whose policies are related to SMEs and/or international trade. The survey yielded a response rate of 53.76% and 497 usable responses, including 271 exporting SMEs and 226 non-exporting SMEs. Descriptive statistics were used to distinguish the characteristics of exporting and non-exporting SMEs. Principal component analysis was used to reduce the dimensions of export stimuli and export barriers. The

empirical frameworks include binary logistic regression to estimate the determinants of SMEs' export engagement and fractional logit regression to estimate the determinants of SMEs' export intensity and exporting SMEs' performances.

The descriptive statistics results show that SMEs are stimulated to export because they aspire to find new markets, but they initiate export activities because of the presence of foreign buyers. SMEs plan to begin exporting to neighbouring countries but they, in reality, initiate export to large and high income countries. SMEs' timing to become exporters varies across provinces. Exporting SMEs in Bali and Yogyakarta, two main tourist destination provinces, on average take less time to internationalise from the outset, indicating a born global firm phenomenon probably due to high exposure to foreigners.

The estimation results show that SMEs' propensity to engage in export activities is influenced by the international work experience of the owners/managers, product, location, firm age, firm size, central government assistance, network relationships with non-government actors and their perceptions of export barriers. SMEs' export intensity is affected by the international work experience of the owners/managers, location, firm age, firm size, export experience, export market, central government assistance, network relationships with non-government actors and their perceptions of export barriers. Engaging in export activities may improve SMEs' performances, but the performances are influenced by owners/managers' education level, firm size, export experience, export intensity, the presence of foreign investors and SMEs' participation in central government's export assistance programmes.

SMEs encounter various export barriers at pre-exporting and exporting stages. At the pre-exporting stage, SMEs are less likely to engage in export activities if they perceive difficulties in tariff and non-tariff barriers, informational and human resource barriers, distribution, logistics and promotional barriers, business environment barriers in host countries, procedural barriers, and foreign customer and competitor barriers. At the exporting stage, SMEs are prevented from sustaining and developing their exports mainly by informational and human resources barriers, distribution, logistics and promotional barriers, financial barriers, foreign government barriers, procedural barriers and price barriers. However, the policy makers and the SMEs have different perceptions on the severities of each type of export barrier.

The results provide new evidence on firm internationalisation theories, namely the Uppsala Model, the Network Model, the Resource-Based View and the International New Venture Theory. The

results give insight for the policy makers seeking to identify potential exporters, develop effective assistance to remove the main export barriers and strengthen the function of internationalisation networks. The results also provide insights for SMEs' managerial teams to enable the speeding up of their internationalisation process.

Keywords: SMEs, internationalisation, export stimuli, export barriers, export strategy, network relationships, export assistance, export performance

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Abbreviations

AEC	ASEAN Economic Community
AFTA	ASEAN Free Trade Area
AIC	Akaike Information Criterion
ANOVA	Analysis of Variance
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
BIC	Bayesian Information Criterion
BPS	<i>Badan Pusat Statistik</i> (Statistics Indonesia)
DKI	<i>Daerah Khusus Ibukota</i> (Capital City Special Territory)
FDI	Foreign Direct Investment
FTA	Free Trade Agreement
GLM	Generalised Linear Model
GOI	Government of Indonesia
HDI	Human Development Index
INV	International New Venture
KMO	Kaiser-Meyer-Olkin
LEs	Large-sized Enterprises
LPI	Logistic Performance Index
MIEs	Micro-sized Enterprises
MNC	Multinational Corporation
MOE	Margin of Error
MSA	Measures of Sampling Adequacy
OECD	Organisation for Economic Co-operation and Development
OLS	Ordinary Least Square
PCA	Principal Component Analysis
PPP	Purchasing Power Parity
RBV	Resource-Based View
ROA	Return on Assets
ROS	Return on Sales
SCP	Structure–Conduct–Performance
SITC	Standard International Trade Classification
SMEs	Small and Medium-sized Enterprises
SOE	State-owned Enterprise
SWOT	Strength, Weaknesses Opportunities, Threats
UNCTAD	United Nations Conference on Trade and Development
WTO	World Trade Organization

Chapter 1

Introduction

1.1 Introduction

Trade liberalisation, characterised by a fall in tariff and non-tariff barriers, and accelerated by decreasing transportation and communication costs, brings about challenges as well as opportunities for firms across the globe. It forces local firms to compete with cheaper imported products and the presence of multinational enterprises, while providing them with opportunities to export, adopt foreign technologies and operate in foreign markets (Awuah & Amal, 2011; Knight, 2000; Ruzzier, Hisrich, & Antoncic, 2006).

Both domestic market pressure and foreign market openness push firms to internationalise. Despite no consensus on the precise definition of firm internationalisation, it can be perceived simply as a process of a firm's increasing involvement in international business operations (Welch & Luostarinen, 1999) or the process of adapting firm's operations (strategies, structures and resources) to international environments/markets (Calof & Beamish, 1995). A firm's engagement in international operations may take various forms including exporting, importing, investing abroad, licensing or cooperating with foreign firms. Thus the broad definition of firm internationalisation includes inward, outward and cooperative international activities (Ruzzier et al., 2006).¹

Firm internationalisation has been rapid and evident for at least the last two decades. For example, during 2001-2014 the world's merchandise export value had more than tripled from 6.1 to 18.9 trillion USD (ITC, 2016a) and the global exports in services recorded nearly a 3.5-fold increase from 1.47 to 5.12 trillion USD (ITC, 2016b). During the same period, the world's foreign direct investments (FDI) outward stocks rose more than 3.3 times from 7.77 to 25.87 trillion USD (UNCTAD, 2014, 2015). The steady growth of trade and FDI helped the global economy to sustain positive gross domestic product (GDP) growth in that period (2.58% annual average), albeit being interrupted by the 2007-08 global financial crisis (World Bank, 2016b). At the firm level, trade openness also helped a great number of firms worldwide to sustain their businesses and maintain growth and productivity (OECD, 2012).

¹ For further discussion on the definition and scope of firm internationalisation, see Chapter 3.

However, the benefits of trade openness are not reaped equally among countries and enterprises. Despite the growing importance of developing countries in world trade, 34 OECD member states still accounted for 56-60% of world merchandise export value during 2010-15 (ITC, 2016a). At the business level, large enterprises are more prepared to capitalise on trade opportunities compared to small and medium-sized enterprises (SMEs). For example, in the mid-2000s SMEs in the US, Switzerland, the Netherlands, United Kingdom, China and Japan only contributed 30-38% of their respective national exports (Hammer & Stamps, 2010). SMEs' contributions have also been modest in the more advanced modes of outward internationalisation (i.e. services export and outward FDI) (Adlung & Soprana, 2013; Dalli, 1995; Kogut & Chang, 1996). SMEs are less likely to be service exporters or engage in outward FDI activities than large enterprises (Adlung & Soprana, 2013; Breinlich & Criscuolo, 2011; Hollenstein, 2005; OECD, 2012).

SMEs' meagre export contributions are even more prevalent in developing countries. For example, in ASEAN member states on average SMEs only accounted for 23% of total exports (Wignaraja, 2012).² In Indonesia, despite being a major source of GDP growth and job creation, SMEs' share in total non-oil and gas exports was minuscule at 9.3%. SMEs' inability to seize trade opportunity, along with Indonesia's increasing engagement in various free trade agreements (FTAs) which force local products to compete directly with cheap imported merchandise in the domestic market, may severely threaten SMEs' business sustainability in the future.³

SMEs' inability to exploit the gain from international trade amidst the rapid growth of global trade indicates that SMEs face greater impediments and different challenges to internationalise than large enterprises. Scholars' interest in firm internationalisation emerged in the 1950s (Hymer, 1976) but only the later stream of research in this area has begun to pay more attention to smaller firms (i.e. SMEs) (Hollenstein, 2005; Onkelinx & Sleuwaegen, 2008). SME internationalisation has been studied separately from general firm internationalisation because SMEs have particular characteristics such as smallness and limited resources that may constrict their international business activities (Laghzaoui, 2007; Ruzzier et al., 2006). Further, SMEs internationalisation problems appear to be

² The Association of Southeast Asian Nations (ASEAN) is a regional economic and political cooperation organisation among Southeast Asian countries. ASEAN was founded in 1967 and currently comprises ten member states namely Indonesia, Malaysia, Philippines, Singapore, Thailand, Brunei Darussalam, Viet Nam, Lao PDR, Myanmar and Cambodia.

³ In August 2016, Indonesia had eight FTAs in effect, including ASEAN (1993), ASEAN-China (2010), ASEAN-Australia and New Zealand (2010), ASEAN-India (2010), ASEAN-Japan (2008), ASEAN-Korea (2007), Indonesia-Japan (2008), Indonesia-Pakistan (2013). Indonesia also has ongoing negotiations with several other regional and bilateral FTAs.

more complex in developing countries. Hence, the study of Indonesian SMEs will enhance our understanding of SMEs' internationalisation in an emerging country that is facing rapid changes in its international trade environment and policies.

1.2 Research Problem

SMEs (including micro enterprises) play an important role in the Indonesian economy, particularly as they have been Indonesia's major source of business establishments, employment opportunities and value added creation, and their contributions tend to rise over time.⁴ During 2005-13 SMEs made up 99.99% of the total business entities, provided more than 97% of job opportunities and contributed around 56-59% of the Indonesian GDP (Ministry of Cooperatives and SMEs Republic of Indonesia, 2009b, 2010a, 2010b, 2013a, 2014a, 2015b).⁵ By contrast, in the same period, SMEs only accounted for a small share of Indonesia's non-oil and gas exports and their share tend to decline over time. Despite SMEs' steady rise in total annual export value, their share in Indonesia's non-oil and gas exports continually shrank from around 18.5% in 2005-07 to 16.9% in 2008-10 and further down to 15.4% between 2011 and 2013.⁶

Thus, Indonesian SMEs are less able to take advantage of export opportunities from trade liberalisation compared to their larger Indonesian counterparts (Wengel & Rodriguez, 2006). Indonesian SMEs also fare less well in export performance compared to SMEs in other ASEAN countries (Wignaraja, 2012) and perform far below SMEs in developed countries (Hammer & Stamps, 2010). SMEs' poor export performances persist despite various policy measures launched by the Government of Indonesia (GOI), including general assistance (such as access to credit, technical and managerial training) as well as specific export-related assistance (including trade promotion, business matching and training in export procedures).⁷

Since SMEs confront complex challenges in exporting, the effectiveness of export-related policies and assistance requires a comprehensive understanding of SMEs' export activities. The extant

⁴ Prior to the implementation of the Law No. 20 (2008) on Micro, Small and Medium-Sized Enterprise, the "Small-sized Enterprise" term generally included small and micro-enterprises. For the distinction between small and micro-enterprises, see Section 2.2.1.

⁵ For a more detailed discussion on the role of SMEs in the Indonesian economy, see Section 2.2.3.

⁶ If oil and gas exports are included, SMEs' and micro-enterprises' contribution might be even lower since oil and gas exports are performed by large state-owned enterprises. Hence, this figure supports Wignaraja (2012) that Indonesian SMEs' contribution to total exports was actually 9.3%.

⁷ For further discussion of government export support programmes in Indonesia, see Section 2.3.

literature suggests that a comprehensive analysis of SMEs' exports should include, but not be limited to, the following key issues: stimulating factors to export (Acedo & Galán, 2011; Leonidou, 1995b; Morgan, 1997; Morgan & Katsikeas, 1997; OECD, 2009), export barriers (European Commission, 2010a; Leonidou, 1995a, 2004; Morgan, 1997; OECD-APEC, 2006; OECD, 2009), internationalisation processes and strategies (Andersen, 1993; Cavusgil, 1980; Melén, 2009; Nguyen, Le, & Bryant, 2013; Thai, 2008), as well as the role of the government and network relationships in assisting SMEs to export (Kontinen & Ojala, 2012; Korhonen, Luostarinen, & Welch, 1996; Rodrigues & Child, 2012; Shamsuddoha, Ali, & Ndubisi, 2009; Wilkinson & Brouthers, 2006). Extant literature also highlights two key issues particularly related to SMEs at the exporting stage (exporters): export performance (Dhanaraj & Beamish, 2003; Hart & Tzokas, 1999; Robertson & Chetty, 2000; Sousa, Martínez-López, & Coelho, 2008; Wengel & Rodriguez, 2006) and the impact of export engagement on SMEs' performances (Ganotakis & Love, 2012; Hitt, Hoskisson, & Kim, 1997; Lu & Beamish, 2001, 2004, 2006; Singla & George, 2013).

SMEs' export activities are influenced by some export stimulating (enhancing) factors and export barriers (inhibiting factors). Accurate identification of export stimuli is crucial to define appropriate intervention strategies to foster SMEs' exports (European Commission, 2007). For example, the government's understanding of export stimulating factors will be helpful in the screening and selection of SMEs with export potential to participate in export assistance programmes (Sari, Alam, & Beaumont, 2008) or in improving the export performance of the current exporters (i.e. increasing export sales, export continuity or market expansion) (Liargovas & Skandalis, 2008; Nguyen et al., 2013). Accurate identification of export barriers faced by SMEs is also pivotal for successful policy measures because the types and severity of the export barriers might vary across sectors and countries (Tambunan, 2012). The export barriers faced by SMEs can be caused by internal problems (such as human resources, capital and products) or by the external environment (such as the complexity of export procedures and foreign market regulations) (Leonidou, 2004).

Owing to the complexity of export activities and SMEs' limited internal resources, most SMEs seek external assistance to deal with various export barriers. Hence, it is essential to investigate the role of network relationships (e.g. social, business and formal networks) in SME internationalisation. Many SMEs are already involved in extensive networks orchestrated by business associations, cooperatives, leading companies or foreign buyers in certain industries such as fashion accessories (Battaglia, Corsaro, & Tzannis; Johnsen, 2007). These networks or supply chains can find ways to organise their members to reach the global markets (Lim & Kimura, 2010). Network relationships can

also be built upon private or social-ties, as is the case with both Chinese SMEs (Zhou, Wu, & Luo, 2007) and British SMEs (Rodrigues & Child, 2012).

SMEs differ in the processes, pathways and strategies undertaken to enter foreign markets. Most SMEs would first establish their *niche* in domestic markets before exporting to neighbouring countries, and later expanding to more distant countries (Johanson & Vahlne, 1977, 1990; Johanson & Wiedersheim-Paul, 1975). However, some SMEs begin exporting to distant markets with high purchasing power and large populations (Ojala, 2009). In terms of the time taken to become exporters, most SMEs take a considerable amount of time to accumulate knowledge, experience and competitiveness in domestic markets before venturing abroad (Barney, 1991; Wernerfelt, 1984). However, some SMEs already have an international orientation at the outset and begin exporting within the first couple of years of establishment (Oviatt & McDougall, 1994; Rennie, 1993).

Finally, it is also crucial to investigate SMEs' post-export activities. SMEs that successfully enter foreign markets may have difficulties in sustaining or expanding their exports; thereby exporting SMEs differ in their export performances. For example, SMEs' revenue share from exports may range from as low as 1% to as high as 100%. In addition, export-activities may have different impacts upon SMEs' performance. Many SMEs experience significant improvements in firm performances after exporting, while for some other SMEs the impact of exporting on firm performance is marginal.

1.3 Research Objectives

This study aims to analyse internationalisation of Indonesian SMEs, particularly their direct-exporting activities. The analysis is based on the building blocks developed upon the key issues of SMEs' exporting activities discussed in Section 1.2. Specifically, this study has the following objectives:

1. To identify the factors that stimulate Indonesian SMEs to export
2. To identify the export barriers encountered by Indonesian SMEs
3. To investigate the export processes and strategies undertaken by Indonesian SMEs
4. To investigate Indonesian SMEs' network relationships in their exporting activities
5. To investigate the factors influencing Indonesian SMEs' probability of becoming exporters
6. To investigate the factors that determine Indonesian SMEs' export performances
7. To examine the impact of exporting activities on the performance of Indonesian SMEs
8. To formulate appropriate policy measures to foster Indonesian SMEs' exports

1.4 Contributions of the Research

There have been extensive researches on Indonesian SMEs but only a few shed lights on their internationalisation, particularly their exporting activities. Of those few studies, they mostly address only specific and isolated issues of internationalisation, for example, the role of human capital (Sari et al., 2008), export performance (Wengel & Rodriguez, 2006), the impact of trade facilitation programmes (Tambunan, 2009b) and the impact of industry clustering on exports (Tambunan, 2009a). Moreover, most of the extant literature has partially looked at SMEs in certain regions, sectors or industries in Indonesia. For example, Sari (2011) examined the internationalisation of manufacturing firms while Jane (2013), Zubadi and Nugroho (2012) and Roida and Sunarjanto (2012) studied the case of firm internationalisation in Bandung City, Magelang Regency and Jawa Timur Province, respectively.

By contrast, this study covers SMEs in seven provinces in Java, Madura and Bali Islands where approximately 60% of Indonesian SMEs operate (Kuncoro, 2009) and includes SMEs in various sectors/products. This study also encompasses the main issues in SME internationalisation including the export stimuli, export barriers, export processes and strategies, network relationships, government assistance, export performance and export impact. Hence, to the extent of the author's knowledge, this study is the first attempt to comprehensive investigation of the internationalisation of Indonesian SMEs.

The findings of this study contribute to the discourse on firm internationalisation theory in general, and SME internationalisation theory in particular. More specifically, this study provides evidence from Indonesia to lend support to one, among several, competing firm internationalisation theories, namely the Uppsala Model (the Stage Theory), the Network Model, the International New Ventures (Born Global Firms) Theory and the Resource-Based View.⁸

For policy makers/regulators, the findings of this study are beneficial for the government of Indonesia as well as the governments in other developing countries to foster SMEs' exports and SMEs' competitiveness in international markets. In particular, the findings of this study provide more insight into the formulation of general strategy and policy measures to assist SMEs to initiate and speed up their internationalisation, or to sustain or expand their current international business

⁸ For thorough discussion on firm internationalisation theories, see Chapter 3.

activities. Hence, the findings of this study pave the way for further research in this area aimed at formulating specific and detailed policy-mix and measures in particular industry or region.

Finally, at the managerial level, the study will enhance SME owners' and managers' understanding of the internationalisation processes and strategies and lessons learned from successful exporters. SMEs' managerial team can also learn how to utilise various networking sources and government export assistance to help them internationalise their business.

1.5 Structure of the Thesis

The remainder of the thesis is organised as follows. Chapter 2 reviews the role of SMEs in the Indonesian economy and exports as well as the government policies to foster exports. Chapter 3 discusses the theoretical and empirical literature on SME internationalisation. Chapter 4 presents the study area, the data collection procedures and the data analysis methods. Chapter 5 provides the empirical results of the descriptive statistics and the principal component analysis. Chapter 6 provides the estimation results of the regression analysis. Chapter 7 concludes with a summary of the main research findings and the research implications, followed by the limitations of the research and recommendations for future study.

Chapter 2

Research Context

This chapter provides an overview of Indonesia's economy profile as well as the role of SMEs in Indonesia's economy and exports. Section 2.1 provides a general background on Indonesia's economy and exports based on selected socio-economic indicators and the gross domestic product (GDP) structure, followed by international trade indicators as well as merchandise export composition, comparative advantages, market destinations and the provinces of origin. Section 2.2 discusses the role of SMEs in Indonesia, including SME definition, SMEs' distribution pattern across regions and economy sectors, as well as the role of SMEs in the creation of employment opportunity and the enhancement of GDP and exports. Section 2.3 discusses briefly Indonesia's national policy on export development and SMEs' development. Section 2.4 summarises the chapter.

2.1 Overview of Indonesia's Economy and International Trade

2.1.1 Profile and Structure of Indonesia's Economy

Indonesia is an emerging economy characterised by rapid growth but high-income inequality and complex socio-economic problems. Table 2.1 summarizes Indonesia's socio-economic performance during 1996-2014. Indonesia's ability to maintain 4.21% annual economic growth during that period indicates a sturdy and stable economy. In addition, 5.61% annual economic growth during the 2009-2014 period indicates a strong and fast recovery from the 2008 global financial crisis compared to 2.20% global annual growth during the same period (World Bank, 2016b). Nevertheless, Indonesia faces the threat of persistently high unemployment (7.49% average) and high inflation rates as indicated by a 10.80% average inflation rate, mainly contributed by hyperinflation in the 1997/98 Asian financial crisis. The poverty gap, despite its tendency to decrease, suggests that in 2010 the poor population's incomes on average were still 14.19% below the poverty line (at \$3.10 a day) while the country's Gini index of 0.41 since 2011 exhibited an alarming inequality problem.⁹

Table 2.1 also shows that illiteracy has not been completely eradicated among the adult population and more than a fourth of the population cannot afford formal education. Moreover, the Human

⁹ A country with a Gini index value above 0.4 is regarded as a country with high inequality or at least medium-high inequality (Bourguignon, 2004; Vieira, 2012).

Development Index (HDI) that incorporates health (measured by life expectancy), education (measured by years of schooling) and income (measured by per capita purchasing power parity) shows that in 2014 Indonesia's human development still ranked as low as 110 out of 188 countries (UNDP, 2015).

Table 2-1: Selected Socio-Economic Indicators of Indonesia (1996-2014)

Indicators	1996	2002	2006	2010	2014
Human Development Index (rank) ^a	.679 (96)	.692 (111)	.729 (111)	.671 (110)	.684 (110)
Life expectancy at birth (years) ^a	65.31	66.61	67.37	68.15	68.89
Adult literacy rate (% of 15 and above) ^a	85.5	87.9	90.4	92.9	95.9
School enrolment (% combined, gross) ^a	n.a.	65.0	68.2	69.7	71.2
Population, total (million) ^b	199.93	217.37	229.26	241.61	254.45
GDP (current billion US\$) ^b	227.37	195.66	364.57	755.09	890.49
GDP growth (annual %) ^b	7.64	4.50	5.50	6.22	5.02
GDP per capita (current US\$) ^b	1137.27	900.13	1590.18	3125.22	3499.59
Inflation, consumer prices (annual %) ^b	7.97	11.88	13.11	5.13	6.39
Unemployment, total (% of labour force) ^b	4.40	9.10	10.30	7.10	6.20
Poverty gap at \$1.90 a day (2011 PPP) (%) ^b	12.37	4.30	n.a.	2.89	n.a.
Poverty gap at \$3.10 a day (2011 PPP) (%) ^b	32.52	20.09	n.a.	14.19	n.a.
Poverty headcount ratio at \$1.90 a day, 2011 PPP (%) ^b	45.89	23.40	n.a.	15.90	n.a.
Poverty headcount ratio at \$3.10 a day, 2011 PPP (%) ^b	77.55	63.39	n.a.	46.30	n.a.
GINI coefficient ^c	.355	.329	.360	.380	.410

^aNote: The HDI values after 2010 are not directly comparable with pre-2010 values because since 2014 the Human Development Report (HDR) uses the latest International Comparison Program's conversion rates of national currencies to purchasing power parity to calculate HDI and recalculate previous HDI values back to 2010 only.

^aSource: Human Development Report (UNDP, 2015)

^bSource: World Development Indicators (World Bank, 2016b)

^cSource: Gini Ratio by Province (BPS-Statistics Indonesia, 2016)

Indonesia's economy growth, however, does not take place symmetrically in every sector of the economy. Figure 2.1 shows that Indonesia's economy also continuously undergoes structural transformation. The manufacturing industry (Sector 3) has become the major sector in terms of production/value added creation in the economy. However, the shares of the manufacturing industry in the GDP, along with the primary industry (agriculture and extraction) show a steady decline in contrast to the increasing contribution of service-based sectors (Sectors 5-9).

The asymmetric growth is also evident when Indonesia's GDP is categorized by expenditure components. Figure 2.2 shows the growth of the economy was mainly driven by the growth of household consumption and gross capital formation while the government consumption grows at a slower rate and the net exports (exports less imports) even registered negative values in 2012-2014.

If the trade balance continues to decline in the long run, the economic growth of the country might be impeded unless Indonesia manages to foster its exports.

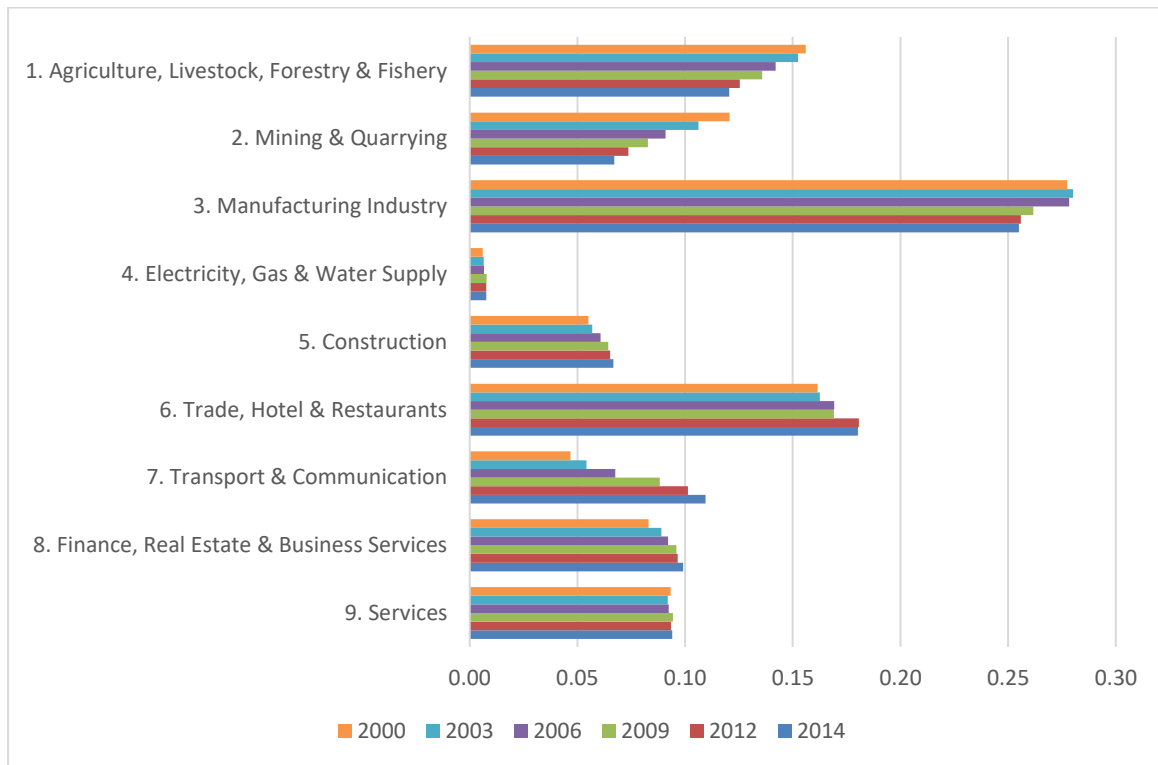


Figure 2-1: Composition of Indonesia's GDP, by Industrial Origin (2000-2014)

Note: GDP values are at 2000 constant market price

Source: BPS-Statistics Indonesia (2015)

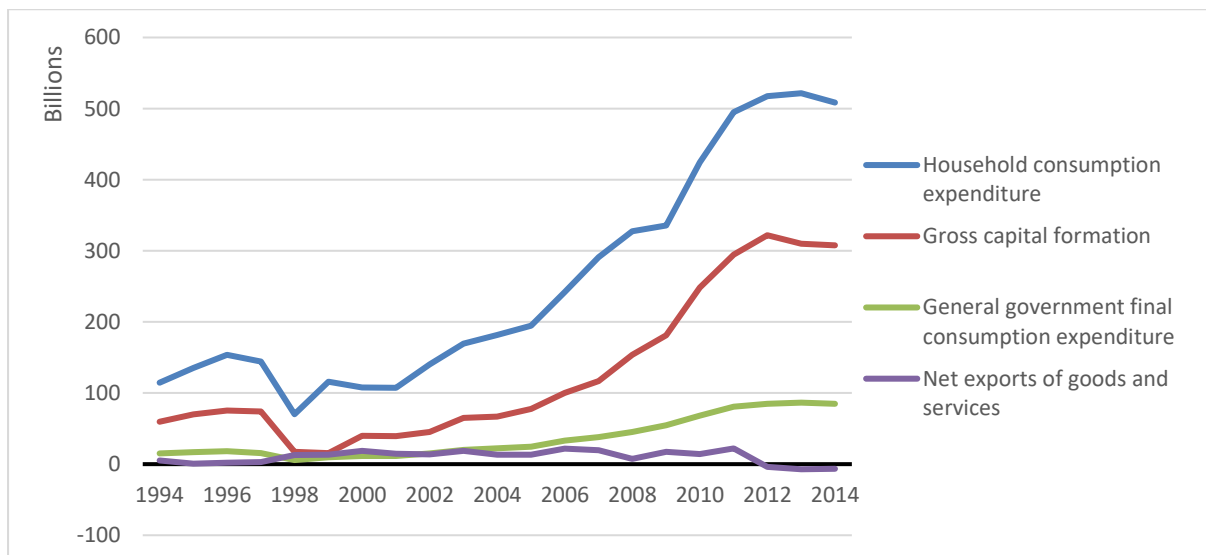


Figure 2-2: Indonesia's GDP by Type of Expenditure, in Billion US\$ (1994-2014)

Note: Expenditure values are at current prices

Source: UN Statistics Division (2016)

2.1.2 Indonesia's International Trade and Export Structure

The shrinking net export values pose further questions on how well Indonesia performs in international trade and FDI, given that Indonesia adopts an open economy policy. The data in Table 2.2 suggests that Indonesia is increasingly engaged in international economic activities, as indicated by the increasing value of trade volumes (except a slight decline in 2014). The exports and imports, however, grow at different paces and directions. The merchandise exports have been plummeting after 2011 and cannot keep up with increasing imports. Likewise, despite the positive growth trend of the export of services, it has always been surpassed by the import of services. As a result, the total trade balance has recorded negative values in 2008 and since 2012 afterwards. The dwindling trade balance indicates that opening the border and being a member of WTO, APEC, and the ASEAN Free Trade Area does not automatically improve Indonesia's export sector. Rather, there are still mounting export obstacles that the government and business societies need to address. The decreasing export-to-GDP ratio also suggests that Indonesia has yet to capitalise on the foreign market opportunity compared to their ASEAN counterparts. The large fluctuation in the Rupiah's exchange rates has not been conducive for exports either.

Table 2-2: Selected International Trade Indicators of Indonesia (2000-2014)

Indicators	2000	2004	2008	2012	2014
Total exports (current million US\$)	70,617	83,496	153,451	213,692	199,824
Merchandise exports (% of total exports)	92.62	84.75	90.98	88.93	88.22
Service exports (% of total exports)	7.38	15.25	9.02	11.07	11.78
Total imports (current million US\$)	59,232	75,733	156,009	225,915	211,719
Merchandise imports (% of total imports)	73.60	72.46	81.75	84.85	84.16
Service imports (% of total imports)	26.40	27.54	18.25	15.15	15.84
Trade balance (current million US\$)	11,385	7,763	-2,557	-12,223	-11,896
Trade volume (% of GDP)	71.44	59.76	58.56	49.58	48.06
Total exports (% of GDP)	40.98	32.22	29.81	24.59	23.63
Foreign direct investment, net (current million US\$)	4,550	1,512	-3,419	-13,716	-15,890
Exchange rate (LCU per US\$, period average)	8,421.8	8,938.9	9,699.0	9,386.6	11,865.2

Source: World Development Indicators (World Bank, 2016b)

In many cases, the decrease in exports may be partially explained/substituted by increase in outward FDI (Fontagné, 1999; Helpman, Melitz, & Yeaple, 2003; Pfaffermayr, 1996).¹⁰ Nevertheless, the rise in the negative value of net FDI suggests that Indonesian businesspersons and firms are not

¹⁰ Horizontal outward FDI, in which firms set up similar activities in domestic and overseas markets, displaces trade while on the contrary vertical outward FDI, in which firms set up different stages of production in different countries, further spurs trade (Fontagné, 1999; Helpman et al., 2003; Pfaffermayr, 1996).

aggressive in expanding their investments and operations abroad compared to the inflow of foreign companies' operations in Indonesia. Hence, the shrinking export sector could be attributed to problems in domestic production and export infrastructure rather than expansion of exporting companies that have moved part of their production or operation activities abroad.

In order to have a better perspective of Indonesia's exports, particularly merchandise exports, the aggregate merchandise export value discussed in the previous section can be broken down into types of commodities exported. Figure 2.3 depicts the composition of value of products exported by Indonesia during 2009-2013, using Standard International Trade Classification (SITC).¹¹

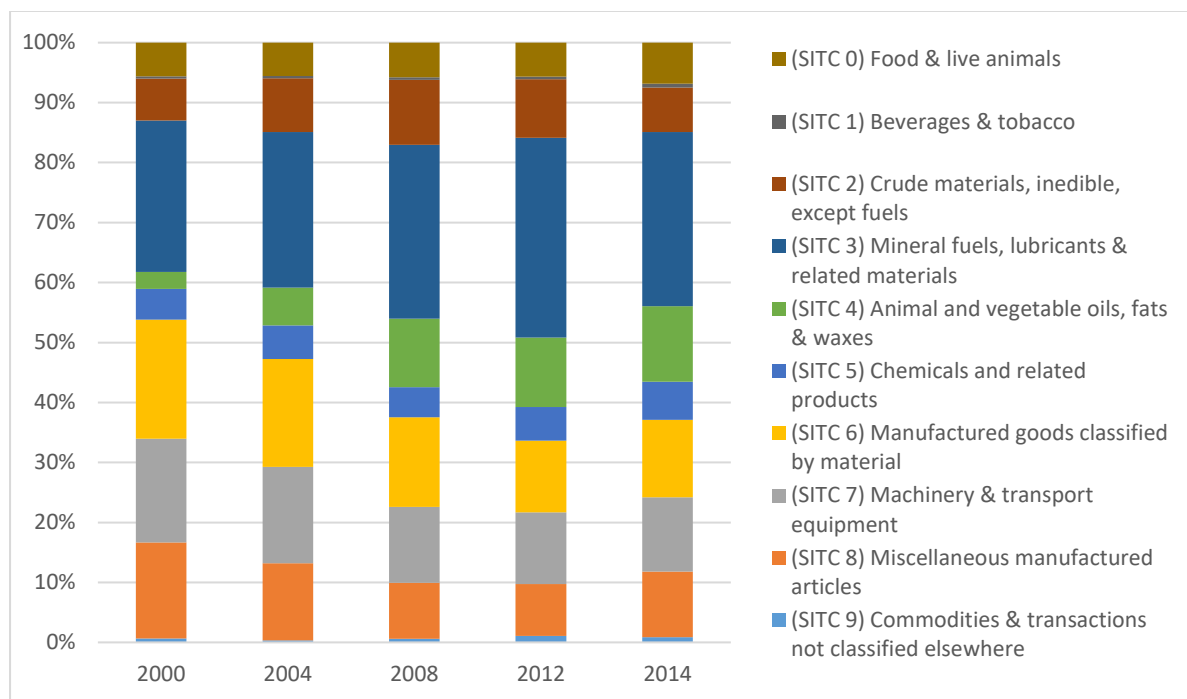


Figure 2-3: Composition of Indonesia's Merchandise Exports (2000-2014)

Note: The data for the figure is based on SITC Rev.3

Source: UN Comtrade Database (UN Trade Statistics, 2016)

Figure 2.3 shows that the SITC-3 product group, which includes coal, petroleum and gas, contributes a fair share of Indonesia's exports. The importance of this product group does not exhibit any decline and, if combined with the contribution of the export of goods under SITC 2 (mostly metal ores and crude rubber), indicate that Indonesia's exports are still reliant on natural and non-renewable resources.

¹¹ SITC is used instead of HS codes because SITC's most general classification can break down goods into 9 groups compared to 97 groups in HS classification.

Table 2-3: Factor Intensity of Industries in Indonesia

Factor Intensity	Industries and ISIC Codes
Low capital intensity (labour-intensive)	Production, processing and preservation of meat, fish, fruit, vegetables, oils and fats (151); Manufacture of grain mill products, starches and starch products, and prepared animal feeds (153); Manufacture of other food products (154); Manufacture of tobacco products (160); Spinning, weaving and finishing of textiles (171); Garments and carpets (172); Manufacture of knitted and crocheted fabrics and articles (173); Manufacture of wearing apparel, except fur apparel (181); Tanning and dressing of leather; manufacture of luggage, handbags, saddlery and harness (191); Manufacture of footwear (192); Sawmilling and planing of wood (201); Manufacture of products of wood, cork, straw and plaiting materials (202); Manufacture of paper and paper products (210); Printing and service activities related to printing (222); Manufacture of refined petroleum products (232); Manufacture of basic chemicals (241); Manufacture of other chemical products (242); Manufacture of man-made fibres (243); Manufacture of rubber products (251); Manufacture of plastics products (252); Manufacture of glass and glass products (261); Manufacture of non-metallic mineral (269); Manufacture of basic iron and steel (271); Manufacture of basic precious and nonferrous metals (272); Manufacture of structural metal products, tanks, reservoirs and steam generators (281); Manufacture of other fabricated metal products; metal working service activities (289); Manufacture of domestic appliances (293); Manufacture of accumulators, primary cells and primary batteries (311); Electrical cables and telephone (313); Manufacture of accumulators, primary cells and primary batteries (314); Manufacture of electric lamps and lighting equipment (315); Manufacture of other electrical equipment n.e.c. (319); Manufacture of electronic valves and tubes and other electronic components (321); Communication equipment (322); Manufacture of television and radio (323); Manufacture of medical appliances and instruments and appliances for measuring, checking, testing, n.e.c. (331); Manufacture of optical instruments (332); Manufacture of watches and clocks (333); Building and repairing of ships and boats (351); Manufacture of transport equipment (359); Furniture (361); Other processing (369)
High capital intensity (capital-intensive)	Manufacture of office, accounting and computing machinery (300); Manufacture of dairy products (152); Manufacture of beverages (155); Dressing and dyeing of fur; manufacture of articles of fur (182); Publishing (221); Manufacture of coke oven products (231); Manufacture of general purpose machinery (291); Manufacture of special purpose machinery (292); Manufacture of electricity distribution and control apparatus (312); Manufacture of motor vehicles (341); Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers (342); Manufacture of parts and accessories for motor vehicles and their engines (343); Manufacture of aircraft and spacecraft (353)

Source: Setyari, Widodo, and Purnawan (2015)

The composition of Indonesia’s merchandise exports reflects the performance of each type of commodities in international markets, which to a certain extent is driven by their comparative advantages. The comparative advantage theory predicts that a country will specialise and export commodities that can be produced with lower opportunity costs, which stem from commodities’

factor intensity, country's factor endowments and technology. Factor intensity of an industry/ commodity can be country-specific because production techniques and technology for a certain commodity may vary across countries (i.e. manual or mechanised production method). For each country, an industry can be classified as capital-intensive if its capital intensity, calculated as ratio of capital stock over labour force, is higher than the average capital intensity of all industries in the country (Shirotori, Tumurchudur, & Cadot, 2010). Using such method, Setyari et al. (2015) suggest the classification of industries in Indonesia by capital intensity as shown in in Table 2.3.

We next investigate whether Indonesia has comparative advantage in labour-intensive or capital-intensive commodities and whether the comparative advantage pattern changes over time. A widely-used measure of comparative advantage is the revealed comparative advantage (RCA) index (Balassa, 1965, 1977).¹² Figure 2.4 shows the dynamics of RCA indices of Indonesia's exported labour-intensive commodities during 2001-2016. The RCA indices mean value was always higher than one during the period, indicating that Indonesia has comparative advantages in various labour-intensive commodities identified in Table 2.3. The mean of RCA indices initially decreased steadily from 2001 until it reached the lowest point in 2011 (1.07), indicating Indonesia's steady decline of comparative advantage in labour-intensive commodities. Furthermore, during the same period the declining RCA indices mean value was followed by a decrease in its standard deviation, indicating that the lower RCA index values were observed in various labour-intensive commodities. However, from 2011 onwards both RCA indices mean and standard deviation have been bouncing back and steadily increasing, indicating that some of Indonesia's labour-intensive commodities have regained their comparative advantages in international markets.

Figure 2.5 plots the dynamics of RCA indices of Indonesia's exported capital-intensive products during 2001-2016. The RCA indices mean value is much lower than one during the period, indicating that Indonesia has comparative disadvantages in various capital-intensive commodities identified in Table 2.3. The mean of RCA indices fluctuates around 0.2, indicating little changes in the comparative disadvantages of Indonesia's capital intensive products in international markets over time.

¹² RCA index is given by: $RCA_{ij} = \left(\frac{X_{ij}}{X_{wj}} \right) / \left(\frac{X_i}{X_w} \right)$, where X_{ij} represents country i 's export value of product j , X_{ij} is the world's total export value of product j , X_i is country i 's total export value, and X_w is the world's total export value. $RCA_{ij} > 1$ indicates that country i has comparative advantage in product j and, conversely, $RCA_{ij} < 1$ indicates that country i has comparative disadvantage in product j .

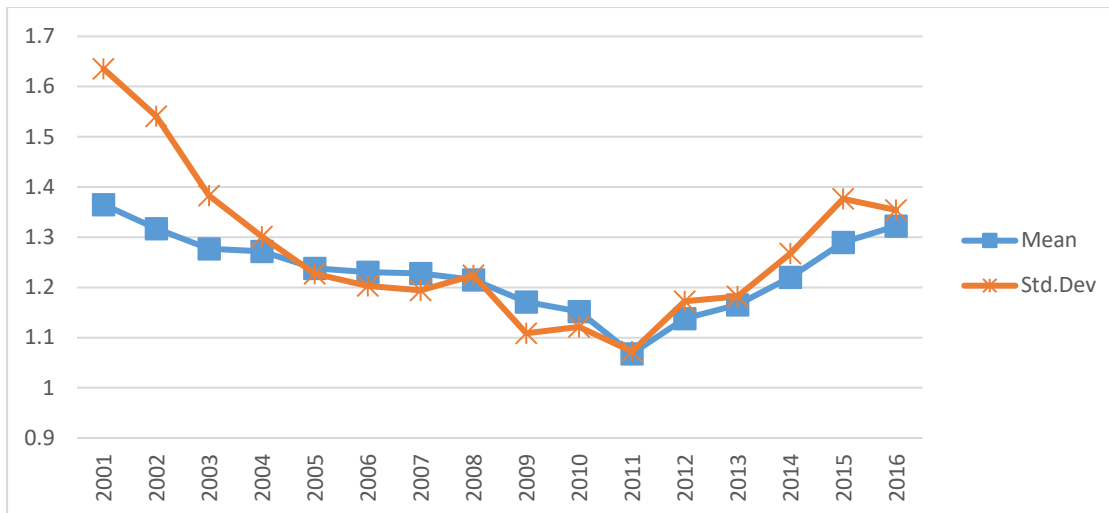


Figure 2-4: RCA Indices of Indonesia's Labour-Intensive Commodities, 2001-2016

Source: Author's calculation based on ITC (2017) database

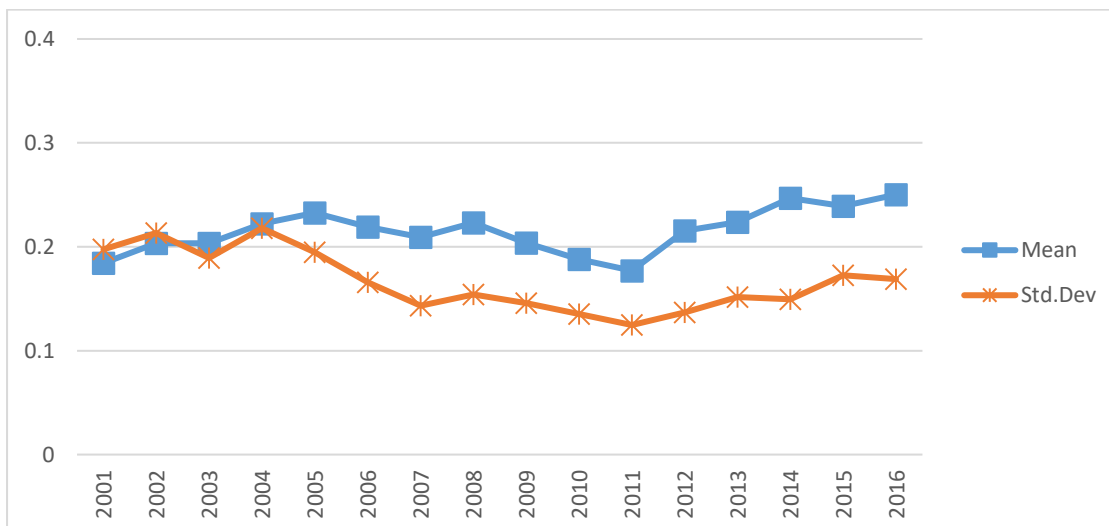


Figure 2-5: RCA Indices of Indonesia's Capital-Intensive Commodities, 2001-2016

Source: Author's calculation based on ITC (2017) database

Indonesia has been undergoing a structural transformation with which the economy structure has been gradually shifting away from agriculture-dominant economy (primary production) since 1966 and from the dependency on oil and gas (resource-base) export in the 1980s towards the development of manufacturing and service sectors (Hidayat, 2002; Sjahrir, 1990). However, as Figure 2.4 and 2.5 show, Indonesia currently still rely on labour-intensive (low-tech) industries in international markets while the competitiveness of the capital-intensive (high-tech) industries still

lag far behind. Hence, Indonesia has not successfully developed technological capacity to shift away from the labour-intensive industries initially relocated from Japan in the 1970s.¹³

The export concentration can be observed not only by the product groups but also by destination countries. Table 2.4 shows that Indonesia's export destinations tend to be concentrated on several markets rather than diversified markets. The importance of the ASEAN market, to which Indonesia sells almost one fourth of its total merchandise exports, is not peculiar given the market's proximity as well as the ASEAN Free Trade Area (AFTA) agreement since 1992. Nevertheless, the dependency on Japan, China and the US markets, to which more than one third of total merchandise exports are shipped, may put Indonesia in a vulnerable position should one of those main trade partners experience economic turbulence and contraction. On the contrary, the very limited exports to the Middle East, South America, Eastern Europe, Australia and Africa suggest that these markets are underexploited.

Table 2-4: Destination of Indonesia's Merchandise Exports (2001-2014)

Destinations	2001	2004	2007	2010	2012	2014
Asia	63.4	67.3	69.3	71.1	73.5	70.7
ASEAN	16.9	18.2	19.5	21.1	22.0	22.5
Japan	23.1	22.3	20.7	16.3	15.9	13.1
China	3.9	6.4	8.5	9.9	11.4	10.0
India	1.9	3.0	4.3	6.3	6.6	7.0
Korea, Republic of	6.7	6.7	6.6	8.0	7.9	6.0
Taiwan	3.9	4.0	2.3	3.1	3.3	3.6
Rest of Asia	7.0	6.7	7.4	6.4	6.4	8.5
America	16.2	14.4	12.4	11.7	10.1	11.9
USA	13.8	12.3	10.2	9.1	7.8	9.4
Rest of America	2.4	2.1	2.2	2.6	2.3	2.5
Europe	14.7	13.4	12.7	11.8	10.3	10.6
Netherlands	2.7	2.5	2.4	2.4	2.5	2.3
Germany	2.3	2.3	2.0	1.9	1.6	1.6
Rest of Europe	9.7	8.6	8.3	7.5	6.2	6.7
Oceania	3.7	3.0	3.4	3.1	3.0	3.2
Australia	3.3	2.6	3.0	2.7	2.6	2.8
Rest of Oceania	0.4	0.4	0.4	0.4	0.4	0.4
Africa	2.1	1.9	2.2	2.3	3.0	3.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Trade Map (ITC, 2016a).

¹³ According to "the flying geese model", Japan as the Asia's leading power in technological development in the 1970s relocated the sunset industries (mainly the labour-intensive industries) to less industrialised Asian countries including Indonesia, due to Japan's increasing labour costs (Korhonen, 1994; Lim & Feng, 2005; Lin, 2012).

Indonesia's merchandise exports can be traced back to the regions or provinces where they originated. Figure 2.6 shows the contribution of each economic zone to Indonesia's total exports.¹⁴ The figure shows that exports do not originate equally from all the six regions, but are largely produced in a few more industrialised regions in the country. Figure 2.4 shows that Indonesia's exports mostly originated from Zones 1, 2 and 3.¹⁵ These 3 zones consist of 21 out of the total 34 provinces in Indonesia and contribute more than 90% of the country's total exports. These 3 zones are more industrialised than Zones 4, 5 and 6 and located in the western part of Indonesia with several advantages over other zones to conduct export activities. For example, Jawa (Zone 2) is the most equipped with transportation and communication infrastructure and most populated island in Indonesia where 57.5% of the country's population reside (BPS-Statistics Indonesia, 2013a). Sumatera and Kalimantan (Zones 1 and 3) have location advantages since both share direct borders with South East Asian neighbouring countries. On the contrary, export contribution originating from Sulawesi (Zone 4), Bali and Nusa Tenggara (Zone 5) and Maluku and Papua (Zone 6) are very limited. These three zones are neither industrialised, well developed nor densely populated.

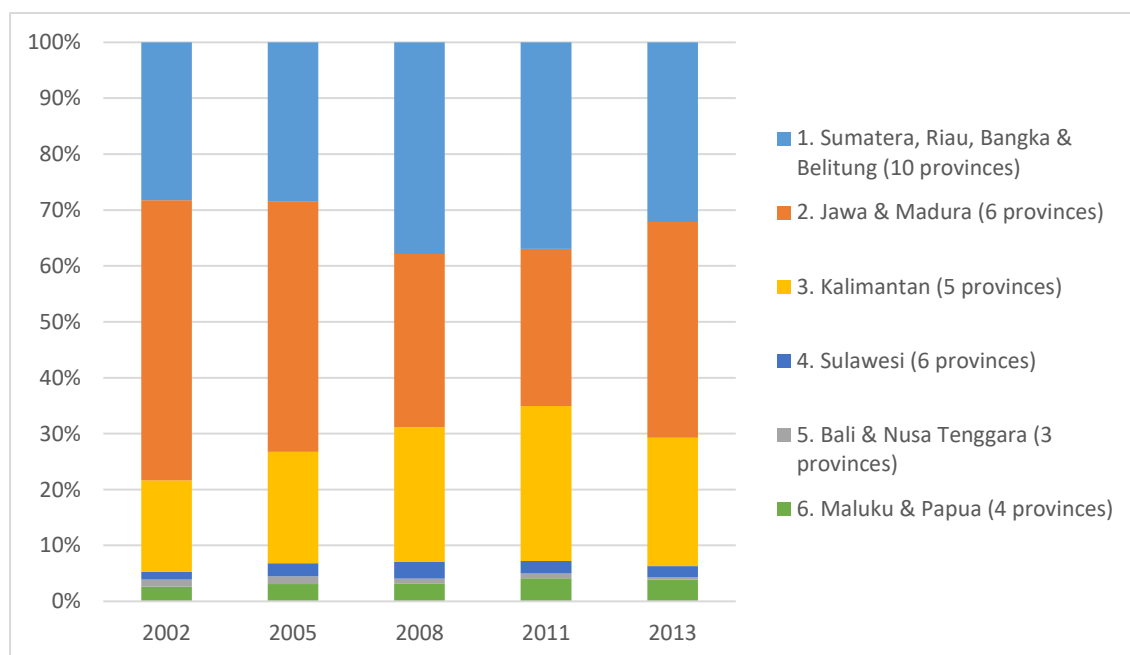


Figure 2-6: Indonesia's Merchandise Export by Ports of Origin (2002-2013)

Source: BPS-Statistics Indonesia (2014d)

¹⁴ We used the broad division of the Indonesian region into 6 economic zones/corridors proposed by the Master Plan for Acceleration and Expansion of Indonesia's Economic Development 2011-2025 (Coordinating Ministry for Economic Affairs, 2011).

¹⁵ The exports reported in one port of origin are mostly generated from the same province/area where the port is located although in a few cases it is not necessarily true (BPS-Statistics Indonesia, 2013b, 2014b).

2.2 Role of SMEs in Indonesia’s Economy and Exports

2.2.1 Definitions of SMEs

Ministries and other government institutions in Indonesia have different goals and interests regarding enterprise development and therefore adopt different enterprise definitions. These definitions may also differ from those adopted by international bodies/agencies and the definitions used by other countries. Table 2.5 summarizes several enterprise definitions used in Indonesia as well as the World Bank definition.

Table 2-5: Definitions of Enterprises by Size

Type of Enterprise	Definitions			
	Ministry of Cooperatives & SMEs ^a	BPS-Statistics Indonesia ^b	Ministry of Finance ^c	The World Bank ^d
Micro	Assets ≤ IDR 50 million; or Turnover ≤ IDR 300 million	Number of employees < 5	Small business: Turnover ≤ IDR 4.8 billion	Headcount < 10; Assets ≤ US\$10,000; Turnover ≤ US\$100,000
Small	Assets: IDR 50-500 million; or Turnover: IDR 300 million – IDR 2.5 billion	Number of employees: 5-19		Headcount < 50; Assets ≤ US\$3 million; Turnover ≤ US\$3 million
Medium	Assets: IDR 500 million – IDR 10 billion; or Turnover IDR 2.5-50 billion	Number of employees: 20-99	Non-small business: Turnover > IDR 4.8 billion	Headcount < 300; Assets ≤ US\$15 million; Turnover ≤ US\$15 million
Large	Assets > IDR 10 billion; or Turnover > IDR 50 billion	Number of employees ≥ 100		Headcount ≥ 300; Assets > US\$15 million; Turnover > US\$15 million

Note: The average daily exchange rates are IDR 11,880/US\$ in 2014 and 13,401/US\$ in 2015 (IMF, 2016).

^a*Source:* Law No. 20 on Micro, Small and Medium-Sized Enterprise. The law also further defines that the asset criterion excludes land and buildings.

^b*Source:* Statistical Yearbook of Indonesia 2014 (BPS-Statistics Indonesia, 2014c)

^c*Source:* Ministry of Finance Republic of Indonesia (2013)

^d*Source:* Ayyagari, Beck, and Demircuc-Kunt (2005)

The most widely used enterprise definition in Indonesia is by assets and annual turnover values as this definition is stated in Law No. 20 ("Undang-undang No. 20 Tahun 2008 tentang Usaha Mikro Kecil dan Menengah [Law on Micro, Small and Medium-Sized Enterprise Number 20 of 2008].", 2008). This definition is the main reference for the Ministry of Cooperatives and SMEs and is also referred to by several other ministries. However, the assets and turnover values may not always represent the size of the enterprise’s activity, particularly in manufacturing industries. For example, a furniture production may require investment in expensive equipment and therefore possess a high value of assets. Likewise, a small-scale jewellery craft has a large product value in monetary terms and therefore large turnovers. Hence, the BPS-Statistics Indonesia (previously the Indonesian National Bureau of Statistics) rather

defines enterprises by the number of employees (BPS-Statistics Indonesia, 2014c), particularly for their Medium and Large Scale Industry Survey. For taxation purposes, the Ministry of Finance classifies businesses into only two categories based solely on annual turnover: small businesses and large businesses. However, none of the definitions matches the definitions used by the World Bank's surveys (Ayyagari et al., 2005).

This study is particularly interested in the internationalisation of SMEs. SMEs in this study refers particularly to small-sized and medium-sized enterprises and excludes micro-sized and large-sized enterprises.¹⁶ The definition of small-sized and medium-sized enterprises used in this study is that used by BPS-Statistics Indonesia (by number of employees). Thus, throughout this study the term SMEs refers to business entities that fall within the following criteria: *enterprises with employees of at least 5 and at most 99*.

2.2.2 SMEs' Sectoral and Regional Distribution in Indonesia

Most enterprises grow in numbers over time, except large enterprises that tend to fluctuate at around 5,000 units (Ministry of Cooperatives and SMEs Republic of Indonesia, 2015a). During 2005-2013 the total number of business establishments in Indonesia grew annually at 2.64% on average and in 2013 reached approximately 57.9 million units in total (Ministry of Cooperatives and SMEs Republic of Indonesia, 2014a).¹⁷ However, most of these business establishments are in the form of micro-enterprises (**MiEs**) (see Table 2.6). Since 2006, MiEs constitute more than 98% of total business establishments in Indonesia while the numbers of other types of enterprises are much fewer. It appears that large-scale firms' (**LEs**) establishments are few and very few of the MiEs and SMEs can grow into large-scale firms. Despite its relatively large numbers, the share of MiEs to the country's total business establishments has tended to decrease since 2007, while on the contrary the share of SMEs has tended to increase over time and the share of LEs tends to fluctuate around 0.01%.

¹⁶ Micro enterprises are excluded for two reasons. First, the micro enterprises database is unavailable in Indonesia as they mostly take the form of individual business or home industries. Second, micro enterprises are less likely to engage in international business (Pendergast, Sunje, & Pasic, 2008).

¹⁷ The business establishment term is used instead of business unit with reference to BPS-Statistics Indonesia (BPS-Statistics Indonesia, 2014a). In its survey, BPS-Statistics Indonesia treats a business' activities as a separate establishment if it operates in a specific place, has its own bookkeeping on costs and production and has management authority, regardless of whether it may be a branch or subsidiary of another enterprise.

Table 2-6: Business Establishments in Indonesia by Types of Enterprises (2005-2013)

	2005	2007	2009	2011	2013
Total business establishments in Indonesia (in million units)	47.02	50.15	52.77	55.21	57.9
Business establishments by type of enterprise					
Micro-sized enterprises	96.16%	98.92%	98.88%	98.82%	98.77%
Small-sized enterprises	3.60%	0.99%	1.04%	1.09%	1.13%
Medium-sized Enterprises	0.22%	0.08%	0.08%	0.08%	0.09%
Large-sized enterprises	0.01%	0.01%	0.01%	0.01%	0.01%

Source: Ministry of Cooperatives and SMEs Republic of Indonesia (2015a)

However, the business establishments are not equally spread across provinces/regions in Indonesia. Table 2.7 shows approximately 60% of SMEs in the country are concentrated in only three islands; Java, Madura and Bali (Kuncoro, 2009; Wiratno & Dhewanto, Undated). This unequal distribution is in line with the economic agglomeration pattern in Indonesia. Indonesia comprises 17.5 thousand islands scattered in 34 provinces, but the economic activity is largely concentrated in those three closely related islands (see Table 2.7 and Figure 2.7). Although these three islands consist of only seven provinces and constitute only 7.07% of the country's land area, they are inhabited by 57.5% of the country's total population and generate over 58% of the country's GDP/value added (BPS-Statistics Indonesia, 2014c).

Table 2-7: Regional Distribution of SMEs and Economic Activities in Indonesia

Regions	Land Area ^a	Population ^a	Production (GDP) ^a	Number of SMEs ^b
Java, Madura & Bali Islands	7.07%	57.5%	58%	±60%
The rest of Indonesia	92.93%	42.5%	42%	±40%

^aSource: Statistical Yearbook of Indonesia 2014 (BPS-Statistics Indonesia, 2014c)

^bSource: Kuncoro (2009) and Wiratno and Dhewanto (Undated)

**Figure 2-7: Map of the Main Islands in Indonesia**

Source: Clickable map of Indonesia, Discover Indonesia Online (Indahnesia.com, 2014)

The unequal distribution of enterprises is also present across the economy sectors as shown in Table 2.8. Most of the SMEs operate in the trade, hotel and restaurant sectors, some in the manufacturing sector and fewer in other sectors. A large concentration of MiEs is found in the agricultural sector as well as the trade, hotel and restaurant sectors. On the contrary, high concentrations of LEs in a particular sector are not observable as they are spread in several different sectors. It appears that large enterprises are fewer in numbers but they are able to enter and operate in various sectors in the economy.

Table 2-8: Types of Enterprises and their Distribution across Economy Sectors in Indonesia

Economy Sectors	Type of Enterprises			
	Micro	Small	Medium	Large
1 Agriculture, Livestock, Forestry& Fishery	49.73%	0.94%	3.99%	15.47%
2 Mining & Quarrying	0.54%	0.44%	0.77%	1.55%
3 Manufacturing Industry	6.38%	11.86%	25.90%	18.58%
4 Electricity, Gas& Water	0.02%	0.09%	1.17%	4.99%
5 Construction	1.61%	2.66%	2.50%	8.73%
6 Trade, Hotel& Restaurant	28.02%	67.62%	45.62%	23.49%
7 Transportation & Communication	6.79%	3.87%	3.10%	8.88%
8 Finance, Real Estate& Business Services	2.38%	5.14%	13.96%	15.71%
9 Services	4.53%	7.38%	2.99%	2.61%
Total	100%	100%	100%	100%

Notes: The figure is the average distribution in the period of 2008-2012

Source: Micro, Small, Medium and Large-Sized Business Statistics, Ministry of Cooperatives and SMEs (2013b, 2014b)

2.2.3 Role of SMEs in Indonesia's Economy

One of the main economic challenges faced by developing countries is the high rate of unemployment and Indonesia is not an exception. Table 2.9 shows the enterprises' contribution to the provision of employment opportunities in Indonesia.¹⁸ In general, despite some fluctuation, each type of enterprise increases the provision of employment opportunities over time. However, MiEs dominate the contribution to the nation's provision, providing more than 90% of employment opportunities in aggregate, while SMEs and LEs together provide less than 10% of the nation's total employment.

¹⁸ The term "employment/job opportunity" differs from "job creation". Employment opportunities are the total employed persons during a brief specific period, either under paid employment or self-employment. On the contrary, job creation is the new employment opportunities created since the last period. For further explanation, see <http://laborsta.ilo.org/definition>.

Table 2-9: Employment Provisions in Indonesia by Enterprises Categories, 2005-2013

	2005	2007	2009	2011	2013
Job opportunity (in million persons)	86.31	93.03	98.89	104.61	117.68
Job opportunity by type of enterprise					
Micro-sized enterprises	81.07%	90.78%	91.03%	90.77%	88.90%
Small-sized enterprises	10.67%	3.52%	3.56%	3.75%	4.73%
Medium-sized Enterprises	5.12%	2.97%	2.71%	2.72%	3.36%
Large-sized enterprises	3.15%	2.73%	2.70%	2.76%	3.01%

Source: Ministry of Cooperatives and SMEs Republic of Indonesia (2015a)

Each type of enterprise has different sectorial concentration of workers. Table 2.10 shows SMEs employed workers mostly in the manufacturing sector, followed by the construction and the trade, hotel and restaurant sectors. MiEs workers are concentrated mainly in the agricultural sector, followed by the trade, hotel and restaurant and the manufacturing sectors. In contrast, in LEs more than 50% of the workers were employed in the manufacturing sector and a considerable number in the agricultural sector, with very few in other sectors. This suggests that SMEs and MiEs can provide employment opportunities for more varied job seeker backgrounds in various sectors compared to large enterprises.

Table 2-10: Distribution of Employment across Sectors for Each Type of Enterprises

Economy Sectors		Type of Enterprise			
		Micro	Small	Medium	Large
1	Agriculture, Livestock, Forestry& Fishery	44.95%	2.32%	15.99%	20.23%
2	Mining & Quarrying	1.41%	0.74%	0.90%	4.85%
3	Manufacturing Industry	10.04%	29.35%	42.99%	50.16%
4	Electricity, Gas& Water	0.11%	1.49%	1.00%	4.57%
5	Construction	4.21%	31.89%	8.35%	6.62%
6	Trade, Hotel& Restaurant	21.60%	16.29%	16.03%	5.01%
7	Transportation & Communication	7.37%	3.84%	3.52%	3.01%
8	Finance, Real Estate& Business Services	1.68%	5.42%	6.01%	4.03%
9	Services	8.63%	8.66%	5.21%	1.52%
Total		100.00%	100.00%	100.00%	100.00%

Note: The figure is the average distribution in the period of 2008-2012

Source: Micro, Small, Medium and Large-Sized Business Statistics, Ministry of Cooperatives and SMEs (2013b, 2014b)

In terms of production/value added, all types of enterprises have contributed to Indonesia's GDP growth, as indicated by the increasing aggregate production value of each type of enterprise over time (See Table 2.11). The contribution to GDP, however, differs among types of enterprises and changes dynamically. Contrary to their importance in business establishments and employment opportunities, MiEs' role in the value added (GDP) creation is overtaken by LEs, whereas SMEs show a notable contribution. Table 2.11 shows LEs made up more than 40% of GDP, MiEs accounted for less than 40%,

while SMEs contributed slightly above 20%. The larger the firms, the higher the output per labour due to economies of scale and technology, and therefore they are more productive. These GDP shares, however, are rather dynamic. MiEs' GDP share tends to increase as opposed to the decreasing share of LEs through time, while the share of SMEs fluctuates.

Table 2-11: Indonesia's GDP, by Type of Enterprise (2005-2013)

	2005	2007	2009	2011	2013
Nominal GDP, at current market prices (in billion US\$) ^a	285.87	432.22	539.58	892.97	912.52
GDP by type of enterprise ^b					
Micro-sized enterprises	28.61%	32.29%	33.08%	34.64%	36.90%
Small-sized enterprises	9.20%	10.32%	9.98%	9.94%	9.72%
Medium-sized enterprises	16.06%	13.67%	13.47%	13.46%	13.72%
Large-sized enterprises	46.13%	43.72%	43.47%	41.95%	39.66%

^aSource: World Bank (2016b)

^bSource: Ministry of Cooperatives and SMEs Republic of Indonesia (2015a)

Interestingly, the four types of firms show different concentrations of GDP creation across the sectors in the economy. Table 2.12 shows that MiEs create value added mostly in the agricultural sector, while LEs produce a fair share of output in the manufacturing sector. The different GDP creation pattern is observed in SMEs where the value-added creation is not dominated by certain sectors but rather distributed in the manufacturing, trade, hotel and restaurant, transportation and communication as well as finance, real estate and business services sectors.

Table 2-12: Distribution of GDP for Each Type of Enterprise

Economy Sectors	Type of Enterprises			
	Micro	Small	Medium	Large
1 Agriculture, Livestock, Forestry & Fishery	33.97%	0.41%	6.89%	1.58%
2 Mining & Quarrying	4.81%	1.23%	1.31%	23.46%
3 Manufacturing Industry	13.41%	19.57%	29.91%	46.08%
4 Electricity, Gas & Water	0.02%	0.06%	0.64%	1.18%
5 Construction	3.48%	4.84%	13.64%	9.62%
6 Trade, Hotel & Restaurant	25.64%	51.89%	12.36%	1.31%
7 Transportation & Communication	2.45%	10.97%	9.73%	8.16%
8 Finance, Real Estate & Business Services	4.04%	3.98%	20.76%	7.88%
9 Services	12.17%	7.05%	4.77%	0.72%
Total	100.00%	100.00%	100.00%	100.00%

Notes: The figure is the average distribution in the period 2008-2012.

Source: Micro, Small, Medium and Large-Sized Business Statistics, Ministry of Cooperatives and SMEs (2013b, 2014b)

2.2.4 Role of SMEs in Indonesia's Exports

LEs have been the backbone of Indonesia's merchandise exports. As shown in Table 2.13, LEs conduct more than 80% of the nation's merchandise exports and the contribution tends to increase over time. On the contrary, SMEs perform only less than 15% of the country's total exports, while the contribution of MiEs is diminutive. The MiEs' and SMEs' limited contributions to the country's exports also tend to shrink further through time, with large decreases observed from 2011 to 2012. In addition, LEs are the only type of enterprise that manages to increase the nominal export value consistently as opposed to the fluctuating export value of other types of enterprises.

Table 2-13: Indonesia's Merchandise Exports by Types of Enterprises (2005-2013)

	2005	2007	2009	2011	2013
Total merchandise exports (in billion US\$) ^a	85.66	114.10	116.51	203.50	182.55
Exports by type of enterprise ^b					
Micro Enterprises	1.52%	1.63%	1.51%	1.51%	1.38%
Small-Sized Enterprises	3.64%	3.98%	3.87%	3.45%	2.76%
Medium-Sized Enterprises	15.12%	12.06%	11.65%	11.48%	11.54%
Large Enterprises	79.72%	82.34%	82.98%	83.56%	84.32%

^aSource: ITC (2016a)

^bSource: Ministry of Cooperatives and SMEs Republic of Indonesia (2015a)

The four types of enterprises also show different export activity concentration across the sectors/products in the economy. Table 2.14 shows agriculture, livestock, forestry, and fishery products make up more than 98% of MiEs' merchandise exports. More specifically, the two most important exported MiEs' products are products of plantation crops (mainly rubber and palm oil) that contribute 81.46% and fisheries products that add up 11.09% of MiEs' total exports.

On the contrary, the merchandise exports of SMEs and LEs mostly consist of various products from the manufacturing sector. For SMEs, the notable export products are food, beverages and tobacco as well as machinery apparatus, followed by chemical, rubber and plastic products, textiles, apparels and leather products. The exports of LEs consist of various manufacturing products and mining (excluding non-oil and gas) products. These export compositions show that as the firms' size grow, not only can they enter foreign markets more effectively but they can also export a wider range of products.

Table 2-14: Types of Exported Products for Each Type of Enterprise

Sectors	MiE	SE	ME	LE
1. Agriculture, Livestock, Forestry, and Fishery	98.08%	2.33%	1.13%	0.62%
a Food crops	3.94%	0.17%	0.00%	-
b Plantation crops	81.46%	1.80%	0.11%	0.49%
c Livestock and its products	1.46%	0.16%	0.04%	0.01%
d Forestry	0.12%	0.05%	0.09%	0.01%
e Fisheries	11.09%	0.15%	0.90%	0.12%
2. Mining and Quarrying	0.74%	0.30%	1.01%	26.22%
a Oil and gas mining	-	-	-	8.55%
b Non-oil and gas mining	-	0.16%	0.93%	17.65%
c Quarrying	0.74%	0.14%	0.09%	0.02%
3. Manufacturing Industry	1.18%	97.38%	97.85%	73.15%
a Oil and gas manufacturing	-	-	-	10.87%
b Non-oil and gas manufacturing	1.18%	97.38%	97.85%	62.29%
1) Food, beverages & tobacco	0.13%	29.15%	26.66%	12.63%
2) Textile, wearing apparel, leather & shoes	0.30%	12.15%	12.24%	8.17%
3) Wood and wood products	0.06%	3.39%	3.69%	1.77%
4) Paper, paper products, printing & publishing	0.14%	17.70%	1.63%	3.63%
5) Chemical, chemical products, rubber & plastic products	0.35%	19.93%	16.05%	13.21%
6) Cement & other mineral non metals	0.00%	2.96%	1.06%	0.55%
7) Basic metal, fabricated metal products except machinery & equipment	-	1.20%	10.63%	6.81%
8) Machinery, office & computer, transport equipment & apparatus	0.06%	7.92%	22.69%	15.04%
9) Other products	0.13%	2.98%	3.20%	0.46%
Total Export	100.00%	100.00%	100.00%	100.00%

Notes: The figure is the average distribution in the period of 2008-2012

Source: Ministry of Cooperatives and SMEs (2013b, 2014b)

In addition to the role of each type of enterprise to Indonesia's total exports, it is also important to examine how each contributes to Indonesia's export of specific sectors or product groups. Table 2.15 shows the contribution of the four types of enterprises to Indonesia's exports by the product groups. MIEs are the main exporters of almost all types of agricultural products, except the exports of forestry products that are mainly contributed by SMEs and LEs. SMEs also have some notable contributions in the export of fisheries and livestock products while LEs have notable contribution in the export of fisheries, livestock and plantation crop products.

All types of mining and quarrying products are mostly exported by LEs while the roles of MiEs and SMEs are very limited except in the export of quarrying products. The roles of LEs are also dominant in the export of all types of manufacturing products. On the contrary, the roles of MiEs and SMEs in the export

of various manufacturing products never exceed 20% except for the export of non-metal mineral products, food, beverages and tobacco as well as wood products.

Table 2-15: Share of Each Type of Firm to Sectorial Exports

Sectors	Share in Sectorial Exports				Total	Sector's Share in National Export
	MiE	SE	ME	LE		
1. Agriculture, Livestock, Forestry & Fishery	62.38%	3.33%	5.45%	28.83%	100%	1.87%
a Food crops	90.75%	8.62%	0.63%	0.00%	100%	0.05%
b Plantation crops	66.83%	3.32%	0.65%	29.19%	100%	1.45%
c Livestock and its products	53.92%	13.37%	10.53%	22.18%	100%	0.03%
d Forestry	7.38%	6.88%	43.63%	42.11%	100%	0.02%
e Fisheries	41.38%	1.30%	25.47%	31.85%	100%	0.32%
2. Mining and Quarrying	0.04%	0.03%	0.40%	99.53%	100%	22.91%
a Oil and gas mining	0.00%	0.00%	0.00%	100.00%	100%	7.43%
b Non-oil and gas mining	0.00%	0.03%	0.54%	99.43%	100%	15.44%
c Quarrying	23.18%	9.95%	20.29%	46.58%	100%	0.04%
3. Manufacturing Industry	0.02%	3.43%	11.66%	84.89%	100%	75.22%
a Oil and gas manufacturing	0.00%	0.00%	0.00%	100.00%	100%	9.48%
b Non-oil and gas manufacturing	0.02%	3.93%	13.34%	82.71%	100%	65.74%
1) Food, beverages & tobacco	0.01%	5.44%	16.85%	77.69%	100%	14.19%
2) Textiles, wearing apparel, leather & shoes	0.04%	3.78%	12.86%	83.32%	100%	8.54%
3) Wood and wood products	0.04%	4.68%	16.90%	78.39%	100%	1.98%
4) Paper, paper products, printing & publishing	0.04%	12.40%	3.85%	83.71%	100%	3.79%
5) Chemical, chemical products, rubber & plastic products	0.03%	3.90%	10.62%	85.45%	100%	13.51%
6) Cement & other mineral non metals	0.01%	11.87%	14.46%	73.66%	100%	0.66%
7) Basic metal, fabricated metal products except machinery & equipment	0.00%	0.45%	13.67%	85.88%	100%	6.94%
8) Machinery, office & computer, transport equipment & apparatus	0.00%	1.36%	13.25%	85.38%	100%	15.36%
9) Other products	0.19%	10.34%	37.32%	52.15%	100%	0.77%

Notes: The figure is the average distribution in the period of 2008-2012

Source: Micro, Small, Medium and Large-Sized Business Statistics, Ministry of Cooperatives and SMEs (2013b, 2014b)

The relationships between firm size and the types of exported commodities presented in Table 2.14 and 2.15 can be examined by the factor intensity nature of the industries (see Table 2.3 for classification of capital-intensive and labour-intensive industries). For example, none of MiEs and only very few SMEs export crude oil, natural gas and minerals as the mining and quarrying industries are capital-intensive. Likewise, none of MiEs and SMEs export oil and gas manufacturing products as the industry requires high capital-intensity. Rather, SMEs concentrate their export activities in several less

capital-intensive commodities including food, tobacco, textile, apparel, leather, shoes, paper, paper products, chemical, chemical products, rubber, and plastic products. Further, within SMEs type of firm, SEs and MEs differ in their main export commodities. Very few SEs export medium and high capital-intensive commodities such as basic metal, fabricated metal products, machinery, office and computer, and transport equipment and apparatus, in contrast to MEs' notable contribution in the export of those products. Hence, Indonesia's sectorial comparative advantage discussed in Section 2.1.2 to some extent can also be associated with firm size. The larger the firms, the stronger tendency that they have comparative advantage in capital-intensive commodities, and *vice versa*.

2.3 National Policy to Foster Exports and SME Development

2.3.1 Indonesia's Export Strategy and Policy

The National Long Term Development Plan 2005-2025 ("Undang-Undang Republik Indonesia Nomor 17 Tahun 2007 Tentang Rencana Pembangunan Jangka Panjang Nasional Tahun 2005 – 2025," 2007) lays the strategic guideline for the country's export development. The plan defines the long-term direction of Indonesia's export development as transforming the comparative advantage-based export products that depend heavily on cheap labour and abundant but non-renewable raw materials towards competitive advantage-based export products characterised by knowledge and skill intensiveness, high global demand and extended value chains from domestically processed natural resources. Therefore, in its WTO Trade Policy Review (2013) the Government of Indonesia (GOI) reiterates that the goal of the GOI export assistance programmes is not solely increasing the total export value, but also to increase the contribution of non-oil export products through better product quality and diversity as well as market diversity.

At the operational level the current challenges to achieve that goal have been well identified in the National Medium Term Development Plan 2010-2014 ("Peraturan Presiden Republik Indonesia Nomor 5 Tahun 2010 tentang Rencana Pembangunan Jangka Menengah Nasional (RPJMN) Tahun 2010-2014," 2010). These include: (i) limited market access to several potential regions/continents; (ii) low manufacturing product quality compared to international health, safety, environment and production standards; (iii) the rise of non-tariff barriers in foreign markets as a means of protection following the global economy crisis; (iv) limited product diversity and variants; (v) Limited ability to utilise multilateral, regional and bilateral trade agreements; and (vi) slow progress of trade facilitation and inefficient customs as indicated by the number of documents, expenses per container and the time taken to export, and (vii) the limited ability to develop export of services. The 2015-2019 National Medium Term

Development Plan (2014) reiterates those challenges while also revealing additional challenge, that is, limited ability to compete in the export of services.

In response to those challenges, the GOI (2013; "Peraturan Presiden Republik Indonesia Nomor 5 Tahun 2010 tentang Rencana Pembangunan Jangka Menengah Nasional (RPJMN) Tahun 2010-2014," 2010; 2014) has defined the strategies for export development. These include: (i) emphasising the export product development on the plantation crops-based and fishery products and their derivatives, processed mining products, processed food/beverage, textiles and textile products, machinery and electrical equipment, chemicals and chemical products, leather products and footwear; (ii) encouraging the participation of SMEs in the exports of creative products and services; (iii) increasing efforts to expand market access, promotion, and facilitation of non-oil exports in Africa, the Middle East, Europe and Australia-New Zealand; (iv) better utilization of various trading schemes and international trade cooperation; (v) developing trade activities in the border areas; and (vi) strengthening the export financing for non-oil exports and various institutions related to exporting.

In line with the spirit to shift the export pattern to the products that are knowledge and skill based, renewable and with high value added to the domestic economy, the Ministry of Trade (2010) has classified export goods into regulated, controlled, prohibited and freely conducted (see Figure 2.8).

To complement those general export policy directions and strategies, the GOI has also defined sector-specific strategies (Government of Indonesia, 2013). In the agricultural sector, the export product development would focus on palm oil, rubber, cocoa, coconut, coffee, mango, *mangosteen*, bark, ornamental plants and medicinal plants, while the capability enhancement would emphasize on-farm and post-farm gate handling techniques as well as Good Agricultural Practices (GAP). In the fisheries sector, the focuses are on investment in the fishing industry and commitment to pursue responsible fisheries, including prevention and reduction of illegal, unreported, and unregulated fishing activities stipulated in the Fisheries Act ("Undang-Undang Republik Indonesia Nomor 45 Tahun 2009 tentang Perubahan atas Undang-Undang Nomor 31 Tahun 2004 tentang Perikanan," 2009), with the objective to meet the European Union's Catch Certification. In the forestry sector, the GOI would show commitment to combat illegal logging and illegal trading through the enforcement of the Indonesian Timber Legality Assurance System (Indo-TLAS) licensing scheme that consists of legality standards, criteria, verifiers, verification methods, and evaluation norms to guarantee sustainable forest management. Finally, in the manufacturing sector, the GOI through the Presidential Decree No 28 ("Peraturan Presiden Republik Indonesia Nomor 28 Tahun 2008 Tentang Kebijakan Industri Nasional," 2008) is eager to accelerate the industrialization process by encouraging participation of entrepreneurs in building the infrastructure,

accelerating government decision making processes and reorientation of the export policy on raw materials and energy sources.

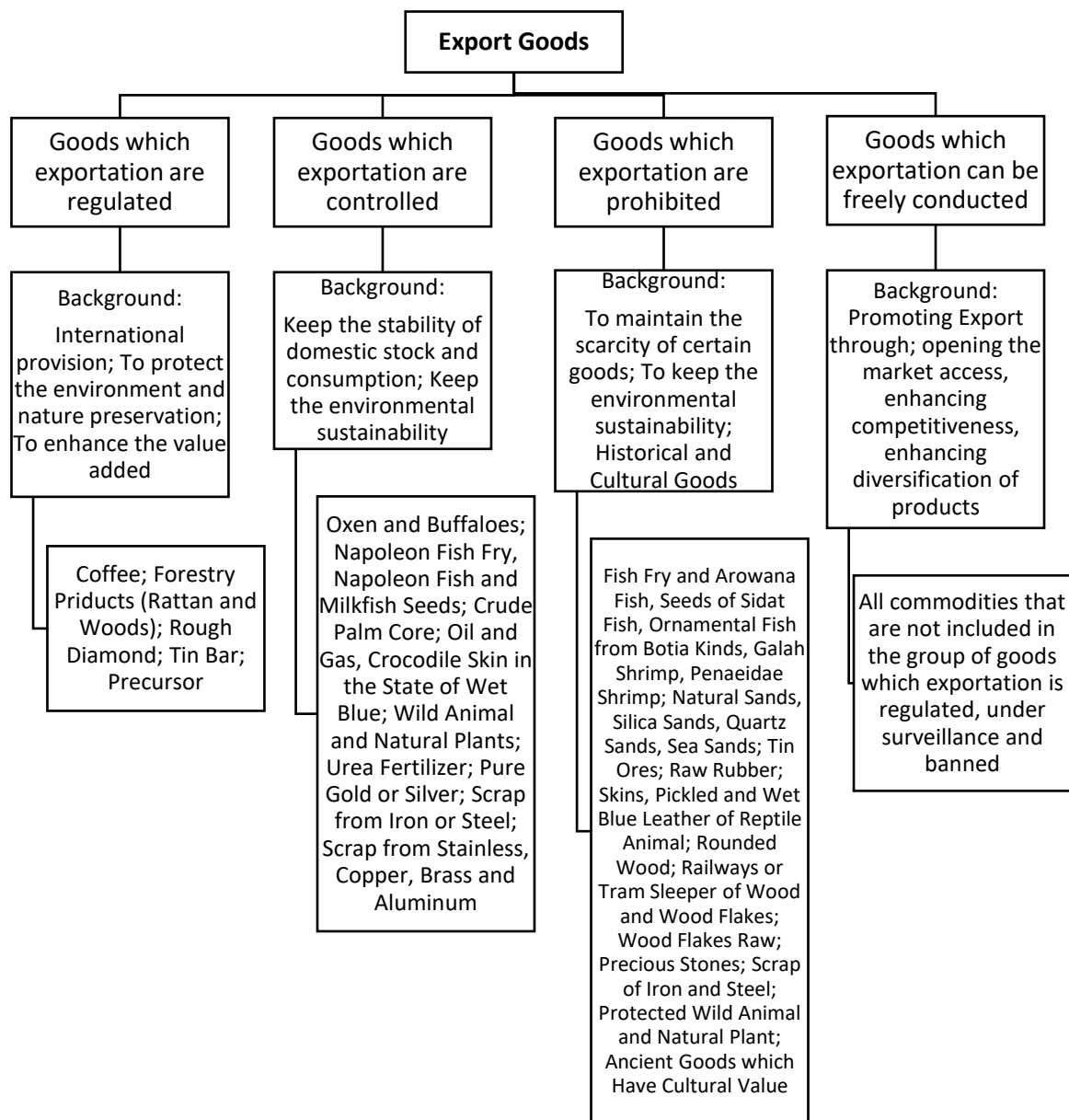


Figure 2-8: Classification of Export Goods in Indonesia

Source: General Policy on Export And Import (Ministry of Trade, 2010)

2.3.2 Trade Facilitation

The pace and the effectiveness of trade facilitation reform is crucial to improve export performance particularly in developing countries (Moisé & Sorescu, 2013; Portugal-Perez & Wilson, 2012). Thus, the GOI firmly expresses its intention to work on several areas that have been bottlenecks in trading across

borders (Government of Indonesia, 2013; Ministry of Trade, 2010; WTO Secretariat, 2013). Two main issues of interests in this area are the time and cost (excluding tariffs) taken to export or import.

Using the recent survey results from *Doing Business* (World Bank, 2014), Table 2.16 shows how Indonesia fares against selected countries and regions in terms of time and cost needed to trade a standardized cargo of merchandise across borders by sea transport. The last three columns on the right of the Table 2.16 indicate the overall Trading Across Borders ranks that incorporate the trading efficiency both in exports and imports during the period 2010-2014. In 2014 Indonesia ranked 54th behind its neighbours such as Singapore and Malaysia which ranked first and fifth, respectively.

Table 2-16: Trading across Borders, Indonesia and Selected Countries/Regions

Economy	Trading across borders 2014			Overall Rank		
	Documents to export (number)	Time to export (days)	Cost to export (US\$ per container)	2010	2012	2014
Countries						
Singapore	3	6	460	1	1	1
Malaysia	4	11	450	35	29	5
United States	3	6	1090	18	20	22
Japan	3	11	890	17	16	23
Thailand	5	14	595	12	17	24
Philippines	6	15	585	68	51	42
Australia	5	9	1150	27	30	46
Indonesia	4	17	615	45	39	54
Vietnam	5	21	610	74	68	65
China	8	21	620	44	60	74
India	9	16	1170	94	109	132
Groups						
East Asia & Pacific	6	21	856			
South Asia	8	33	1787			
OECD high income	4	11	1070			

Source: Trading Across Borders, *Doing Business* (World Bank, 2014)

In terms of exports, Indonesian exporters are required to complete 4 documents which is only slightly different from exporters in the world's best performer Singapore (3 documents), comparable to those in Malaysia and average OECD, but simpler than average East Asia and Pacific (6 documents) and average South Asia (8 documents). However, the number of documents may not always represent the time and fee spent. The second column in Table 2.16 shows that Indonesian exporters take an average of 17 processing days in customs and ports, which is far longer than in Singapore (6 days), Malaysia (11 days) and the OECD (11 days) but still more efficient than average East Asia (21 days) and South Asia (33

days). Similarly, the third column shows that Indonesian exporters spend on average USD 615 per container, more than those in Singapore (USD 460) and Malaysia (USD 450) but cheaper than average East Asia & Pacific (USD 856), South Asia (USD 1787) and OECD (USD 1070) (World Bank, 2014).

The export process, however, does not only include customs and regulatory agencies, but also depends on the efficiency of logistics supply chains such as shipping and trade infrastructure. In order to capture those features, Table 2.17 provides the Logistic Performance Index (LPI) comparing Indonesia with selected countries/regions (World Bank, 2016a).

Table 2-17: Logistics Performances of Indonesia and Selected Countries/Regions

Economy	2014 Performance						Overall Rank		
	Customs	Infrastructure	International shipments	Logistics competence	Tracking & tracing	Timeliness	2010	2012	2014
Countries									
Germany	4.1	4.32	3.74	4.12	4.17	4.36	1	1	1
Singapore	4.01	4.28	3.70	3.97	3.90	4.25	2	1	5
United States	3.73	4.18	3.45	3.97	4.14	4.14	15	9	9
Japan	3.78	4.16	3.52	3.93	3.95	4.24	7	8	10
Australia	3.85	4.00	3.52	3.75	3.81	4.00	18	18	16
Malaysia	3.37	3.56	3.64	3.47	3.58	3.92	29	29	25
China	3.21	3.67	3.50	3.46	3.50	3.87	27	26	28
Thailand	3.21	3.40	3.30	3.29	3.45	3.96	35	38	35
Vietnam	2.81	3.11	3.22	3.09	3.19	3.49	53	53	48
Indonesia	2.87	2.92	2.87	3.21	3.11	3.53	75	59	53
India	2.72	2.88	3.20	3.03	3.11	3.51	47	46	54
Philippines	3.00	2.60	3.33	2.93	3.00	3.07	44	52	57
Groups									
East Asia & Pacific	2.69	2.74	2.87	2.79	2.84	3.17			
South Asia	2.47	2.34	2.7	2.66	2.58	2.87			
OECD high income	3.61	3.73	3.46	3.71	3.67	4.05			

Source: Logistics Performance Index (World Bank, 2016a)

The LPI comprises performance scores (and ranks) in each of the six logistic supply chain elements as well as an overall logistic performance score (and rank)¹⁹. The last column in Table 2.17 shows that in 2014 Indonesia ranked 53rd in overall logistic performance, a considerable improvement from 59th in 2012

¹⁹ The six elements of LPI are: 1) efficiency of the clearance process (i.e., simplicity, speed and predictability of formalities) by border control agencies, including customs; 2) quality of trade and transport-related infrastructure (e.g., roads, ports, railroads and information technology); 3) ease of arranging price-competitive shipments; 4) competence and quality of logistics services (e.g., customs brokers and transport operators); 5) ability to track and trace consignments; and 6) timeliness of shipments in reaching destinations within the scheduled or expected delivery time (World Bank, 2016a).

despite still behind several other ASEAN countries including Malaysia, Thailand and Vietnam. Nevertheless, Indonesia scores higher than average East Asia and Pacific in all logistics elements. Indonesia also scores higher than average lower-middle income countries group in every logistic element, although it still lags behind Vietnam as the income group's best performer. During 2012-2014, Germany eclipsed Singapore as the world's best logistic performer. Singapore, however, is still the best performer in the East Asia and Pacific Region and outperforms Indonesia in every single element.

2.3.3 Policy to Foster SMEs' Exports

The GOI export strategy discussed in Section 2.3.1 incorporates the role of SMEs, particularly in exports of creative products and services.²⁰ Nevertheless, from the SME development planning side, the SMEs development policy is still inwardly or domestically oriented rather than outward looking to the global market. As firmly stated in the National Long Term Development Plan 2005-2025 ("Undang-Undang Republik Indonesia Nomor 17 Tahun 2007 Tentang Rencana Pembangunan Jangka Panjang Nasional Tahun 2005 – 2025," 2007), SMEs' competitiveness is to be developed such that they can strengthen the foundation of the domestic economy, supply domestic demand and utilize science and technology to build a strong ground against imported products.

Consequently, most of the policy directions toward SMEs are general policy for their development rather than specific policy to foster SMEs exports, except the policy for SMEs' product development and marketing through export promotion. Hence, the effort to foster SMEs' exports are incorporated in the general policy for SMEs' development as follows:

- 1) Enhance the business environment conducive for SMEs (Ministry of Cooperatives and SMEs Republic of Indonesia, 2010c; "Peraturan Presiden Republik Indonesia Nomor 5 Tahun 2010 tentang Rencana Pembangunan Jangka Menengah Nasional (RPJMN) Tahun 2010-2014," 2010; State Ministry of National Development Planning, 2014). The first focus of this policy is to simplify the procedures regarding SMEs' business establishment and operations. The second focus is to strengthen the coordination and to synchronize the national, provincial, municipal and sectorial regulations regarding SMEs. Finally, the GOI also addresses the urgency to fight the bureaucracy practices that hinder SMEs' development.

²⁰ Creative products and services are those with the following characteristics: (i) require some input of human creativity in their production; (ii) serve as symbolic or cultural messages for consumers rather than just the functional purpose; and (iii) contain some intellectual property that is attributable to the individual or group who produces them (UNCTAD, 2010).

- 2) Increase access to productive resources (Ministry of Cooperatives and SMEs Republic of Indonesia, 2010c; State Ministry of National Development Planning, 2014). The focus of this policy is to provide accessibility and variability of financial resources suitable for particular SMEs' needs. The financing scheme designated to serve this purpose is the Credit Program for Small Enterprises (*Kredit Usaha Rakyat* – KUR), channelled through several banks with branches in almost all sub-districts in Indonesia. The needs for access to technology and markets are also addressed.
- 3) Enhance the SMEs' human resource competitiveness (Ministry of Cooperatives and SMEs Republic of Indonesia, 2010c; "Peraturan Presiden Republik Indonesia Nomor 5 Tahun 2010 tentang Rencana Pembangunan Jangka Menengah Nasional (RPJMN) Tahun 2010-2014," 2010; State Ministry of National Development Planning, 2014). The focus of this policy is to increase SMEs' owners, managers and employees' capacity and productivity. The second focus is to spread entrepreneurship spirit and to incubate the new entrepreneurs during their early years of inception.
- 4) Product development and marketing (Ministry of Cooperatives and SMEs Republic of Indonesia, 2010c; "Peraturan Presiden Republik Indonesia Nomor 5 Tahun 2010 tentang Rencana Pembangunan Jangka Menengah Nasional (RPJMN) Tahun 2010-2014," 2010; State Ministry of National Development Planning, 2014). The broad goal of this policy is to develop SMEs' products characterised by quality, innovation and creativity that may compete in domestic as well as foreign markets. In order to do so, the GOI provides incentives and empowerment packages for innovation-based and export oriented SMEs. The GOI plans to build and fully support SMEs' production cluster, particularly in remote or isolated areas. The GOI will also facilitate partnership schemes between SMEs with large enterprises so that SMEs can be involved in value chains and transfer of technology. Finally, the GOI aims to provide more assistance in SMEs' product marketing through the provision of market information and the functioning of trade *attaches* and Indonesian Trade Promotion Centres worldwide.

2.4 Chapter Summary

The chapter discusses the profile of Indonesia's economy and exports and the role of SMEs in these. Indonesia's economy is characterised by rapid growth but alarming inflation and inequality problems. On the production side, the growth has been driven mainly by the service-related sectors, while the agriculture and manufacturing sectors' contributions have been slowly declining. On the expenditure side, the export growth has stalled since 2011 and its contribution to growth therefore declines. Further examination of the export composition reveals that Indonesia's merchandise export products are not

vastly diverse while its foreign market destinations/directions are not well diversified either. Moreover, owing to domestically imbalanced growth, the exports originate mostly from certain regions/provinces in the country that are more industrialised/developed.

The chapter also discusses the contribution of various firms by categories, including SMEs, to Indonesia's economy. The literature reveals that the smaller the size of the firms, the more important their contribution to business establishments and employment opportunities but they are less important to value added creation and exports. The opposite is also true. The larger the enterprises, the more important their contribution to exports and value added creation but they are less important to job creation and business establishments. Therefore, small and medium enterprises' role in the country's total exports is currently very limited. When the Indonesia's total exports are broken down into specific sectors/products, SMEs' role has never been dominant in any sectorial exports either.

The GOI has been aware of the low SMEs' participation in the country's exports. From the trade policy side, the GOI in the National Medium Term Development Planning 2010-2014 ("Peraturan Presiden Republik Indonesia Nomor 5 Tahun 2010 tentang Rencana Pembangunan Jangka Menengah Nasional (RPJMN) Tahun 2010-2014," 2010) acknowledges that SMEs may play a more important role in the export of creative products. However, from the SMEs' development policy side, the inward orientation to strengthen their position in the domestic market, particularly towards imported products is more evident than outward orientation to exploit global markets. SMEs' development is aimed to strengthen their position in the domestic market, supply domestic demands and substitute for imported products. Consequently, none of the policy supports for SMEs is specific on fostering exports, but rather general and broad policy supports as follows: improvement of the business environment; access to finance and technology; product development and marketing; and capacity enhancements.

Chapter 3

Literature Review

This chapter presents the review of the extant literature on firm internationalisation in general and SME internationalisation in particular. Section 3.1 provides an overview of the main theories that attempt to explain firm internationalisation. Section 3.2 discusses the conceptual framework of SMEs' internationalisation strategies and processes. Sections 3.3 and 3.4 discuss various factors that stimulate SMEs to export and various barriers that impede SMEs' exports, respectively. Sections 3.5 and 3.6 discuss the role of network relationships and the government's export assistance in SME internationalisation. Section 3.7 discusses the factors influencing SMEs' engagement in export activities. Sections 3.8 and 3.9 discuss the determinants of SMEs' export performance and the impact of exporting on SMEs' performances, respectively. Section 3.10 summarizes and concludes the chapter.

3.1 Review of Firms' Internationalisation Theories

The intensive research on firms' internationalisation began in the late 1950s as an attempt to explain the international activities of multinational enterprises (Buckley, 2011; Dunning, 2006; 1976). The early streams of research in this area have resulted in several main theories of firms' internationalisation including *internalisation theory/transaction cost theory*, *eclectic paradigm*, and *monopolistic advantage theory* (Ruzzier et al., 2006). *The internalisation theory/transaction cost approach* argues that firms always seek to lower the cost of organizing and transacting business including the transactions beyond national borders. As a consequence, multinational enterprises exist because some firms no longer use the service of intermediating parties such as foreign sales representatives, but rather pursue vertical integration by setting up new operations and activities abroad (Buckley & Casson, 2009; Teece, 1986).

The eclectic paradigm, proposed by Dunning (2001), suggests that firms' international activities are determined by three types of advantages: 1) ownership advantages, including the accumulation of geographically transferable intangible assets (such as technological capacities), product innovations and entrepreneurial skills; 2) location advantages, related to non-transferable/immobile production inputs and supportive institutions such as raw material, low wages and favourable regulation in a particular geographical area; and 3) internalisation advantages, related to the capability of the firm to manage and coordinate cross-border production and distribution without having to use licensing methods or forming joint ventures.

Monopolistic advantage theory views that firms may expand their activities abroad if they have superior technology, ability to differentiate their products and organizational skills over foreign firms in foreign markets to the extent that those superiorities outweigh the advantage of foreign firms' knowledge of their own (foreign) markets (Caves, 1971; Hymer, 1976).

These theories help to explain the international activities of large multinational enterprises but are less effective to explain SMEs' international activities. SMEs are less likely to acquire ownership of foreign business entities, have no superior ability over local firms in foreign markets and lack the capability to pursue vertical integration to internalise their economic activities abroad, as argued by the eclectic paradigm, monopolistic advantage and internalisation theories, respectively (Hollenstein, 2005; Onkelinx & Sleuwaegen, 2008). As a result, SMEs' internationalisation process is more dynamic, less deterministic and less likely to take the form of foreign direct investment (FDI) but rather to engage in global supply chains or direct exporting activities (Abdullah & Zain, 2011a; Hollenstein, 2005; Ruzzier et al., 2006). In response to the shortfall of those theories, in the 1970s the second stream of the research on firm internationalisation began to focus on small firms' international activities. Within this stream, the main theories include *the stage model*, *network model*, *international entrepreneurship approach* and *resource-based view*.

The Stage Model (Uppsala Model)

Johanson and Vahlne (1977, 1990) developed the firm internationalisation model that later would be known as *the Uppsala Model*. In this model, firms would take small incremental, gradual and sequential steps in increasing their engagement in international activities. Firms begin international activities from foreign markets that have less psychic distance or perceived as having many similarities to the home market. In terms of foreign market entry mode, firms will begin by exporting via an agent, joint venture, licensing or franchising, depending on the nature of each firm. As firms accumulate market knowledge, they are willing to give more commitment to intensifying their international activities by changing the operation mode to sales subsidiaries and finally wholly owned subsidiaries. Each internationalisation stage can be considered as an adoption of the innovation process or innovation-type behaviour (Gankema, Snuif, & Zwart, 2000; Reid, 1981). In general there are three generic stages/phases in exporting activities: the pre-engagement/pre-export stage; the initial/early export stage; and the advanced export stage in which firms are already regular exporters with extensive international experience (Leonidou & Katsikeas, 1996).

The Network Model

Differently from *the Stage Theory* that highlights the internationalisation stages, Johanson and Mattsson (1988) emphasize the role of network relationships in firms' internationalisation process. A network can be defined as "sets of two or more connected exchange relationships" (Easton & Axelsson, 1992).

Networks in the international markets could be perceived as systems of cross-border industrial and social relationships among suppliers, customers, competitors, family, and friends (Coviello & Munro, 1997). Network relationships, in which firms establish and develop positions in relation to the involved parties including suppliers, customers, distributors, the industry, and public and regulatory agencies as well as other market actors, can stimulate and facilitate firms to venture abroad. Networking provides market knowledge with which firms can gradually expand their activities beyond their current territories and across national borders (Johanson & Mattsson, 1988). For SMEs, network relationships could be a feasible route and strategy towards internationalisation as the relationships in the network will help small firms to minimize their need for knowledge development and for adjustment in international markets, and exploit established business network in a foreign country (Abdullah & Zain, 2011b; Ruzzier et al., 2006).

The International New Ventures/Born Global Enterprises Theory

Technological advancements, by which transportation and communication exhibit declining costs but increasing speed and capacity, along with decreasing trade barriers have resulted in an integrated or globalized world economy. For that reason, some researchers argue that more and more firms, including small firms, have already had international orientation since their establishment and therefore take a very short time to become internationalised (Chetty & Campbell-Hunt, 2004). As a result, some researchers question the validity of *the stages theory* and *the network model*, and argue that both theories can no longer appropriately explain the internationalisation of the firms in today's globalised world (Abdullah & Zain, 2011b).

To better explain this new phenomenon of rapid firm internationalisation, Oviatt and McDougall (1994) proposed the concept of *international new ventures (INVs)* or *the born global firms*. INV is defined as a business organization that has built competitive advantage from the use of its resources and sale of products in multiple countries since its inception. The INV concept argues that many small firms can internationalise very early because of the following: 1) the managers have a strong international outlook and international entrepreneurial orientation; 2) targeting relatively distinctive products to *niche* markets that are too small to attract large firms; 3) optimizing the advancement of communication and information technologies and using external and independent intermediaries for distribution in foreign

markets (Cavusgil & Knight, 2009). Born global firms, however, are not necessarily internationalised immediately after their inception, but refers to firms that only take a short time to internationalise. Rennie (1993) defines born global firms as those which begin to export within two years of establishment, while Cavusgil and Knight (2009) argued that INVs are firms that have already made at least twenty five percent of sales from foreign markets within three years of establishment.

The Resource-Based View

The Resource-Based View (RBV) argues that a firm's competitive advantage comes primarily from its valuable tangible and intangible resources (Wernerfelt, 1984). In the context of internationalisation, if a firm aspires to enter international markets and to export regularly, it should consider whether its resources can be a source of competitive advantage. More specifically, the firm should assess whether its resources are valuable, rare, difficult to imitate or substitute (Barney, 1991). Firms' resources include: 1) Physical capital resources, including the physical technology, geographic location, plant and equipment and access to raw materials; 2) Human capital resources, including the training, experience, judgment, intelligence, relationships and insight of individual managers and workers of the firm; 3) Organisational capital resources, including the firms' formal structure, planning, controlling and coordinating systems, as well as informal relations among groups within a firm and with other firms in their environment; 4) Intangible assets, including brand names or innovative capability; 5) Financial resources, including internal funds (e.g., liquidity at hand), debt capacity to borrow at normal rates, and external funds such as new equity issuance and the possibility of having high-risk debts (such as junk bonds) (Barney, 1991; Chatterjee & Wernerfelt, 1991). RBV is applicable to analyse the international activities of smaller firms because it helps to gauge how well positioned a firm is to succeed in expanding to foreign markets without having to follow internationalisation phases suggested by the stage theory (Peng, 2001; Sari, 2011).

To date, there is no single firm internationalisation theory that can satisfactorily explain SME internationalisation and be accepted as the generic theory, as the firms' internationalisation processes and determinants empirically vary across countries and industries (Onkelinx & Sleuwaegen, 2008; Thai, 2008). In other words, firms' internationalisation processes and determinants might be specific to the nature of each country and industry. However, little is known about Indonesian firms' internationalisation processes and determinants in general and Indonesian SMEs' exporting activities in particular. Previous studies of internationalisation with reference to Indonesia were mostly rather sporadic attempts to address a specific aspect of internationalisation in particular sectors/industries or regions. For example, Sari (2011) and Sari et al. (2008) looked at the role of entrepreneur human and

social capital in the internationalisation of manufacturing SMEs in selected provinces. Wengel and Rodriguez (2006) compared the export performance of SMEs and large firms and investigated the determinants of export performances. Tambunan (2009b), Tambunan (2009a) and Tambunan (2012) looked at the impact of trade facilitation, the advantage of industry clusters and the main constraints of SMEs' exporting, respectively. Jane (2013), Zubadi and Nugroho (2012) and Roida and Sunarjanto (2012) examined firms' internationalisation with case studies of SMEs in Bandung City, Magelang Regency and Jawa Timur Province, respectively.

Owing to the extant literature's inconclusiveness on SMEs' internationalisation processes and determinants as well as limited and fragmented evidence regarding Indonesian SMEs' exporting activities, a strict *a priori* or preconception of a particular firms' internationalisation theory may not be suitable to investigate the internationalisation of Indonesian SMEs. Alternatively, a comprehensive study on the internationalisation of Indonesian SMEs that looks at various elements of internationalisation may be appropriate. The key elements of internationalisation include, but are not limited to: 1) internationalisation process and strategy; 2) export stimuli; 3) export barriers; 4) international network relationships; 5) government export assistance; 6) export engagement determinants; 7) export performance; and 8) impact of exporting on SMEs' performance. The following sections discuss each of the above-identified elements of internationalisation.

3.2 Internationalisation Process and Strategy

Extant literature differs on the conceptualisation of the process undertaken by firms to internationalise. The early view of the internationalisation process emphasized the stages through which the firms engage in international business activities. Johanson and Wiedersheim-Paul (1975) distinguished four incremental stages of internationalisation: 1) sporadic export activities; 2) export via independent representatives (agent); 3) establishment of sales subsidiary in foreign markets, and; 4) production/manufacturing in foreign markets. Johanson and Vahlne (1977) suggested that firms will initially enter new markets with less psychic distance (less differences in culture, language, political systems and level of education) before expanding to markets with greater psychic distance. Johanson and Vahlne (1977, 1990) proposed a dynamic model where the decisions on the firm's internationalisation process are the outcome of the interaction among knowledge about foreign markets and operations, resources commitment for foreign market operations and the performance of current business activities.

The other stream of research perceived the stages of internationalisation as a learning sequence where firms adopt innovation gradually (Andersen, 1993). The learning and innovation sequences vary across

authors, for example Bilkey and Tesar (1977), Cavusgil (1980), Czinkota (1982), Reid (1981) proposed between five and six different stages of internationalisation. However, they share many similarities: firms initially sell in the domestic market with no interest in exporting, they then learn about foreign market opportunities, they begin trial or limited exports, and finally they are fully committed to export activities.

Despite being widely adopted and tested, those internationalisation process models have received various criticism from scholars. The main criticisms of those models are: 1) they are too deterministic because in reality the decision making in the internationalisation process is contingent on market conditions; 2) they fail to incorporate the rapid globalization phenomenon in which the psychic distance across nations becomes increasingly narrower and; 3) they pay little attention to the time dimension that separates each stage/sequence (Andersen, 1993; Johanson & Vahlne, 1990).

Alternatively, the internationalisation process can be perceived as a set of questions the firms have to address in their process to become exporters. Negrusa (2009) proposed a six-step internationalisation processes including export motivating factors (*why*), firm situation (SWOT analysis), product selection (*what*), target market selection (*where*), entry modes (*how*) and point of entrance (*when*). Figure 3.1 illustrates the model.

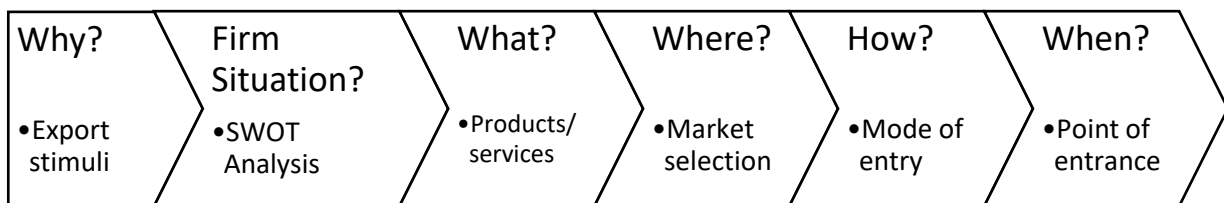


Figure 3-1: Six-Step Model of the Internationalisation Process

Source: Negrusa (2009)

According to the model, firm internationalisation begins with export motivating factors (export stimuli). Export stimuli is critical because internationalisation is a lengthy and complicated process with various obstacles to be overcome (Morgan & Katsikeas, 1997).²¹ Despite the presence of export stimuli, the decisions regarding internationalisation should consider a firm's strength, weakness, opportunity and threat (SWOT analysis). For example, a firm may have strength in its unique product that is highly demanded in international markets (opportunities) but may have weakness in its limited internal resources and hence should carefully consider all the exporting costs, barriers and other threats. The SWOT analysis, therefore, helps a firm to gauge its expected performance in international markets

²¹ Further discussion on export stimuli are provided in Section 3.3.

(Negrusa, 2009). The firm should then make a decision regarding the products to offer in the foreign markets. For example, a firm may have to decide between offering the current products and developing new specific products for particular foreign markets. It might also have to differentiate its products from the competitors' products in foreign markets (Negrusa, 2009).

The next step for the firm is the selection of foreign markets to enter. *The Stage Theory* argues that firms will begin international activities from foreign markets that have less psychic distance or have many similarities to the home market (Johanson & Vahlne, 1977, 1990). Hence, firms should carefully consider the legal, social, cultural and economic differences before entering foreign markets (Negrusa, 2009). However, firms may instead initiate exporting to distant markets with large demands (see for example Ojala, 2009; Ojala & Tyrväinen, 2007). After the target markets are selected, firms should decide how to enter those targeted foreign markets. They may begin by exporting via an agent, joint venture, licensing or franchising before committing to direct exporting (Johanson & Vahlne, 1977, 1990). Firms with fewer financial resources and personnel capabilities, and who have limited knowledge of the target markets, may minimize the exporting risk and resource commitment through licensing. As the firm accumulates market knowledge and begins to expect high foreign market sales, it may later decide to commit to direct exporting or even to invest in the outlet/sales facilities abroad (Hill, Cronk, & Wickramasekera, 2007; Negrusa, 2009). The last issue the firm should address is the time for target market entry (point of entrance). One of the consequences of *the Stage Theory* is that firms gain domestic experience before venturing abroad (Johanson & Vahlne, 1977, 1990). On the contrary, *the INV theory* argues that born global firms only take a short time to internationalise, despite not necessarily being internationalised immediately after inception. Rennie (1993) and Cavusgil and Knight (2009) define born global firms as those which begin to export within two years and three years of establishment, respectively.

The six-step firm internationalisation model is rather exploratory in nature owing to its non-hypothetical questions in each stage (why, SWOT, what, where, how and when). In addition, the model is not strictly deterministic because the sequence of the six-steps can be interchanged. For example, in the course of internationalisation the decision on the product may come before or after the target market selection. Hence, the model might be suitable to analyse the internationalisation process of firms in a country with limited previous evidence such as Indonesia. Interestingly, to the extent of the author's knowledge the six-step model has not been used and tested, and has only been discussed as a conceptual framework in the studies by Negrusa (2009), and Bandi and Bhatt (2008).

3.3 Export Stimuli

Various terms have been used in the literature to collectively describe the forces that push or enhance firms' engagement in export activities such as export stimuli, export motivating factors, export drivers, export incentives, facilitating factors, initiating and auxiliary factors and export attention evokers (Morgan, 1997; OECD, 2009; Wiedersheim-Paul, Olson, & Welch, 1978; Yorgason, 2004). Export stimuli can be broadly defined as factors that influence a firm's decision to initiate, sustain or develop export operations (Leonidou, 1995b; Morgan, 1997).

The extant literature agrees that export stimuli is critical in determining the success of SMEs' exports (Acedo & Galán, 2011; Morgan & Katsikeas, 1997). Export stimuli is crucial in various stages of exporting activities including how a non-exporting firm intends to initiate or attempt to export and how an exporting firm is motivated to sustain exports, increase product lines or widen destination markets. Hence, a good understanding of export stimuli may help the policy makers to correctly identify SMEs with export potential to participate in export assistance programmes. A clear understanding of export stimuli may also help the government to formulate appropriate interventions for SMEs in different stages of export activities, such as determining the types of export assistance for aspiring-exporters, current/active exporters, inactive exporters or sporadic exporters.

However, extant literature diverges in the conceptualization and typology of export stimuli (see Table 3.1). For example, one common typology is the division of export stimuli originating from internal to the firm and those coming from the firm's external environment (Simpson Jr & Kujawa, 1974; Wiedersheim-Paul et al., 1978). The internal export stimuli factors include unique competence and excess capacity in management, marketing, production, or finance resources while the external export stimuli factors include arbitrary orders from foreign customers, foreign market opportunities, domestic competition and export stimulation supports from the government. Another proposed framework is the differentiation of export stimuli according to their proactive or reactive nature (Leonidou, 1988; Piercy, 1981). A typical proactive exporter is an aggressive firm that deliberately seeks, identifies and exploits export opportunities, for whom exporting is an important source of growth. In contrast, reactive exporters are associated with firms that initiate exporting by accident in response to unsolicited orders or that sell abroad to vent for surplus capacity. Other proposed typology is differentiating the factors that drive a firm's decision to initiate exporting (pre-export stage) and those related to ongoing export decisions (Morgan & Katsikeas, 1997). In addition, Acedo and Galán (2011) suggested a differentiation between export stimuli that motivate firms to begin and continue export activities and those that influence export behaviour and performance.

Table 3-1: Various Typologies of Export Stimuli

Typology	Authors and Contexts
Export stimuli internal and external to the firm	US exporting and non-exporting manufacturing firms (Simpson Jr & Kujawa, 1974); Australian small manufacturing firms at the pre-export stage (Wiedersheim-Paul et al., 1978); British exporting and non-exporting small businesses (Matlay & Fletcher, 2000)
Proactive or reactive nature of the export stimuli	Medium-sized exporting firms in England (Piercy, 1981); Cypriot exporting manufacturing firms (Leonidou, 1988)
Export stimuli at the pre-exporting stage and the exporting stage	UK manufacturing SMEs at pre-export and export stages (Morgan & Katsikeas, 1997); Theoretical work (Leonidou & Katsikeas, 1996)
Stimuli to begin and continue exporting and stimuli that influence exporting behavior and performance	Spanish exporting SMEs (Acedo & Galán, 2011)

Other authors suggested a more detailed classification of export stimuli. For example, the internal/external and proactive/reactive dichotomies can be integrated into a four cells classificatory matrix: proactive-internal, proactive-external, reactive-internal and reactive-external (Leonidou, 1995b; Morgan, 1997). The OECD (2009) proposed the following four export stimuli categories: growth motives, knowledge-related motives, network/social ties and domestic/regional market factors. Leonidou, Katsikeas, Palihawadana, and Spyropoulou (2007) suggested further breakdown of internal and external stimuli, with internal stimuli to include human-resources-related, financial, production-related, research and development-related and marketing-related stimuli, and external stimuli to include domestic market-related, foreign market-related, home government-related, foreign government-related, intermediary-related, competition-related, customer-related and miscellaneous stimuli.

Table 3.1 also shows that the empirical studies on export stimuli have yielded mixed results. Export stimuli were reported to differ across countries, industries and firm size. Hence, instead of strict adoption of particular export stimuli preconceptions, some authors opted to use an exploratory approach to analyze export stimuli. In an exploratory study, the researcher prepares a set of specific items/statements with each representing a specific export stimulus concept identified from literature or from pre-study or focus group discussion. Factor analysis technique reduces the items into several factors that each represents a latent export stimulus dimension. For export stimuli analysis with this method, see for example Liargovas and Skandalis (2008) and Leonidou (2011).

Despite the extant literature's rich conceptual discussions and empirical evidence on export stimuli, previous studies have explored more cases of firms in developed countries, but are still short of evidence of firms in developing/emerging countries. In particular, none of previous studies refers to

Indonesian firms or SMEs. The extant literature also puts more emphasis on the export stimuli of large firms but puts little effort in SMEs' export stimuli. Finally, most of the previous studies on export stimuli focused on either the pre-exporting stage or the exporting stage but there is limited study that made direct comparisons of export stimuli between the two stages in similar settings (comparison of export stimuli of non-exporting and exporting firms in the same country, firm size and period of analysis).

3.4 Export Barriers

Export barriers can be defined as various obstacles that hamper a firm's effort to initiate, sustain or develop export activities (Leonidou, 1995a, 2004). The perception or presence of various export barriers may cause a negative attitude towards internationalisation among firms, especially SMEs. Export barriers may cause a non-exporting firm's reluctance to initiate export activities, prompt neophyte exporters to pull out from their early foreign market operations, and halt the business sustainment and expansion of established exporters. The removal or minimization of export barriers is therefore crucial to foster firm internationalisation.

To overcome the export barriers effectively, accurate identification of the barriers as well as their level of intensity and severity are required (Leonidou, 1995a, 2004). With a good understanding of export barriers, business managers/owners can anticipate or reduce their impact on export activities, especially for the barriers that are within the firm's ability to cope with. A good understanding of export barriers also helps the government agencies to provide appropriate policy measures and assistance to individual firms or business/industrial associations in their export-related activities.

The extant literature, however, provides a rather fragmented conceptualization of export barriers. One stream of research focused on the identification of export barriers in different export stages (see for example Bilkey & Tesar, 1977; Leonidou, 2004; OECD-APEC, 2006). The type and the severity of export barriers may vary across export stages. At the pre-export stage, the export barriers are based on firms' subjective/perceptual opinions rather than actual experiences and most barriers are related to internal capabilities and market opportunity identification. At the export stage, firms have actual experience of export barriers from day-to-day foreign market activities. For example, at the early export stage firms might be concerned about the hostile business environment in overseas markets while at the more advanced and mature export stages they may encounter difficulties in maintaining relationships with foreign distributors and customers.

Another stream of research in this area focuses on the typology of export barriers. One broad classification of export barriers is between internal and external export barriers (Leonidou, 1995a, 2004). Internal barriers include all export impediments that are internal to the firms and mostly related to the availability and capability of organisational resources and production capacity. External barriers include all barriers arising from the home country/domestic environment and target market/host environment. Another way to classify export barriers is according to their domestic and foreign typology (Leonidou, 1995a). Domestic barriers include all export barriers within the firm’s home country including the lack of government support, the underdeveloped industry and the firm’s lack of resources. Foreign barriers include all export impediments in foreign markets including the distribution channels, the strenuous regulations and the demanding customers. The internal-external and domestic-foreign barrier typologies can also be combined into internal-domestic (e.g. human resource barriers), external-domestic (e.g. home country business environments beyond the firm’s control), internal-foreign (e.g. the firm’s marketing strategy in target markets), and external-foreign (e.g. the foreign country regulations) (Leonidou, 1995a). However, the most comprehensive typologies of export barriers are perhaps offered by Leonidou (2004) and the OECD (2012) (see Table 3.2).

Table 3-2: Typology of Export Barriers

Leonidou (1995a)	Leonidou (2004)	OECD (2012)
Internal Barriers	Informational Barriers	Informational Barriers
	Functional Barriers	Human Resource Barriers Financial Barriers
	Marketing Barriers	Product and Price Barriers Distribution, Logistics and Promotion Barriers
External Barriers	Procedural Barriers	Procedural Barriers
	Governmental Barriers	Governmental Barriers
	Task Barriers	Customer and Foreign Competitor Barriers
	Environmental Barriers	Business Environment Barriers Tariff and Non-Tariff Barriers

The empirical evidence of various export barriers identified in Table 3.2, particularly for the case of SMEs, has been well documented in previous studies. Internally, as SMEs attempt to initiate exports, the first hurdle may come from *insufficient knowledge and information* regarding international markets. SMEs are often reluctant to initiate exporting because they do not possess reliable/relevant information regarding foreign market locations and analyses, international market data, foreign business

opportunities' identification and overseas customers contact (EFIC, 2010; Hashim, 2012; Leonidou, 2004; OECD, 2009). Exporting may also be hampered because internally SMEs must deal with *functional barriers* related to limitations in the various enterprise functions such as finance, human resources and production capacity. Examples of *human resource barriers* include limitations in managerial skills and time, inadequacies in export personnel and lack of innovation (Freeman, Edwards, & Schroder, 2006; Hashim, 2012; Köcker & Buhl, 2007; Leonidou, 2004; OECD, 2008). *Production barriers* take the form of limited production capacity, unreliable input and limited ability in developing new products (OECD, 2008; Tambunan, 2009a). *Finance barriers* have also been observed as SMEs face shortages of working capital and limited access to export financing (EFIC, 2010; Freeman et al., 2006; Hashim, 2012; Köcker & Buhl, 2007; Leonidou, 2004; OECD, 2008; Tambunan, 2009a, 2009b). Another internal barrier faced by SMEs is the weakness in *marketing functions* needed to access foreign markets including arrangement of the company's suitable products, pricing, distribution, logistics, and promotion (Leonidou, 2004; OECD, 2008; Tambunan, 2009a).

External barriers faced by SMEs are also evident in previous studies. *Procedural barriers*, those related to operational aspects of transactions with foreign customers such as unfamiliarity with techniques/procedures, communication failures, and slow collections of payments, were found to be troublesome for SMEs' engagement in export activities (Leonidou, 2004; OECD, 2008; Rahardhan, Kusumaningrum, & Rahman, 2008). *Home government's* actions or inaction may also influence SMEs' export activities. Close and intensive assistance by the home government may facilitate indigenous exporters, but in most cases there are only limited assistance and incentives provision to current and potential exporters which is worsened by sophisticated regulatory frameworks on exporting activities (Hashim, 2012; Leonidou, 2004; OECD, 2008; Wengel & Rodriguez, 2006). By expanding overseas, SMEs have to cope with *task barriers* such as differences in foreign customer behaviours/attitudes and intense competition in overseas markets (Hashim, 2012; Köcker & Buhl, 2007; Leonidou, 2004; OECD, 2008). *Foreign market environment* can also halt SMEs' exports. Foreign economic conditions, including declining economic conditions, foreign currency exchange risks, political instability, strict foreign country laws and regulations, and high tariff and non-tariff barriers are harmful to SMEs' exporting activities (EFIC, 2010; Hashim, 2012; Leonidou, 2004; OECD, 2008; Rahardhan et al., 2008). Other types of *environmental barriers* to exporting include unfamiliar foreign business practices and different sociocultural traits and verbal/nonverbal language (Köcker & Buhl, 2007; Leonidou, 2004).

The extant literature on export barriers, however, has paid more attention to firms in developed countries and therefore more evidence from developing/emerging countries, particularly Indonesia, is needed. The detailed export barrier classification by the OECD (2012) has not been used or tested for

the cases of developing countries. In addition, there is no study of export barriers in developing countries that shows the differences and the shifts of export barriers in various export stages.

3.5 Network Relationships for Internationalisation

Johanson and Mattsson (1988) developed the network approach after observing that more and more firms use various networking sources to facilitate their internationalisation process. In the context of internationalisation, a network can be defined as the firm management team's relationships with customers, suppliers, distributors, competitors, family, friends, bankers, regulatory and public agencies as well as private support agencies that enable the firm to expand its business activities to overseas markets (Coviello & Munro, 1997; Coviello & Munro, 1995; Zain & Ng, 2006). Networking is crucial for SME internationalisation because the relationships in the network can provide market information, minimize the need for adjustment in a foreign environment and access to established network positions in foreign target markets (Abdullah & Zain, 2011b; Ruzzier et al., 2006).

Zain and Ng (2006) suggest that network relationships have various supportive roles in the SMEs' internationalisation process. These include: 1) triggering and driving SMEs' intention to internationalise; 2) influencing SMEs' target market selection; 3) influencing SMEs' entry mode of choice; 4) providing access to broader relationships and established channels in foreign markets; 5) providing access to destination market knowledge; 6) providing initial credibility in new markets; 7) lowering the cost and minimizing the risk of overseas business activities; and 8) influencing the internationalisation pace and patterns.

However, a close tie with a particular international network can also constrain SMEs' future scope and market expansion opportunity. In some cases, firms that have close ties with and dependence on other network members are less motivated to seek alternative international market opportunities (Coviello & Munro, 1995; Zain & Ng, 2006). As such, the market access and international reputation remain exclusive to the large firms in the network.

From a theoretical point of view, the role of network relationships in firm internationalisation is important for at least three reasons. First, the network model suits the SME internationalisation analysis because network relationships may help SMEs overcome limited internal resources to venture abroad. Second, with the help of network relationships SMEs may begin internationalisation from either close or distant markets, which differs from the stage theory that implies internationalisation begins from nearby markets (Ojala, 2009; Zain & Ng, 2006). Third, the help from network relationships may enable

SMEs to immediately internationalise as opposed to the stage theory that suggests the firm's incremental and gradual progression towards overseas operations (Ojala, 2009).

However, the extant literature differs in the classification of networking sources for entering foreign markets. One common approach is looking at the types of relationships that exist in the international network and dividing the network relationships into formal, informal and intermediary relationships (Ojala, 2009). *Formal relationships* refer to business activities between two or more actors in the international network; *informal relationships* relate to personal relationship with relatives, friends and associates; while *intermediary relationships* refer to the presence of a third party that facilitates the establishment of the network relationships between the firm and the foreign buyers or distributors. Another approach is looking at the networking sources that can be divided into institutions (including all government agencies), business associates (suppliers, global supply chains, other firms) and personal relations (friends, relatives, colleagues) (Senik, Scott-Ladd, Entekin, & Adham, 2011).

The extant literature offers different views about how SMEs interact in the networks. Ojala (2009) suggests that SMEs' relationships with the actors in the network can develop in either active or passive ways. *Active networking* is characterized by SMEs' initiatives to build network relationships while *passive networking* is indicated by the initiatives from the buyers' side. Firms with limited network relationships for internationalisation can take an active role to build new connections to facilitate their overseas market expansion. In contrast, network relationships can still occur despite the SMEs being passive, as a result of the initiatives by other actors including customers, importers, distributors or intermediaries. Alternatively, Senik et al. (2011) proposed a network linkage model where all networking sources (institutions, business associates and personal relations) work as a system in tandem and in cohesiveness. To ensure the viability of this network linkage system, there has to be a function of facilitation, coordination and monitoring of all networking sources. Those functions can be performed by a single public body or independent body that links the potential firms with myriads of public agencies, NGOs, industries, businesses and other actors in the network.

Previous empirical studies on the role of network relationships in firm internationalisation have yielded mixed results. Variations in results are evident across countries, industries, time periods of the studies, forms of internationalisation and firm size. In addition to the inconclusiveness of network relationships conceptualization and the fragmented empirical findings, there has been no study with reference to Indonesian firms or SMEs. A study that investigates how Indonesian SMEs use network relationships to help them internationalise is therefore highly appropriate to further enrich the extant literature.

3.6 Government Export Assistance

Policy makers worldwide have recognized the crucial role of SMEs for the domestic economy and the importance of SME internationalisation. A series of policy studies by the OECD (1997, 2009, 2012), the Organization of Islamic Cooperation (2013), the European Commission (2007, 2010b, 2011), and APEC (2011) attempted to formulate appropriate and effective policy measures and export assistance to foster SME internationalisation.

At least three key factors should be considered for the SMEs' export assistance programmes to be effective. First, it is crucial that the government correctly identify the main barriers faced by SMEs in their export activities. The government may perceive export barriers differently from what SMEs actually encounter. This differences in preconceptions are not uncommon and can lead to ineffective export assistance programmes (Lloyd-Reason & Mughan, 2008). Second, the government should have some central themes or focuses that may lead and direct all export assistance provided by various agencies/ministries at various levels. Third, it will be beneficial if the export assistance programmes are not only a stopgap action to address current export impediments but also build SMEs' capabilities to overcome some export barriers that are within their control span (European Commission, 2007; Lloyd-Reason & Sear, 2007). Fourth, it is also important that the governments are able to identify SMEs with future export potential to participate in export assistance programmes (OECD, 2008).

Export Barriers Identification

Despite the government's willingness to foster SMEs' participation in global markets and to remove export barriers, its export assistance will be ineffective if it is not based on accurate identification of export barriers faced by SMEs. The government may have insufficient knowledge of actual export barriers faced by SMEs or the government may have its own perception of the export barriers, differently from those actually faced by SMEs (OECD-APEC, 2006; OECD, 2008). In both cases, there will be misconceptions of export barriers between the government and the SMEs. Consequently, the government and SMEs may differ in perceiving the type of barriers hampering the exports, or differ in perceiving the severity and the urgency in addressing each barrier, or both. These mismatches may lead to imperfect input for the policymaking process, which in turn will lead to ineffective export assistance programmes. These misconceptions may come from the government's inadequate resources and mechanisms to gather information and collect feedbacks from SMEs (Bouzas & Avogadro, 2002; Jerome, 2005).

Export Assistance Focus

Government export assistance programmes for SME can be grouped in different ways. For example, Levy, Berry, and Nugent (1999) compared the support systems for exporting SMEs across four countries (Colombia, Indonesia, Japan, and the Republic of Korea) and suggested that the public policy focus to support SMEs' export activities were best divided into marketing, technology and finance supports. The Boston Consulting Group (2004) identified the following focus of export supports provided by various countries: exporting know-how (for pre-exporting firms); information centres; customised market insight; contacts and sales leads and in-market activities. A study by UNCTAD (2005) in Brazil, China, India, Singapore and South Africa suggested that governments may assist SMEs by organising missions to target markets, providing financial and fiscal incentives, supporting feasibility studies and creating industrial parks abroad.

However, it would be useful if the export assistance focus can directly link and match with the types of export barriers faced by SMEs. The OECD (1997) proposed a broad classification of a government's export support programmes which can be easily matched with the types of export barriers: access focus, financial focus, capabilities focus and business environment focus. Table 3.3 shows a clear linkage between the four government support focuses and the types of export barriers suggested by the OECD (2012) and OECD-APEC (2006).

Table 3-3: Export Barriers and Government Support Focuses

No	Types of Export Barriers	Government Support Focuses
1	Informational Barriers	Access Focus
2	Distribution, Logistics and Promotion Barriers	
3	Financial Barriers	Financial Focus
4	Human Resource Barriers	Capabilities Focus
5	Product and Price Barriers	
6	Customer and Foreign Competitor Barriers	
7	Procedural Barriers	Business Environment Focus
8	Home Governmental Barriers	
9	Foreign Governmental Barriers	
10	Business Environment Barriers	
11	Tariffs and Non-tariff Barriers	

Source: OECD (1997), OECD-APEC (2006) and OECD (2012)

The OECD (1997, 2008) further specifies that *Access focus* includes the provision of general market information, specific target market analysis, the organisation of trade fairs and off-shore assistance through the foreign consulates. Support programmes under the access focus are aimed at removing informational, distribution, logistics and promotion barriers. *Financial focus* includes support in export insurance, loan guarantees, as well as direct financial support to cover costs of promotional activities such as export promotion and visits to trade fairs. Support programmes under the financial focus are aimed at removing financial barriers. *Capability focus* includes assistance in business planning, marketing, cultural differences awareness, language skills and knowledge of export procedures or specific technologies aimed at specific markets such as specific production processes, logistics and machineries. Support programmes under the capability focus remove human resources, products, prices, customer, foreign competitors and procedural barriers. *Business environment focus* includes awareness of taxation systems and the legal framework, support for research and development collaboration between local firms, setting-up industrial clusters, and favourable international trade policy. Support programmes under the business environment focus help SMEs to overcome home governmental, foreign governmental, business environment, tariffs and non-tariff barriers.

Level of Intervention and Participant Selection for Export Assistance

The effectiveness of the government export support programmes are partly determined by the appropriateness of the level of intervention for SMEs with different export potentials. Lloyd-Reason and Mughan (2008) suggest that the SMEs' export potential can be classified as the curious, frustrated, tentative, enthusiastic and successful (see Table 3.4). Lloyd-Reason and Mughan's study also provides some advice for government intervention regarding the SMEs' export potentials. First, the most important assistance for *the Curious, Frustrated* and *Tentative* SMEs are identification, clarification and understanding of their own problems. These kinds of assistance can be delivered through, for example, sharing and support from the successful exporting firms, written/on-line case studies on related problems and the provision of guidebooks on how to export. Second, direct intervention is needed by the *Enthusiastic* and *Successful* because they may already face more specific problems in their international businesses activities (Lloyd-Reason & Mughan, 2008). In this case, the government can either deliver specific services needed by SMEs or just serve as a brokerage to match SMEs with available private specialised sources of support.

Accurate identification of SMEs' export potentials is also crucial for the selection of the SMEs to participate in export assistance. Lloyd-Reason and Mughan (2008) suggests that the type of SMEs that would receive the biggest impact from government support is *the Enthusiastic*, characterised by well

established, fast growth, medium-scale enterprises with some degree of international trading activities' experience and success. They are motivated to expand their business in foreign markets and attempt to look for assistance to help remove the obstacles to sustain and develop international activities. However, OECD (2008) underlines that targeting firms with high export potential to participate in export assistance is debatable from academic standpoint due to its selectivity in the use of public funds. Nevertheless, targeting and prioritising firms with export potential can arguably be justified at policy implementation level on the basis of effective use of limited government resources.

Table 3-4: Classification of SMEs' Export Potential

Typology	Characteristics
The Curious	<ul style="list-style-type: none"> • Previously considered international business activity • Lack of self-analysis, particularly in the identification of the key problem areas • Accepted the fact that they are probably unable to overcome the major challenges faced in international business activity • Unsure whether they have the competitive product, or suspect that there is be a market for their products but are uncertain how to proceed
The Frustrated	<ul style="list-style-type: none"> • Had international activity experience in the past, but are currently inactive within the international business environment • Identify that their key challenges are in strategic planning, marketing skills, and product issues • Perceive the planning process for international activity as complex and daunting that they are uncertain where to begin • Generally aware that international activity requires a specific set of management skills and that their inability to succeed in international activity is probably due to their lack of skills in this area
The Tentative	<ul style="list-style-type: none"> • Limited experience with some skills in international activity, but encountered major problems with no applicable solutions • Perceive that firms are internally capable to internationalise and the only real problem is finding customers (market intelligence) • General inability to self-analyse and tend to look to external service providers to solve their problems
The Enthusiastic	<ul style="list-style-type: none"> • Have considerable international activity experience, eager to grow business beyond country border, but are currently experiencing barriers to growth • Identify that their key challenges are in management skills, finances and market intelligence • Along with the growing international activity, the need for management skills upgrading becomes apparent to manage an increasingly complex business environment • Growing concerns of finance issue, in terms of capital funding and cost management • Increased awareness that the remaining key issues are more internal to the firm than external. Market intelligence remains a key issue
The Successful	<ul style="list-style-type: none"> • Have extensive experience and some major successes in international business activity • Have very high managerial skills and knowledge development, a high degree of awareness and usage of available external support • Aware of the gap in their skills and knowledge and therefore eager to improve • Identify that their key challenges are in management skills, due to the a highly complex environment in which many of these firms operate • They still face problems related to market intelligence or finance, but they regard these issues as secondary problems due to their knowledge and learning ability

Source: Lloyd-Reason and Mughan (2008)

3.7 Export Engagement Decision

Owing to their lack of resources, SMEs are averse to the risk of failure in international market operations. Hence, SMEs cautiously evaluate the expected benefit and cost of exporting before deciding to venture abroad. Following Bernard and Jensen (2004) and Ottaviano and Martincus (2011), in the case that export engagement is a one-period decision, the firm formally maximizes its profits as follows:

$$\pi_{it}(q_{it}^*, Z_{it}, Y_{it}) = p_{it}q_{it}^* - c_{it}(q_{it}^*, Z_{it}, Y_{it}) \quad (3-1)$$

Where π_{it} is the export profit of firm i in period t . The firm's export revenue is the price of exported products (p_{it}) times the profit-maximizing level of exports (q_{it}^*). The variable cost of producing the exported goods (c_{it}) is the function of q_{it}^* , a vector of firm-specific features (Z_{it}) and a vector of environmental factors that are exogenous to the firm but affect its probability of exporting (Y_{it}). Therefore, the firm exports if the expected revenue exceeds the expected costs:

$$X_{it} = \begin{cases} 1 & \text{if } \pi_{it}(q_{it}^*, Z_{it}, Y_{it}) = p_{it}q_{it}^* - c_{it}(q_{it}^*, Z_{it}, Y_{it}) > 0 \\ 0 & \text{if } \pi_{it}(q_{it}^*, Z_{it}, Y_{it}) = p_{it}q_{it}^* - c_{it}(q_{it}^*, Z_{it}, Y_{it}) \leq 0 \end{cases} \quad (3-2)$$

Where X_{it} is a binary variable representing firm i 's export status at period t (1 = exporting, 0 = otherwise).

However, the firm may face export decisions in multiple periods (i.e. a sporadic exporter or a previous exporter). In this case, in addition to the variable costs, the firm also faces a sunk cost of foreign market entry (Bernard & Jensen, 2004; Ottaviano & Martincus, 2011; Roberts & Tybout, 1997). Examples of foreign market entry cost are the cost of gathering information and establishing distribution systems in target markets. The entry cost is sunk in nature and thereby the firm that has already exported in the previous period does not have to pay in the current or future period. Hence, the firm's profit maximization from export activities is given as follows:

$$\pi_{it}(q_{it}^*, Z_{it}, Y_{it}) = p_{it}q_{it}^* - c_{it}(q_{it}^*, Z_{it}, Y_{it}) - N(1 - X_{it-1}), \quad (3-3)$$

Where N is the sunk entry cost and X_{it-1} is the firm's export status in the previous period (1 = exported in the past, 0 = otherwise). Hence, the firm's export decision in period t is as follows:

$$X_{it} = \begin{cases} 1 & \text{if } p_{it}q_{it}^* > c_{it}(q_{it}^*, Z_{it}, Y_{it}) + N(1 - X_{it-1}) \\ 0 & \text{if } p_{it}q_{it}^* \leq c_{it}(q_{it}^*, Z_{it}, Y_{it}) + N(1 - X_{it-1}) \end{cases} \quad (3-4)$$

Despite their strong and clear insights, those models are difficult to estimate in the absence of precise measures and data in terms of the product's price in foreign markets and the variable costs of production. Alternatively, the export decision model can also be treated as the result of the factors that enhance the export, the factors that inhibit the export and firm characteristics (see Figure 3.2) (Shih & Wickramasekera, 2011).

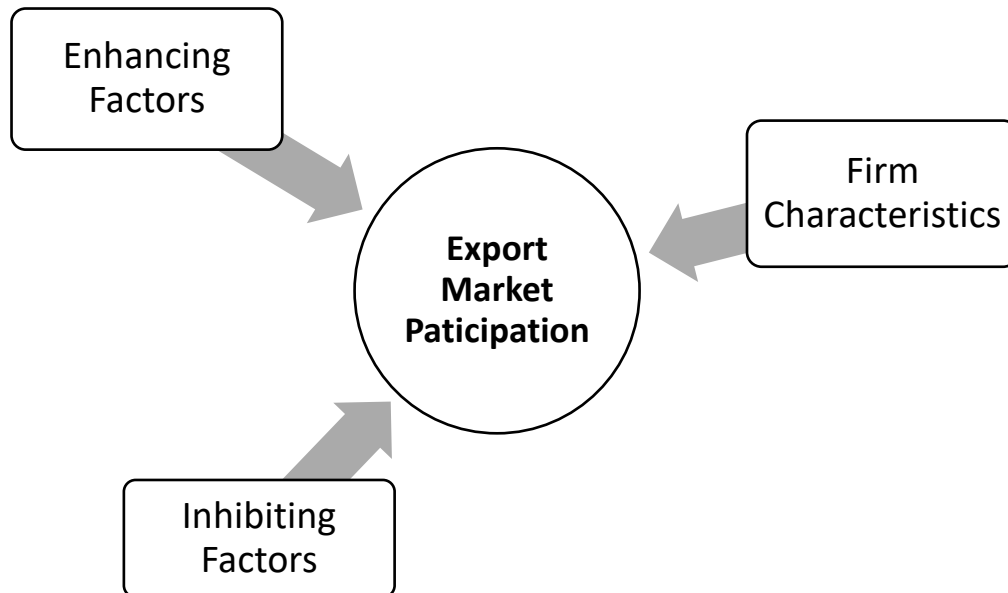


Figure 3-2: Export Engagement Decision Conceptual Framework

Source: Shih and Wickramasekera (2011)

In the model described in Figure 3.2, the enhancing factors may include the factors that stimulate the export and the perceived benefits of exporting. The inhibiting factors may include the cost of exporting and the perceived export barriers. The export market participation can be estimated with a probabilistic model with maximum likelihood estimation techniques (i.e. probit or logistic regression analysis). Some previous studies on export probability have been conducted on, amongst others, the Middle East and the North African region (Fakih & L. Ghazalian, 2014), Taiwan (Shih & Wickramasekera, 2011), USA (Yang, Leone, & Alden, 1992), Argentina (Ottaviano & Martincus, 2011) and Colombia (Roberts & Tybout, 1997), but there is no reference to the case of Indonesian firms/SMEs.

3.8 Export Performance

The ability of SMEs to export is one of the hallmarks of a country's successful effort to foster SME internationalisation. However, the challenges and obstacles of exporting prevail upon the firm's entry into foreign markets. Hence, the export performance may differ widely from one firm to another. For example, an exporter may have higher export revenue or higher export intensity (higher share of export revenue in total revenue) than other exporters. Hence, understanding the factors that affect the firm's export performance (export sustainment and development) and behaviour in the foreign markets is equally as important as understanding the factors that trigger a firm to initiate exporting (Sousa et al., 2008).

In general, there are two conceptual frameworks that have been widely used to examine export performance (Sousa et al., 2008). The first is based on the *resource-based view* that focuses on the firm's internal factors that influence export performance and the second is *the contingency paradigm* that brings more explanations on external determinants. *The resource-based view* approach focuses on how a set of firm's unique resources creates and sustains competitive advantage (Conner & Prahalad, 1996; Wilkinson & Brouthers, 2006). A firm can be perceived as a collection of physical and human resources and therefore variations in performance across firms can be explained by the heterogeneity in these resources and capabilities (Makadok, 2001). A firm may perform better than other firms in the same industry and market if that firm possesses and exploits its unique resources (Dhanaraj & Beamish, 2003). Correspondingly, in the context of internationalisation the resource-based view suggests that a firm's export performance is determined by the firm's characteristics such as size, experience and production techniques (Zou & Stan, 1998).

A rather different view on export performance is offered by *the contingency paradigm* that is based on the *structure–conduct–performance* (SCP) framework commonly used in industrial organization analysis (Cavusgil & Zou, 1994; Zou & Stan, 1998). The SCP framework argues that an organization's resources is dependent on its environments and the organization develops and maintains appropriate strategies to manage the dependence (Sousa et al., 2008). Hence, in the context of internationalisation it is the environmental factors specific to the firm that determine the firm's strategies and characteristics that in turn affect the firm's export performance. In other words, *the contingency paradigm* views that export engagement is a firm's strategic response to its internal and external factors (Robertson & Chetty, 2000; Yeoh & Jeong, 1995).

However, Sousa et al. (2008) suggest the incorporation of the two conceptual frameworks to analyse the export performance. Figure 3.3 shows how the internal and external factors affect the firm's export

performance. The internal factors consist of export marketing strategy (e.g. product, price, promotion, distribution, service and networking strategies), firm characteristics (e.g. size, international experience, capabilities/competencies, industrial sector/product type, organizational culture, ownership structure and production management) and management characteristics (e.g. age, education, innovativeness, international exposure and export commitment). The external factors consist of foreign market characteristics (e.g. legal, political and economic systems, cultural similarity, market dynamics, customer and competitor behaviour) and domestic market characteristics (such as government export support and domestic business environment).

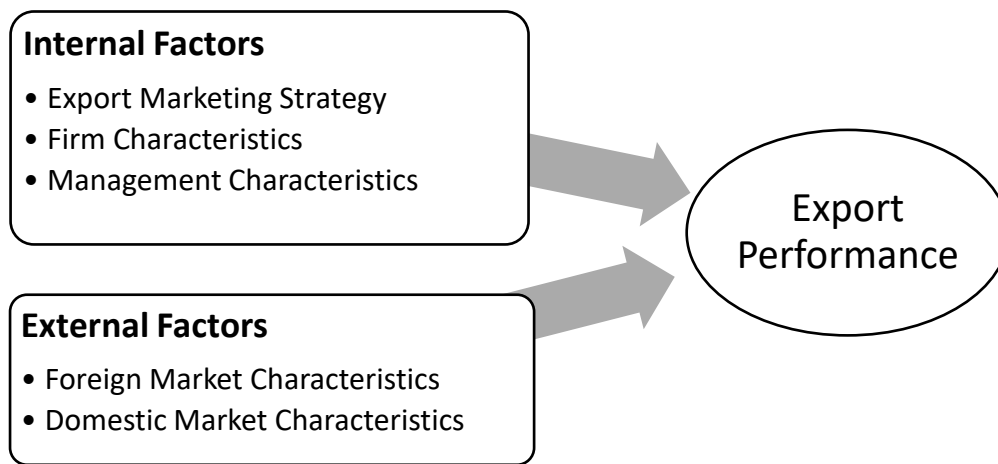


Figure 3-3: Export Performance, a Conceptual Framework

Source: Sousa et al. (2008)

The hybrid model given in Figure 3.3, however, has not been used or tested as most of the previous studies adopted either *the resource-based view* or *the contingency paradigm*. For example, the importance of internal factors in export performance were reported in the US manufacturing SMEs (Wilkinson & Brouthers, 2006), US and Canadian SMEs (Dhanaraj & Beamish, 2003), British SMEs (Hart & Tzokas, 1999), Portuguese firms (Lages, Silva, & Styles, 2009) and Spanish SMEs (Stoian, Rialp, & Rialp, 2011). *The contingency paradigm* has been evident in the US firms (Cavusgil & Zou, 1994), Greek firms (Liargovas & Skandalis, 2008) and the New Zealand apparel industry (Robertson & Chetty, 2000). In addition, there is limited evidence from developing countries. With regard to Indonesia, Wengel and Rodriguez (2006) investigated the export performance of Indonesian firms with a large number of determinants but the study lacked a conceptual framework.

3.9 Impact of Internationalisation on the Performance of SMEs

Firms venture abroad with a view to gaining many benefits. International markets offer almost unlimited market expansion opportunities for the firms and thereby their growth (Hitt et al., 1997). Cross-border business activities allow the firms to gain above-normal returns if they can exploit foreign market imperfections and *niche* markets using their firm-specific and intangible assets (Hitt et al., 1997; Lu & Beamish, 2004). Market diversification may reduce the firms' revenue uncertainty through the spreading risk of market slump in different countries (Kim, Hwang, & Burgers, 1993). Market expansion enables the firms to realize economies of scale and scope through larger production levels and product diversification (Caves, 1996; Hitt et al., 1997). Larger production levels may lower the average cost of input through bulk purchasing (Kogut, 1985). International business activities may also positively affect the firms' efficiency through organizational and experiential learning, including an enhanced knowledge base, capabilities, innovations and competitiveness (Lu & Beamish, 2004). Enhanced competitiveness from international operations may in turn also reinforce the firms' revenue in domestic markets (Lu & Beamish, 2004).

However, internationalisation also implies some significant costs for firms. The cross-border business activities incur some costs typically associated with the firms' newness and foreignness (i.e. unfamiliarity with local cultural, political and economic environments) (Lu & Beamish, 2004; Olmos & Díez-Vial, 2015). Foreign market operation is also complex and laborious to manage. Transaction, coordination, distribution and logistical costs are among the types of costs that may arise from managing overseas business activities (Hitt et al., 1997; Olmos & Díez-Vial, 2015).

Owing to the complexity and the enormous barriers and costs associated with foreign market expansion, the relationship between internationalisation and firms' performance is less straightforward than the expected multiple benefits of internationalisation. Table 3.5 summarizes various possible internationalisation-performance relationships and some empirical evidence that supports them. Some studies reported that internationalisation has positive and linear relationships with performance (e.g. Ganotakis & Love, 2012; Lu & Beamish, 2006; Nachum, 2004). Some studies reported that internationalisation has a non-linear relationship with performance. For example, firms' performance may accelerate or decelerate with market diversification (Nachum, 2004); exhibit a U-form relationship, with performance being high at low degrees of internationalisation, low at medium degrees of internationalisation and pick up again at high degrees of internationalisation (Ruigrok & Wagner, 2003); exhibit inverted U-shaped relationship (Hitt et al., 1997); and even take a horizontal sigmoid S-shaped relationship (Lu & Beamish, 2004). Other studies reported that the

relationship between internationalisation and performance is non-existent or weak at best (e.g. Singla & George, 2013; Tallman & Li, 1996) and some other studies even reported that internationalisation may have negative effects on firms' performance (Lu & Beamish, 2001; Siddharthan & Lall, 1982; Singla & George, 2013).

Table 3-5: Relationship between Internationalisation and Firms' Performances

Types of Relationship	Author(s)	Sampled Firms	Results
Linear and positive relationships	Lu and Beamish (2006)	Japanese SMEs	Exporting and FDI activities have a positive impact on sales and assets
	Ganotakis and Love (2012)	High-technology firms in the UK	Export activities improve labour productivity
	Nachum (2004)	Large firms in Southeast Asia and Latin America	FDI activities increase profits to sales ratio
Non-linear relationship	Nachum (2004)	Large firms in Asia	Profits to sales ratio accelerates with market diversification
		Large firms in Africa	Profits to sales ratio decelerates with market diversification
	Ruigrok and Wagner (2003)	Large manufacturing German firms	U-form relationship between ROA and the degree of internationalisation
	Chiao, Yang, and Yu (2006)	Taiwanese SMEs	U-shaped relationship between ROS and export intensity
	Lu and Beamish (2001, 2004)	Japanese firms and SMEs	Horizontal S-shaped relationship between ROA and the geographic diversification of FDI
	Hitt et al. (1997)	US large manufacturing firms	Inverted U-shaped relationship between ROA and international diversification
	Olmos and Díez-Vial (2015)	SMEs in Spanish wine industry	Firm performance depends on the internationalisation pathways (traditional or born global)
Negative relationship	Lu and Beamish (2001, 2006)	Japanese SMEs	Exporting has a negative effect on ROA
	Singla and George (2013)	Indian firms	FDI activity has a negative impact on financial performances
	Siddharthan and Lall (1982)	Large US MNCs in manufacturing industry	Multinational spread has a negative effect on sales revenue growth
Weak/no relationship	Singla and George (2013)	Indian firms	Export intensity has no significant impact on firm performances
	Tallman and Li (1996)	US industrial MNCs	International diversity has no significant effect on the return on sales

Table 3.5 also shows that previous empirical studies on internationalisation and performance have yielded mixed results. Variation of results is evident across countries, industries, time periods of the studies, internationalisation forms, performance measures and firm size. In addition to the

inconclusiveness of the findings, there are also still a few gaps in the extant literature that can be filled. *First*, the extant literature pays more attention to firms in developed countries and therefore is still short of evidence of the performance of internationalised firms in developing/emerging countries (Chiao et al., 2006) and in particular none of those studies refers to Indonesia. *Second*, the extant literature still puts more emphasis on internationalised large firms or MNCs' operations and thereby more effort in the case of SMEs is still required (Chiao et al., 2006). *Third*, the benefits and costs of internationalisation previously identified better fit the international operation of large enterprises/MNCs where FDI and sales by foreign subsidiaries are more dominant activities than direct export (Hollenstein, 2005). In sum, a study focusing on the impact of export activities on the performance of SMEs in a developing country (Indonesia as a case) is therefore highly appropriate to further enrich the extant literature.

3.10 Chapter Summary

Firm internationalisation has attracted scholars' attention over the last five decades. Firm internationalisation theories initially attempted to explain large firms' international operations, characterised by the equal importance of exporting and FDI activities. However, the new firm internationalisation theories aimed at explaining the internationalisation of smaller firms (i.e. SMEs) that is characterised by dynamic and less deterministic internationalisation processes with emphasis on global supply chain involvement and direct exporting activities. However, none of those theories stood out as a generic firm internationalisation theory due to the variations of empirical evidence of internationalisation processes and determinants across countries, industries/economy sectors and firm size.

Ample studies have been devoted to testing or developing the firm's internationalisation theories, but many more were aimed at investigating some specific elements of firm internationalisation including export stimuli, barriers, strategy, network relationships, government support, export performance and export impacts. Hence, the extant literature provides rich empirical evidence of how each element of internationalisation varies across regions, countries or sectors/industries. However, there are still a few gaps in the literature. For example, more evidence is needed to investigate how export stimuli, barriers, network relationships, performances and impacts differ across various export stages. In addition, previous studies paid more attention to large firms' international operations and the case of developed countries, while less evidence is available for the case of SMEs in developing countries. In particular, little is known about the SMEs internationalisation in Indonesia, a fast-developing country facing rapid changes in international

trade policy and environment. New evidences from the internationalisation process, determinants and elements of Indonesian SMEs will therefore enhance the body of knowledge in this research area.

Chapter 4

Research Data and Methodology

This chapter discusses the data collection procedures and the empirical models used to investigate Indonesian SMEs' internationalisation processes and determinants. This study uses both primary and secondary data including: (1) A survey of SMEs administered in Java, Bali and Madura Islands; (2) A survey of policy makers administered to central government agencies/institutions whose policy areas are relevant to SMEs' export development; (3) SMEs' databases from various government agencies to construct the sample frame from which the study samples were drawn. The data analysis involves descriptive statistics, principal component analysis and regression analysis. Section 4.1 describes the study area and the target populations as well as the data collection procedure including the sampling design, the sample distribution and the survey instruments. Section 4.2 discusses the data analysis methods to investigate the SMEs' export stimuli, export barriers, network relationships, government export assistance, and export strategies and processes. Section 4.2 also develops the empirical models to estimate the determinants of SMEs' export engagement, export performance and export impact on firm performances.

4.1 Study Area and Data Collection

4.1.1 The Target Population and the Study Area

This study focuses on small-sized and medium-sized enterprises (SMEs) and excludes micro-sized and large-sized enterprises.²² Among various definitions of SMEs previously discussed in Section 2.2.1, two definitions are widely used in Indonesia:

1. The Ministry of Cooperatives and SMEs defines SMEs as enterprises with assets valued at Rp50 million - Rp10 billion (equivalent to USD3,846.15 - 769,230.77) or with an annual turnover of Rp300 million - Rp50 billion (equivalent to USD23,076.9 - \$3,846,153.8) ("Undang-undang No. 20 Tahun 2008 tentang Usaha Mikro Kecil dan Menengah [Law on Micro, Small and Medium-Sized Enterprise Number 20 of 2008].", 2008).²³

²² Micro enterprises are excluded for two reasons. First, the micro enterprises database is unavailable in Indonesia as they are mostly in the form of individual businesses or home industries. Second, micro enterprises are less likely to engage in international business (Pendergast et al., 2008).

²³ The exchange rate is assumed at Rp13,000/USD.

2. BPS-Statistics Indonesia defines SMEs as enterprises with 5-99 employees (BPS-Statistics Indonesia, 2014a).

During the pilot survey, we found that at the practical level the identification of SMEs' assets and turnover value was difficult, laborious and potentially inaccurate. SMEs' asset valuation requires a complex appraisal method and SMEs' turnover estimations are not always available due to the poor bookkeeping. Hence, this study refers to the definition of SMEs by number of employees (5 to 99) used by BPS-Statistic Indonesia. Despite its applicability, it is worth noting that this definition also has shortcomings. Most notably, the SME definition by number of employees has potential bias towards capital-intensive industries. For example, this definition potentially includes some large-scale enterprises in capital-intensive industries that employ a small number of employees, but excludes medium-scale enterprises in labour-intensive industries that employ large numbers of workers.

The total number of SMEs in Indonesia was approximated at 678,415 units in 2012 (Ministry of Cooperatives and SMEs Republic of Indonesia, 2014b). As discussed in Section 2.2.2, SMEs are not equally spread across provinces/regions in Indonesia. Approximately 60% of the SMEs in the country are concentrated in only 3 islands; Java, Madura and Bali (Kuncoro, 2009; Wiratno & Dhewanto, Undated). This imbalanced SMEs' distribution largely reflects the economic agglomeration pattern in Indonesia that causes economic activity to be largely concentrated in those three closely related islands. The three islands consist of only seven provinces and constitute only 7.07% of the country's total land area but are inhabited by 57.5% of the country's total population and generate over 58% of the country's total GDP/value added (BPS-Statistics Indonesia, 2014c).

Taking into account those agglomeration patterns of economic and SMEs' activities in Indonesia, our study concentrates on SMEs located in Java, Bali and Madura Islands. The three islands also have better transportation and communication infrastructure than the rest of the country, allowing better access to survey a large number of SMEs that are spread throughout the islands within the time and budget constraints. Hence, the target population of this study is the SMEs that operate in seven provinces in Java, Madura and Bali islands.

4.1.2 Sampling Design and Data Collection

In order to construct the sample frame, we merged four different databases into one list of SMEs from which the samples were picked. The first three databases were published by the Ministry of

Cooperatives and SMEs including: (1) the Ministry of Cooperatives and SMEs' online trading board²⁴; (2) *SME and Cooperative Indonesia Catalogue* (Ministry of Cooperatives and SMEs Republic of Indonesia, 2011, 2012)²⁵; and (3) *Exporting SMEs Directory* book (Ministry of Cooperatives and SMEs Republic of Indonesia, 2009a)²⁶. The fourth database is the Indonesian 2006 Economic Census provided by BPS-Statistics Indonesia.²⁷

Owing to the large size of the target population (i.e. large numbers of SMEs in the study area), the sample size is not expected to exceed 5% of the population.²⁸ Hence, the sample size formula for infinite population is appropriate and given as:²⁹

$$n = \left(\frac{(Z_{\alpha/2})\sigma}{MOE} \right)^2 \quad (4-1)$$

where n is the sample size; $Z_{\alpha/2}$ is the value of the two-sided confidence interval in normal distribution, σ represents the variation of the variable of interest and MOE is the desired margin of error (Anderson et al., 2010; Crossley, 2008). Assuming that $Z_{\alpha/2} = 1.96$ (corresponds to a 95% confidence interval), response distribution $\sigma = 0.5$, $MOE = 0.05$ and $N = 407,049$ (total number SMEs in Java, Madura and Bali), the calculated sample size is 384. However, the sample size was increased by at least 20% (to at least a total sample of 461) to anticipate insufficiency and incomplete responses.

To capture SMEs' internationalisation processes and determinants, it is important that our study sample consist of SMEs in different export stages including exporting SMEs and non-exporting SMEs. However, stratified sampling was not applicable because the export status of the SMEs was unknown prior to the survey. Therefore, a quota random sampling method was used in which the sampled

²⁴ Online promotion at the website of the Ministry of Cooperatives ad SMEs, <http://www.indonesian-products.biz>.

²⁵ The catalogue provides SMEs' contacts and products description in four languages (English, Arabic, Japanese and Indonesian). The catalogue is published annually as part of the ministry's promotion program.

²⁶ The directory books listed all SMEs that participated in international trade shows organised by the Ministry of Cooperatives and SMEs' during 2005-2009.

²⁷ The BPS-Statistics Indonesia (National Agency for Statistics) performs economic censuses every ten years. When the survey for this study was conducted in 2014, the most recent census was the 2006 national census while the next census will be conducted in 2016 and published in 2018.

²⁸ The population of SMEs in the study area (N) is approximated to be around 407,049 (approximately 60% of the total Indonesian SME population of 678,415). The sample (n) would not exceed 20,352 SMEs (5% of SMEs population in the study area) due to time and budget constraints.

²⁹ In the case that $n \leq 0.05 N$, the sample size formula for an infinite population is appropriate (Anderson, Sweeney, & Williams, 2010; Crossley, 2008; Lee, Lee, & Lee, 1999).

SMEs were drawn randomly from the sample frame until each SMEs' export status category was filled. As such, the survey targeted at least 192 samples (half of the calculated sample size of 384) for each exporting and non-exporting SME category (see Figure 4.1).

The survey was administered in April – August 2014 with the help of trained research assistants. During the survey period, we contacted and approached 971 SMEs, 522 of which were willing to participate in the survey (a response rate of 53.76%). 449 SMEs refused to participate in the survey, had shut down the business or changed the number of employees beyond the 5-99 range. Of the 522 returned questionnaires, 497 were usable while 25 were unusable due to incomplete responses. The usable responses consisted of 271 exporting SMEs and 226 non-exporting SMEs and therefore the targeted total sample size and the specified quota were fulfilled. Further, within the 226 non-exporting SMEs category, there were 114 SMEs with the intention and plan to export and the other 112 had no intention to export in the future, which added more variation to the sample collected.

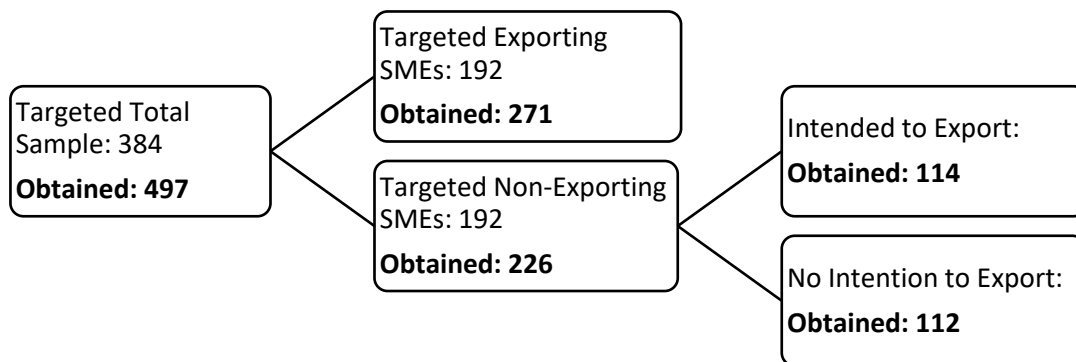


Figure 4-1: Sample Quota and Realization

Source: Author's calculation based on survey data

In addition to the survey conducted on the SMEs, this study also collected information from nine central government agencies whose policy areas are directly or indirectly related to SMEs' development or international trade activities. The survey of government agencies was aimed to capture policy makers' perspectives on export barriers faced by SMEs and identify the provision of policies measures, programmes and assistance related to SMEs' development or export development. Table 4.1 shows the list of surveyed central government agencies and the directorate generals, deputies or functions within the agencies that are relevant to SMEs' export activities. In total, 36 survey responses were collected from officials in various agencies.

Table 4-1: Surveyed Central Government Agencies

Ministries/Agencies	Functions Related to SMEs' Export Activities
Ministry of Cooperatives & SMEs	<ul style="list-style-type: none"> • Deputy for Production • Deputy for Marketing and Business Networking • Deputy for Human Resource Development • Deputy for Financing
Ministry of Industry	<ul style="list-style-type: none"> • Directorate and Small and Medium Industries • Directorate General of International Industry Cooperation
Ministry of Trade	<ul style="list-style-type: none"> • Directorate General of Foreign Trade • National Agency for Export Development
National Agency for Development Planning	<ul style="list-style-type: none"> • Poverty, Employment and SMEs Section • Economy Section
Ministry of Foreign Affairs	<ul style="list-style-type: none"> • Assistant Minister for Economic, Social & Cultural Affairs
Coordinating Ministry of Economy	<ul style="list-style-type: none"> • Deputy for Coordinating International Economic Cooperation • Deputy for Coordinating Creative Economy, Entrepreneurship and SMEs
Ministry of Maritime & Fishery Affairs	<ul style="list-style-type: none"> • Directorate General of Maritime and Fishery Product Competitiveness
Ministry of Tourism & Creative Economy	<ul style="list-style-type: none"> • Directorate General of Design, Technology and Media-Based Creative Economy
Ministry of Agriculture	<ul style="list-style-type: none"> • Directorate General of Agriculture Product Processing and Marketing

4.1.3 Sample Distribution

In this study, the following terms are used to group SMEs by their export experiences and intentions:

Exporters or **Exporting SMEs** refers to SMEs that have direct export activity experiences, while **Non-Exporters** or **Non-Exporting SMEs** refers to SMEs without direct export activity experiences.

However, as the OECD (2012) suggests, the exporting SMEs can be further classified into: 1) **Current Exporters** or **Active Exporters** as exporting SMEs which are currently actively exporting, and 2) **Sporadic** or **Inactive Exporters** as exporting SMEs which are temporarily not exporting for various reasons at the time of the survey. The non-exporting SMEs can be further categorized into: 1)

Aspiring-Exporters as non-exporting SMEs that have the intention, interest and plan to export in the future, and 2) **Non-Intenders** as non-exporting SMEs with neither the intention nor plan to export in the future.³⁰ In addition, the term **Export Status** represents the grouping of SMEs by export

³⁰ In the literature, the aspiring-exporters (non-exporting firms that have the intention, interest and plan to export in the future) are also often referred to as export intenders (for example, see Naidu, Cavusgil, Murthy, and Sarkar (1997) or Morgan and Katsikeas (1997)).

experience and intention (current exporter, sporadic exporter, aspiring-exporter and non-intender).

Table 4.2 shows the sample distribution by SMEs' export status.

Table 4-2: Sample Distribution by Export Status

SMEs' Export Status	Usable Responses
<u>Exporter</u>	<u>271</u>
<i>Current exporter</i>	235
<i>Sporadic exporter</i>	36
<u>Non Exporter</u>	<u>226</u>
<i>Aspiring exporter</i>	114
<i>No intention to export</i>	112
<u>Total Useable Sample</u>	<u>497</u>

Source: Author's calculation based on survey data

Table 4.3 shows the distribution of the sample by province and export status. A large number of responses were collected from Jawa Timur Province (185 SMEs, including Madura Island) and DKI Jakarta Province (100 SMEs). Both provinces are highly populated and industrialized. The remaining 212 respondents were distributed in the remaining five provinces (Banten, Jawa Barat, Jawa Tengah, DI Yogyakarta and Bali).

Table 4-3: Sample Distribution by Province and Export Status

Province	<u>Exporter</u>		<u>Non-Exporter</u>		<u>Total by Province</u>	
	Count	%	Count	%	Count	%
Banten	11	4.1	4	1.8	15	3.0
DKI Jakarta	56	20.7	44	19.5	100	20.1
Jawa Barat	19	7.0	20	8.8	39	7.8
Jawa Tengah	13	4.8	28	12.4	41	8.2
DI Yogyakarta	53	19.6	6	2.7	59	11.9
Jawa Timur	76	28.0	109	48.2	185	37.2
Bali	43	15.9	15	6.6	58	11.7
<u>Total by Export Status</u>	271	100.0	226	100.0	497	100.0

Source: Author's calculation based on survey data

Table 4.4 shows the distribution of surveyed SMEs by their commodities and export status. Seventy-four SMEs produce more than one type of product (multi products) while the remaining 423 SMEs specialise in a specific type of product, with the largest number in handicrafts (91 SMEs) and the lowest number in machinery components (18 SMEs).

Table 4-4: Sample Distribution by Product and Export Status

Products	Exporter		Non-Exporter		Total by Products	
	Count	%	Count	%	Count	%
Agricultural Products	23	8.5	8	3.5	31	6.2
Food & Beverages	17	6.3	39	17.3	56	11.3
Furniture	43	15.9	37	16.4	80	16.1
Handicrafts	59	21.8	32	14.2	91	18.3
Garments	33	12.2	36	15.9	69	13.9
Leather Products & Fashion Accessories	15	5.5	17	7.5	32	6.4
Household Utensils	15	5.5	12	5.3	27	5.4
Machinery Components	7	2.6	11	4.9	18	3.6
Other Products	9	3.3	10	4.4	19	3.8
Multi Products	50	18.5	24	10.6	74	14.9
Total by Export Status	271	100.0	226	100.0	497	100.0

Source: Author's calculation based on survey data

4.1.4 Survey Instruments

Two sets of structured questionnaires with close-ended questions were developed and translated into *Bahasa Indonesia*. The first questionnaire set was designed for SMEs and the second for central government institutions/agencies. Before the SME survey was administered, the questionnaire was piloted randomly to 25 SMEs in the DKI Jakarta region. The pre-test was carried out to obtain feedback to improve the content of the questions and the instructions, clarity, and layout of the questionnaire. The pre-test also gave important feedback on the questionnaire translation from English to *Bahasa Indonesia*.

Response to the SME survey questions required a good knowledge of the enterprises' operational activities and therefore the questionnaires were administered to SMEs' owners or managers. The structured questionnaire for SMEs consists of eight parts (see Appendix I1). The first part covers SME characteristics such as the history of establishment, the number of employees, business sector, products and legal status. The second and the third parts explore the SMEs' export aspiration, including export plan, motivation, process and initial attempt to export. The fourth part assesses the perceived export barriers including various types of internal and external export barriers. The fifth part investigates SMEs' participation in government assistance programmes. For programme recipients, the questions focus on the helpfulness of the assistance on finance, business environment, capabilities and market access. For non-recipients, the questions focus on the reasons SMEs did not access the government assistance. The sixth part explores the assistance provided by various formal and informal networking sources that may help SMEs overcome various export

impediments. The seventh section asks how exporting affects SMEs' performance. Finally, the eighth part explores owners/managers' socio-economic characteristics such as education, age and business experience.

The second questionnaire set, designed for government agencies, consists of five parts (see Appendix I2). The first part explores the agencies' general strategy to foster SMEs' exports. The second part asks how the agencies implement their strategies and how they coordinate the policy implementation with other agencies as well as with local government agencies. The third part explores the agencies' perceptions of export barriers encountered by SMEs. The fourth part focuses on the range of assistance programmes related to SMEs' exports provided by each agency. Finally, the fifth part asks how the provided assistance programmes could be beneficial for SMEs in removing the barriers to exporting.

4.2 Data Analysis and Empirical Models

This section discusses the data analysis methods used to answer the research objectives. The data analysis involves descriptive statistics analysis, principal component analysis (PCA) and estimation with regression analysis. The descriptive statistics include frequency analysis, mean comparison test (independent t-test and one-way ANOVA) and test of independence (Chi-square test). The PCA is used to reduce the dimensions of export stimuli items and export barrier items. The regression analysis includes binary logistic, fractional logit and least squares regression models.

4.2.1 Export Stimuli Analysis

From the export stimuli literature discussed previously in Section 3.3, twenty-two specific export stimulus types/statements were developed. Table 4.5 shows that the 22 export stimuli items incorporate three export stimuli typologies including those based on external-internal, proactive-reactive and OECD's typology (Leonidou, 1995b; Morgan, 1997; OECD, 2009). Appendix A1 provides the complete descriptions for each export barrier item. In the survey, the exporting SME and aspiring-exporter respondents were asked to identify the extent to which each export stimulus item motivates them to export, in a three-point Likert-scale.³¹ The three-point Likert-scale is used because during the pilot study the respondents had difficulties when given five-point and seven-point Likert-scale. Jacoby and Matell (1971) argued that three-point Likert scale are sufficient to capture the

³¹ The respondents who did not have an intention or plan to export were instructed to skip the export stimuli questions.

variation of non-dichotomous response. In addition, Matell and Jacoby (1971) proved that the number of scale points are independent to the reliability and validity of the measurement.

Table 4-5: Export Stimuli Types Used in the SME Survey

Export Stimuli Codes and Items	Locus and Typologies		
	Internal-External	Proactive-Reactive	OECD Typology
(S1) Find new markets	Internal	Proactive	Growth
(S2) Find large & high income markets	Internal	Proactive	Growth
(S3) Find stable markets	Internal	Proactive	Growth
(S4) First mover advantage	Internal	Proactive	Growth
(S5) Follow peer firms' action	Internal	Reactive	Growth
(S6) Manager's international exposure	Internal	Proactive	Knowledge-related
(S7) Manager's global awareness	Internal	Proactive	Knowledge-related
(S8) Firm's maturity	Internal	Reactive	Knowledge-related
(S9) Product innovation	Internal	Proactive	Knowledge-related
(S10) Product's quality & uniqueness	Internal	Proactive	Knowledge-related
(S11) Revenue in foreign currencies	Internal	Proactive	Knowledge-related
(S12) International business networks	External	Reactive	Network/Social-Ties
(S13) Social networks	External	Reactive	Network/Social-Ties
(S14) Emigrant communities	External	Reactive	Network/Social-Ties
(S15) Foreign buyers	External	Reactive	Network/Social-Ties
(S16) Limited domestic market	External	Reactive	Domestic Condition
(S17) Stiff domestic competition	External	Reactive	Domestic Condition
(S18) Government support	External	Reactive	Domestic Condition
(S19) Home country's good image	External	Reactive	Domestic Condition
(S20) Close distance to target market	External	Reactive	Domestic Condition
(S21) Low transportation cost	External	Reactive	Domestic Condition
(S22) Simplified export procedures	External	Reactive	Domestic Condition

Note: For a complete description of each export stimulus item, see section Appendix A1

Source: Leonidou (1995b), Morgan (1997) and OECD (2009)

The Likert-scale ranges from “not motivating” (response alternative 1), “motivating” (response alternative 2) to “very motivating” (response alternative 3). The advantages and disadvantages of this type of unbalanced Likert-scale without mid-point neutral scale has been well addressed in the literature. The unbalanced scale points can cause biasedness if the questions are controversial or sensitive to the local socio-cultural or political norms, in which the respondents tend to give answers that are socially more acceptable (Garland, 1991; Johns, 2010). By contrast, the topic of this study is neither politically nor socio-culturally sensitive and during the pilot study the respondents showed a strong tendency to choose the neutral scale when the mid-point scale option is available. Hence, the

three-point Likert scale without mid-point was used to force a choice without sacrificing the reliability, validity and unbiasedness principles.³²

The Likert-scale responses of the export stimulus items are analysed in four different ways. First, we rank the twenty-two export stimulus items by their average Likert response scores to identify the main factors that stimulate SMEs to export. A high average Likert score of an export stimulus item represents the high importance of that type of stimulus in motivating SMEs to export (Hashim & Ahmad, 2008; Liargovas & Skandalis, 2008). Second, we compare aspiring-exporters and exporters' average Likert response scores for each export stimulus item. It is hypothesized that the exporters' average Likert response scores are higher than those of aspiring-exporters for each export stimulus item because SMEs are more likely to become exporters if they are driven by strong motivating factors to export. Third, we analyse the export stimuli for the exporting SMEs group and the aspiring-exporter SME group separately. We rank the twenty-two export stimulus items for each SME group. The high average Likert response score of an export stimulus item for the aspiring-exporter group indicates the importance of that type of stimulus in motivating SMEs to initiate exporting (stimuli at the pre-exporting stage). Differently, the high average Likert response score of an export stimulus item given by the exporting SMEs group represents the importance of that type of stimulus in motivating exporting SMEs to sustain and develop exports (stimuli at the exporting stage).

Fourth, we use principal component analysis (PCA) to reduce the dimensions of the 22 export stimulus items. Following Rencher (2012), Tufféry (2011), Abdi and Williams (2010) and PSU (2017), the PCA procedure in reducing the dimensions of export stimuli items can be briefly explained as follows. We initially have a vector of 22 export stimuli items:

$$\mathbf{S} = (\mathbf{s}_1, \mathbf{s}_2, \dots, \mathbf{s}_{22}) \quad (4-2)$$

The population variance-covariance matrix of the vector is given by:

$$\text{var}(\mathbf{S}) = \mathbf{\Sigma} = \begin{pmatrix} \sigma_1^2 & \sigma_{12} & \dots & \sigma_{122} \\ \sigma_{21} & \sigma_2^2 & \dots & \sigma_{222} \\ \vdots & \vdots & \ddots & \vdots \\ \sigma_{221} & \sigma_{222} & \dots & \sigma_{22}^2 \end{pmatrix} \quad (4-3)$$

³² For the use of the three-point Likert-scale without a neutral scale/mid-point, see OECD (2012).

Consider the following linear relationships/equations:

$$\begin{aligned}
 Z_1 &= a_{11}s_1 + a_{12}s_2 + \dots + a_{122}s_{22} \\
 Z_2 &= a_{21}s_1 + a_{22}s_2 + \dots + a_{222}s_{22} \\
 &\vdots \\
 Z_{22} &= a_{221}s_1 + a_{222}s_2 + \dots + a_{2222}s_{22}
 \end{aligned}
 \tag{4-4}$$

Each of the relationships above can be viewed as a linear regression equation that predicts Z_i from the export stimuli variables s_1, s_2, \dots, s_{22} . Accordingly, $a_{i1}, a_{i2}, \dots, a_{i22}$ can represent the regression coefficients.

Z_i is random because it is a function of random variable s_1, s_2, \dots, s_{22} . Hence, its population variance is given by:

$$var(Z_i) = \sum_{k=1}^{22} \sum_{l=1}^{22} a_{ik} a_{il} \sigma_{kl} = A_i' \Sigma A_i
 \tag{4-5}$$

Where A_i is a vector, $A_i = (a_{i1}, a_{i2}, \dots, a_{i22})$. Consequently, Z_i and Z_j have the following population covariance:

$$cov(Z_i, Z_j) = \sum_{k=1}^{22} \sum_{l=1}^{22} a_{ik} a_{jl} \sigma_{kl} = A_i' \Sigma A_j
 \tag{4-6}$$

We aim to obtain the first principal component of export stimuli (Z_1), which is a linear combination of s-variables (stimuli) and that has maximum variance among all linear combinations. Maximum variance is required for Z_1 to explain as much export stimuli variation as possible. To obtain a unique solution for Z_1 , we must define the regression coefficients $a_{11}, a_{12}, \dots, a_{122}$ that maximise Z_1 's variance:

$$var(Z_1) = \sum_{k=1}^{22} \sum_{l=1}^{22} a_{1k} a_{1l} \sigma_{kl} = A_1' \Sigma A_1
 \tag{4-7}$$

Subject to the constraint that the sum of the squared coefficients is equal to 1:

$$A_1' A_1 = \sum_{j=1}^{22} a_{1j}^2 = 1
 \tag{4-8}$$

This first principal component of export stimuli (Z_1) retains the largest amount of variation in the sample.

Accordingly, to obtain the i^{th} principal component of export stimuli (Z_i), we must define the regression coefficients $a_{i1}, a_{i2}, \dots, a_{i22}$ that maximise Z_i 's variance:

$$\text{var}(Z_i) = \sum_{k=1}^{22} \sum_{l=1}^{22} a_{ik} a_{il} \sigma_{kl} = A'_i \Sigma A_i \quad (4-9)$$

Subject to the constraint that the sum of the squared coefficients is equal to 1:

$$A'_i A_i = \sum_{j=1}^{22} a_{ij}^2 = 1 \quad (4-10)$$

We also add another constraint that Z_i is uncorrelated with all previously defined principal components of export stimuli. Formally:

$$\begin{aligned} \text{cov}(Z_1, Z_i) &= \sum_{k=1}^{22} \sum_{l=1}^{22} a_{1k} a_{il} \sigma_{kl} = A'_1 \Sigma A_i = 0 \\ \text{cov}(Z_2, Z_i) &= \sum_{k=1}^{22} \sum_{l=1}^{22} a_{2k} a_{il} \sigma_{kl} = A'_2 \Sigma A_i = 0 \\ &\vdots \\ \text{cov}(Z_{i-1}, Z_i) &= \sum_{k=1}^{22} \sum_{l=1}^{22} a_{i-1,k} a_{il} \sigma_{kl} = A'_{i-1} \Sigma A_i = 0 \end{aligned} \quad (4-11)$$

Hence, all principal components obtained with the PCA are uncorrelated with one another. In addition, the i^{th} principal component of export stimuli retains the i^{th} largest fraction of variation in the sample.

The next step is to determine the number of components to retain. We will use the *Kaiser Criterion* for component retention. This criterion dictates that we retain all components whose variance is greater than that of the variables analysed (with eigenvalues larger than 1.0). We also require that the retained components account for at least 50% of the export stimuli variation.³³ The retained components can be interpreted as the broad dimensions/typology of export stimuli for our survey data and therefore will be compared with the typology of export stimuli proposed by the OECD (2009), and internal-external/proactive-reactive typologies by Leonidou (1995b) and Morgan (1997).

4.2.2 Export Barriers Analysis

From the export barrier literature discussed previously in Section 3.4, fifty specific export barrier types/items were developed. Table 4.6 shows the fifty export barrier items and the typology of each item. Appendix B1 provides the complete descriptions for each item. In the survey, all respondents were asked to indicate how serious/difficult each export barrier item in SMEs' export activities was in

³³ For a more thorough discussion on component retention criteria, see for example Hubbard and Allen (1987) or Tufféry (2011).

a three-point Likert-scale. The Likert-scale ranges from “not difficult” (response alternative 1), “difficult” (response alternative 2) to “very difficult” (response alternative 3).³⁴

The analysis of the export barrier items’ Likert-scale responses is as follows. First, we rank the fifty export barrier items by their average Likert response scores to identify the main impediments to SMEs’ exports. A high average Likert score of an export barrier item corresponds to a high level of difficulty or severity of that type of barrier for SMEs (Hashim & Ahmad, 2008; Liargovas & Skandalis, 2008). Second, we compare exporters and non-exporters’ average Likert response scores for each export barrier item. Exporters are hypothesized to exhibit more positive attitudes towards export barriers and thereby lower average Likert response scores for each export barrier item. Third, we analyse the export barriers for the exporter group and the non-exporter group separately by ranking the fifty export barrier items for each SME group. The high average Likert response scores of an export barrier item for the non-exporter group indicate the high level of difficulty or severity of that item for SMEs to initiate exporting (main barriers at the pre-exporting stage). The high average Likert response scores of an export barrier item given by the exporter group represent the high level of difficulty for SMEs to sustain and develop exporting (main barriers at the exporting stage).

We use PCA to reduce the dimension of the 50 export barrier items. The dimension reduction with the PCA follows the procedure previously explained in the dimension reduction of export stimuli (Section 4.2.1). Hence, we repeat the procedure of Equation (4.2) through Equation (4.11), with the difference being that we replace the vector of 22 export stimuli $S = (s_1, s_2, \dots, s_{22})$ with the vector of 50 export barriers $B = (b_1, b_2, \dots, b_{50})$. The retained principal components may represent the typology of export barriers for our survey data and therefore will be compared with the typology of export barriers proposed by Lloyd-Reason and Mughan (2008) and the OECD (2012).

In the survey, the respondents were also asked to identify five types of export barriers that were at the top of their minds (top-of-mind method).³⁵ The five top-of-mind export barriers identified by each respondent are given weighted scores as follows. The score of five is given to the 1st barrier, four for the 2nd barrier, three for the 3rd barrier, two for the 4th barrier and one for the 5th barrier. Accordingly, the fifty export barrier items can be ranked by the total scores of the top-of-mind survey question method.

³⁴ For the advantages and disadvantages of three-point Likert-scale without neutral scale/mid-point, see Section 4.2.1 and for the use of such scale in the survey of export barrier, see OECD (2012).

³⁵ For the use of top-of-mind export barriers in the survey, see Lloyd-Reason and Mughan (2008) and OECD (2012).

Table 4-6: Export Barrier Items Used in the Survey

Export Barrier Items	Types of Barriers
B1 Obtaining information about potential markets	Internal – Informational Barriers
B2 Obtaining reliable data on target markets' economy	Internal – Informational Barriers
B3 Identifying business opportunities in target markets	Internal – Informational Barriers
B4 Contacting potential customers in target markets	Internal – Informational Barriers
B5 Devoting managerial time to deal with export activities	Internal – Human Resource Barriers
B6 Inadequate quantity and capability of personnel	Internal – Human Resource Barriers
B7 Shortage of working capital	Internal – Financial Barriers
B8 Shortage of investment capital	Internal – Financial Barriers
B9 Shortage of export insurance	Internal – Financial Barriers
B10 Granting credit facilities or payment delay to foreign customers	Internal – Financial Barriers
B11 Developing new products suitable for foreign markets	Internal – Marketing Barriers
B12 Adapting product design/style demanded by foreign customers	Internal – Marketing Barriers
B13 Meeting foreign product quality/standards/specifications	Internal – Marketing Barriers
B14 Offering satisfactory prices to foreign customers	Internal – Marketing Barriers
B15 Matching competitors' prices in target markets	Internal – Marketing Barriers
B16 Lack of excess production capacity for exports	Internal – Marketing Barriers
B17 Establishing/using distribution channels in target markets	Internal – Marketing Barriers
B18 Obtaining reliable representation in foreign markets	Internal – Marketing Barriers
B19 Supplying inventory abroad	Internal – Marketing Barriers
B20 Excessive export transportation and insurance costs	Internal – Marketing Barriers
B21 Offering technical/after-sales service in target markets	Internal – Marketing Barriers
B22 Adjusting promotional activities to the target markets	Internal – Marketing Barriers
B23 Unfamiliar exporting procedures/paperwork	External – Procedural Barriers
B24 Communicating with overseas customers	External – Procedural Barriers
B25 Slow collection of payments from abroad	External – Procedural Barriers
B26 Enforcing contracts/resolving disputes in target markets	External – Procedural Barriers
B27 Lack of home government export assistance/incentives	External – Governmental Barriers
B28 Unfavourable home country's export rules and regulations	External – Governmental Barriers
B29 Restriction of asset ownership in target markets	External – Governmental Barriers
B30 Unequal treatment in tax/eligibility to affiliate in target markets	External – Governmental Barriers
B31 Restriction on the movement of people in target markets	External – Governmental Barriers
B32 Unequal treatment in business competition law in target markets	External – Governmental Barriers
B33 Sophisticated target markets' laws/ regulations	External – Governmental Barriers
B34 Different foreign customer attitudes/habits	External – Task Barriers
B35 Stiff competition in target markets	External – Task Barriers
B36 Economic fluctuations in target markets	External – Environmental Barriers
B37 High risks of foreign currency	External – Environmental Barriers
B38 Unfamiliar business practices in target markets	External – Environmental Barriers
B39 Different socio-cultural traits	External – Environmental Barriers
B40 Verbal/nonverbal language differences	External – Environmental Barriers
B41 Lack of e-commerce infrastructure in target markets	External – Environmental Barriers
B42 Political instability in target markets	External – Environmental Barriers
B43 Negative image of Indonesia or Indonesian products	External – Environmental Barriers
B44 High tariff costs in target markets	External – Environmental Barriers
B45 (Intellectual) property rights protection in target markets	External – Environmental Barriers
B46 Health, safety & technical standards in target markets	External – Environmental Barriers
B47 Tariff classification & reclassification in target markets	External – Environmental Barriers
B48 Quotas and/or embargoes imposed by target markets	External – Environmental Barriers
B49 Customs administration cost in target markets	External – Environmental Barriers
B50 Preferential tariff for exporters from other countries	External – Environmental Barriers

Source: OECD-APEC (2006), Leonidou (2004), OECD (2012)

According to OECD-APEC (2006), Likert-scale and the top-of-mind survey question methods may result in different export barrier item ranks because the two methods explore different types of perceived export barriers. We expected the majority of respondents to give the Likert scale responses for most of the fifty export barrier items because each respondent was asked the Likert-scale questions for each export barrier item. Consequently, a high average Likert response score for an export barrier item indicates that the barrier item is universally/generally problematic for the majority of SMEs. On the contrary, in the top-of-mind question the respondents were forced to mention only the five most difficult export barriers. The five mentioned export barriers are most likely the barriers that are specifically problematic for SMEs, i.e. specifically related to SMEs' types of commodity or region.

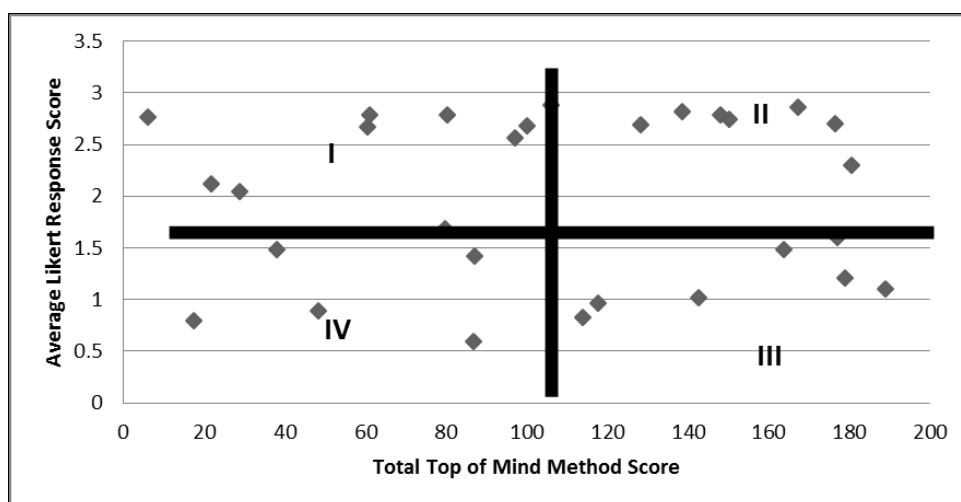


Figure 4-2: Policy Options to Overcome Export Barriers Faced by SMEs

Note: The plot uses dummy data for illustration purpose only

Source: Adopted from Lloyd-Reason and Mughan (2008) and OECD-APEC (2006)

Next, the total average Likert response scores and the total top-of-mind scores of the fifty export barrier items are plotted in a single diagram (see figure 4.2). The vertical axis measures the average Likert response score and the horizontal axis represents the top-of-mind total score for each export barrier item. The plot area can be divided into four quadrants. Quadrant IV contains export barrier items that are perceived as less severe with both survey question methods while quadrant II consists of export barrier items that are perceived as very difficult with both methods. Both quadrant II and IV show consistency of the results of the two survey methods. Differently, quadrant I consists of export barrier items that have low scores with the top-of-mind method but high average Likert response scores. These export barrier items are universally encountered by all SMEs but they are not particularly serious impediments for SMEs in specific sectors or regions. Quadrant III consists of

export barrier items that have low average Likert response scores, but high scores with the top-of-mind method. These export barrier items are not generally/universally faced by SMEs but might be specifically severe for SMEs in certain sectors or regions.

4.2.3 Network Relationships for Internationalisation

A section in the questionnaire (Section 6) is designed to explore how SMEs use network relationships to help them internationalise. In the first part of the section, SMEs' owners/managers were asked to indicate whether they had received external assistance to help them overcome various export barriers, including financial, informational, marketing, distribution, human resources, product, procedure and business environment barriers. The respondents were then asked to indicate the sources/providers of the assistance, i.e. central government agencies, local government agencies or non-government networking sources including business association/ chambers, private companies/ state owned enterprises (SOEs), universities/research institutes, business partners/associates, Indonesian emigrant communities overseas and family/relatives (Battaglia et al., 2006; Senik et al., 2011). The respondents were also asked to indicate the helpfulness of assistance received using a three point Likert-Scale (1 = not helpful, 2 = helpful, 3 = very helpful).³⁶

The data analysis of the survey results are as follows. First, we identify the type of networking sources that provide most assistance (by number provision reported by SMEs) and provide most helpful assistance (highest average helpfulness scores). Second, we identify the types of assistance that are mostly provided by networking sources (counts of assistance received by SMEs) and the most helpful (highest average helpfulness score) types of assistance.

The second part of the questionnaire section on network relationships explores the form of relationships maintained by SMEs with the eight types of networking sources, including central government agencies, local government agencies, business association/chambers, private companies/SOEs, universities/research institutes, business partners/associates, Indonesian emigrant communities overseas and family/relatives. Eight forms of relationships are considered including seven formal relations and two informal relations (Senik et al., 2011). The formal relationships maintained by SMEs include being regular participants in all assistance programs, being irregular participants in all assistance programmes, making regular contact through formal/official discussions/seminars, making irregular contact through formal/official discussions/seminars, being a

³⁶ For the advantages and disadvantages of three-point Likert-scale without neutral scale/mid-point, see Section 4.2.1.

member of a forum set up by agencies/associations/institutes and involvement in strategic partnership(s). The informal relationships maintained by SMEs include personal relationships with key persons in the agencies/institutions and making indirect contact with agencies/institutions through another party. The independence test (Chi-square test) is used to draw the association between SMEs' export status (exporting and non-exporting SMEs) with the form of relationships that they maintain with various networking sources.

4.2.4 Government Export Assistance

Section 4.1.2 previously explained that in addition to the SME survey, this study also administered a survey to various central government agencies whose policy areas are related to SME internationalisation. Government officials in each agency were asked their perceptions on the difficulty level of fifty specific export barrier items, similar to those export barrier items in the SME survey. The government officials were asked to indicate how serious/difficult each export barrier item was in the SMEs' export activities in a three-point Likert-scale that ranges from "not difficult" (response alternative 1), "difficult" (response alternative 2) to "very difficult" (response alternative 3).³⁷

We rank the export barrier items based on the average Likert response score given by government agencies. The ranks may represent policy makers' perceptions of the level of difficulties/severities of each export barrier and may reflect government agencies' priorities in assistance provision. Government agencies are likely to provide more assistance to remove the export barriers that they perceive as the most severe for SMEs, but less assistance for the barriers that they perceive as less difficult.

We plot government agencies' perceptions of the export barriers against SMEs' perceptions (obtained from the SME survey) using a 3 x 3 grid (OECD-APEC, 2006). Figure 4.3 plots SMEs' perceived difficulties of export barrier items on the horizontal axis and the government agencies' perceived difficulties of export barrier items on the vertical axis. The fifty export barrier items are classified into three broad level of difficulties including the Top 25% (12 most difficult export barrier items), the Mid 50% (26 moderately difficult export barrier items) and the Bottom 25% (12 least difficult barriers).

³⁷ For the advantages and disadvantages of three-point Likert-scale without neutral scale/mid-point, see Section 4.2.1.

For some export barrier items, government agencies may give higher average Likert response scores than SMEs (barrier items in Cells A, B and D). The government agencies tend to over-provide the assistance to remove these types of barriers and therefore may reconsider the current level of assistance provisions. For the export barrier items placed in Cells H, I and F, the government agencies give lower average Likert response scores than SMEs. The government agencies tend to underprovide the assistance to remove this type of barriers and therefore should look to increase the current level of provision. For export barrier items in Cells G, E and C, both government agencies and SMEs give equally low, medium and high average Likert response scores, respectively. It is likely that the current level of assistance provision already meet SMEs’ needs and therefore should be sustained (i.e. sustain low provision for barriers in Cell G, medium provision for barriers in Cell E and large provision for barriers in Cell C).

Government agencies’ perspectives	Very Difficult (Top 25%)	(A) Reconsider	(B) Reconsider:	(C) Sustain:
	Moderately difficult (Mid 50%)	(D) Reconsider:	(E) Sustain:	(F) Increase:
	Less Difficult (Bottom 25%)	(G) Sustain:	(H) Increase:	(I) Increase:
Export Barriers’ Rank based on Likert Score	Less Difficult (Bottom 25%)	Moderately Difficult (Mid 50%)	Very Difficult (Top 25%)	SMEs’ Perspectives

Figure 4-3: Policy Options to Overcome Export Barriers Faced by SMEs

Source: OECD-APEC (2006), Lloyd-Reason and Mughan (2008)

We also investigate SMEs’ participation in export assistance provided by the government agencies. In the SME survey, the respondents were asked whether they have received five types of assistance from any central government agencies including international trade fairs, publication of *SME Catalogues*, managerial training, technical training, and export financing, insurance and guarantees. The respondents were also asked whether they have received five types of assistance from any local government agencies including technical training, managerial training, grants of equipment, grants of capital and international trade fairs. The independence test (Chi-square test) is used to examine the association between SMEs’ export status (exporting and non-exporting) with their participation in export assistance provided by central and local government agencies. In addition, for every assistance that SMEs received from central or local government agencies, the respondents were

asked to indicate the helpfulness of the assistance in a three-point Likert-scale (1 = not helpful, 2 = helpful, 3 = very helpful).

4.2.5 Export Process and Strategy

Section 3.2 previously discussed the six-step model of internationalisation processes and strategy in which SMEs have to address the following six questions in their attempt to export: why, firm situation, what, where, how and when (Negrusa, 2009). However, in Section 3.2 we also argued that the model is not strictly deterministic because the sequence of the six-steps can be interchanged. Hence, in this study, we treat each step as an element of internationalisation and we replaced SWOT (company situation) with firm and owner characteristics (*who*) (Ottaviano & Martincus, 2011). Figure 4.3 illustrates the six-element model of the internationalisation process and strategy.

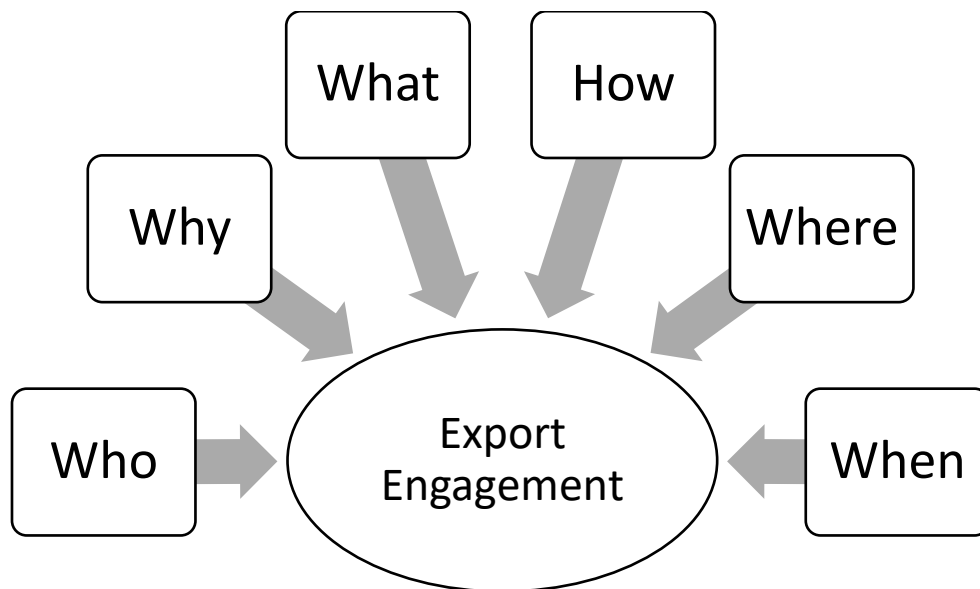


Figure 4-4: Six Elements of the Internationalisation Processes and Strategies

Source: Adopted and modified from Negrusa (2009)

The survey responses will be used to answer the question in each element. First, the firm and owner characteristics are used to distinguish exporters and non-exporters (*who*). Second, the export stimuli are used to find out the export motivating factors (*why*). Third, SMEs' type of products may show the type of commodities that can lead to international markets (*what*). Fourth, the source of information from which SMEs received information regarding export opportunity may show how SMEs initiate exporting (*how*). Fifth, SMEs' selection of foreign market destinations for their exports will be identified (*where*). Finally, the number of years SMEs have operated in the domestic market before they begin exporting will reveal the timing to internationalise (*when*).

4.2.6 Factors Influencing SMEs' Export Engagement

In Section 3.7, we discussed a theoretical framework that explained SMEs' export decision as a function of expected monetary revenue and expected costs of exporting activities (Ottaviano & Martincus, 2011; Roberts & Tybout, 1997; Yi & Wang, 2012). Specifically, SMEs export if the expected export revenue exceeds the expected cost of exporting. However, our pilot survey found that SMEs' accurate financial information was difficult to obtain. Many SMEs did not have good bookkeeping systems and many others were reluctant to reveal their financial information.

To tackle this problem, we instead follow Shih and Wickramasekera (2011) who proposed a more general model of export engagement. In their model, export decision or engagement is determined by enhancing factors, inhibiting factors and firm characteristics. Export enhancing factors include perceived or actual benefits of exporting and other factors that trigger/stimulate SMEs' exports. Export inhibiting factors include perceived export barriers and perceived exporting costs. Firm characteristics include firm experience, size and managerial team characteristics.

Since the target variable is a binary choice of SMEs' export engagement and we aim to predict SMEs' export engagement with a set of explanatory variables, the ordinary least square (OLS) regression is not statistically appropriate (Hill, Griffiths, & Lim, 2011; Maddala, 2001). Instead, we employ a binary logistic regression model to predict the probability of firm i engaging in export activities, given a set of enhancing factors, inhibiting factors and firm characteristics. Formally, the binary logit model procedure can be briefly explained as follows.

$$P_i = E(EXPORT_i = 1) = \frac{1}{1+e^{-Z_i}} \quad (4-12)$$

Where $EXPORT_i$ is firm i 's export engagement status, which is equal to 1 if the firm is an exporter and equal to 0 if the firm is a non-exporter; P_i is firm i 's estimated probability of export engagement (high value of P_i implies a high probability to become an exporter); and

$$Z_i = \alpha + \sum_{j=1}^n \beta_j STIMULI_{ij} + \sum_{k=1}^p \gamma_k BARRIERS_{ik} + \sum_{l=1}^q \delta_l FIRM_{il} + \epsilon_i \quad (4-13)$$

Where $STIMULI_{ij}$ is a vector of export stimuli; $BARRIERS_{ik}$ is a vector of export barriers; $FIRM_{il}$ is a vector of firm characteristics; and ϵ_i is the error term. The notations n , p and q represent the total number of variables representing export stimuli, export barriers and firm characteristics, respectively. The symbols α , β , γ and δ represent the constant and the vector of coefficients for the export stimuli, export barriers and firm characteristics, respectively.

As equation 4.13 represents the cumulative logistic distribution function, the probability of not engaging in export activities is given by:

$$(1 - P_i) = \frac{1}{1+e^{Z_i}} \quad (4-14)$$

Thus, the odds of observing an exporting SME ($EXPORT_i = 1$) over non-exporting SMEs ($EXPORT_i = 0$) is:

$$\frac{P_i}{1+P_i} = \frac{1+e^{Z_i}}{1+e^{-Z_i}} = e^{Z_i} \quad (4-15)$$

Taking the natural logarithm of equation (4.15), we obtain:

$$\ln\left(\frac{P_i}{1-P_i}\right) = Z_i \quad (4-16)$$

Hence, Z_i (in equation 4.16) is the natural logarithm of the odds ratio in favor of observing exporting SMEs.

To obtain efficient parameter estimates, the logistic model uses maximum likelihood estimation techniques. The observed $EXPORT_i$ are the realization of a binomial process with probabilities given by equation 4.12 that vary by individual firm (depending on Z_i). Hence, the likelihood function (L) can be written as follows (Maddala, 2001):

$$L = \prod_{EXPORT_i=1} P_i \prod_{EXPORT_i=0} (1 - P_i) \quad (4-17)$$

We will carry out two binary logit estimations with two different sample size. In the first estimation, we investigate the factors that distinguish exporting and non-exporting SMEs. Thus, the dichotomous dependent variables take the values of 1 for exporters and 0 for non-exporters. In the second estimation, we focus on investigating the factors that distinguish exporting SMEs and aspiring-exporters (non-exporting SMEs that have the intention/plan to export). Hence, the dichotomous dependent variable takes the value of 1 for exporters and 0 for aspiring-exporters.

We use three groups of independent variables including export-enhancing factors, export-inhibiting factors and firm characteristics. Table 4.7 provides the description and the expected signs of the independent variables (the hypothesized relationship between the independent variables and the probability of SMEs' export engagement).

Table 4-7: Independent Variables for the Export Engagement Model

Variables	Description	Priori Sign
Enhancing Factors		
<i>OwnerStudyAbroad</i>	SME owner's overseas study experience, where 1 if SME owner ever studied overseas, 0 otherwise	+
<i>OwnerTrainAbroad</i>	SME owner's training/short courses experience, where 1 if SME owner ever had training/short courses overseas, 0 otherwise	+
<i>OwnerWorkAbroad</i>	SME owner's overseas work experience, where 1 if SME owner previously worked overseas, 0 otherwise	+
<i>OwnerWorkMNC</i>	SME owner's MNC/exporting firm work experience, where 1 if SME owner previously worked with MNC or exporting firms, 0 otherwise	+
<i>GovCentral_Assist</i>	1 if SME received either promotional, business management, finance or production assistance from any central government agencies	+
<i>GovtLocal_Assist</i>	1 if SME received technical or managerial training, grants or promotional assistance from any local (provincial, regency or municipal) government agencies	+
<i>NonGovt_Assist</i>	1 if SME received any type of assistance from either business association/chambers, universities/research institutes, private companies/SOEs, business partners/associates, family/relatives or Indonesian emigrants community	+
<i>ProductXNational</i>	SME's type(s) of product's share in Indonesia's total national non-oil and gas export	+
<i>ProvinceXNational</i>	Province's share in Indonesia's total national non-oil and gas exports	+
Inhibiting Factors		
Export Barriers	Factor scores/summated scale of export barrier components/dimensions resulting from the principal component analysis.	-
SMEs Characteristics		
<i>FirmAge</i>	Number of years the firm has been operating since firm's establishment by the time of the survey	+
<i>TotalEmployee</i>	Total number of employee	+
<i>OwnerGender</i>	Owner's gender, where 1 = male, 0 = female	+/-
<i>OwnerAge</i>	Owner's age at the time of the survey	+
<i>OwnerEducation</i>	Owner's educational attainment, where 1 = primary school or no formal education, 2 = junior or senior high school, 3 = college, diploma or vocational school, 4 = bachelor degree, 5 = postgraduate degree	+

SME owners/managers' international experience and exposure are expected to have a positive effect to SMEs' export engagement. An internationally experienced management team tends to

immediately explore foreign market opportunities after the firm's inception and has greater probability of building a business partnership with foreign distributors or buyers (Reuber & Fischer, 1997). Overseas living or working experiences positively correlate with information gathering or market intelligence (Williams & Chaston, 2004). A management team with international experience is also likely to have more personal contacts in foreign markets (Andersen, 2006). In our model, we use three variables to represent international exposure including overseas study experience (*OwnerStudyAbroad*), overseas training or short courses experience (*OwnerTrainAbroad*) and overseas work experience (*OwnerWorkAbroad*). In addition, we also consider owners/managers' MNC or exporting firms work experience (*OwnerWorkMNC*) to have the same effect on internationalisation as overseas work experience.

SMEs' probability of becoming an exporter is expected to be enhanced by government export assistance (Demick & O'Reilly, 2000; Francis & Collins-Dodd, 2004; Shamsuddoha et al., 2009; Wilkinson & Brouthers, 2006). We use *GovCentral_Assist* to represent various types of export assistance provided by central government agencies. These include international trade fairs (international shows, exhibitions and expos), *SME Catalogue* publications, technical training (including specific production processes, packaging, logistics or machinery aimed at specific markets), managerial training (such as business planning, marketing, cultural differences awareness, language skills and knowledge of export procedures) and financial support (including export financing, export insurance and export guarantees). We use *GovtLocal_Assist* to represent various export assistance provided by provincial, municipal or regency government agencies. These include technical training, managerial training, grants of equipment, grants of capital and trade fairs.

We expect assistance provision by external non-governmental actors in the network to positively affect SMEs' probability to engage in export activities (Demick & O'Reilly, 2000; Levy et al., 1999; Zain & Ng, 2006; Zhou et al., 2007). Hence, *NonGovt_Assist* represents financial, technical, managerial and promotional assistance received by SMEs from various non-governmental actors in the network. These include informal network sources (family, relatives, business associates and Indonesian emigrant communities overseas) or formal non-governmental sources (including business chambers/associations, SOEs and universities/research institutes).

We expect SMEs' export engagement probability to correlate with their type of product, despite the extant literature being not fully conclusive on the direction of the relationship. It has been argued that SMEs have a better chance of exporting if they produce merchandise that is already demanded in foreign markets (buyer effect) and therefore a large number of SMEs imitate the types of products

(copying/imitation effect) (Wengel & Rodriguez, 2006). Conversely, it has been argued that product uniqueness can be one of SMEs' sources of competitive advantage in foreign markets (Barney, 1991; Chatterjee & Wernerfelt, 1991). In our model, *ProductXNational* represents type(s) of commodity's share in Indonesia's total national non-oil and gas exports. We expect SMEs to have a higher propensity to export if they produce a type of merchandise that is among Indonesia's main non-oil and gas exports.

We hypothesise that SMEs' export engagement is affected by their location (province). We expect that SMEs which operate in a province with a large contribution to Indonesia's total non-oil and gas exports are more likely to become exporters. Geographical agglomeration of exporters allows positive externalities, mainly in information spill overs (Silvente & Giménez, 2007), and access to export related services/infrastructure (Freeman, Styles, & Lawley, 2012).

The export inhibiting factors are represented by the perceptions on export barrier difficulties. Section 4.2.2 discussed the 50 types of export barriers that we used in the survey. We expect each type of export barrier to have negative correlations with SMEs' export engagement. The more difficult SMEs perceive a type of export barrier, the less likely they become exporters. However, we first reduce the 50 export barrier items into a smaller number of variables underlying broader dimensions of export barriers using the PCA (see Section 4.2.2). The summated scales/factor scores for each extracted and retained factor/component are calculated and used as input data in the regression model.

Two firm characteristics are used in our export engagement model. Firm age is hypothesised to have a positive effect on export engagement (Brush, 2012). As SMEs accumulate operational experience, they may accumulate capital or creditworthiness and establish an administrative structure and decision making process. The number of employees is expected to have a positive effect on export engagement. Employees are crucial when SMEs need to upgrade the product quality and meet foreign buyers' requirements (Ottaviano & Martincus, 2011).

Our model also controls three owner characteristics (gender, age and education). Owners' age and education are hypothesised to have positive correlations with export engagement (Cavusgil & Naor, 1987; Obben & Magagula, 2003). However, the relationship between gender and export propensity is still inconclusive. On the one hand, it has been argued that female owners are less encouraged to expand the business beyond the domestic market and are less likely to have international business experience than male owners (Orser, Spence, Riding, & Carrington, 2010). On the other hand, Welch,

Welch, and Hewerdine (2008) argue that female business owners have some gender-specific characteristics that may be valuable in export activities, such as patience, persistence, paying attention to detail and being passionate about the business.

4.2.7 Export Performance Analysis

Export performance is represented by export intensity (the ratio of export revenue to the total revenue (Bianchi & Wickramasekera, 2016; Calabrò & Mussolino, 2013; Majocchi, Bacchiocchi, & Mayrhofer, 2005). Accordingly, a regression analysis is performed to estimate the determinants of SMEs' export intensity.

Table 4.8 describes the independent variables used to estimate SMEs' export intensity. In general, three groups of determinants are employed: export-enhancing factors, export-inhibiting factors and SMEs' characteristics (Shih & Wickramasekera, 2011). In Section 3.4, we discussed how export barriers are crucial, not only at the pre-exporting stage (to initiate exporting), but also at the exporting stage (to sustain and expand exporting) (Bilkey & Tesar, 1977; Leonidou, 2004; OECD-APEC, 2006). Hence, we use a set of inhibiting factors similar to those in the export engagement model to estimate export intensity. In particular, export-inhibiting factors are represented by export barrier dimensions obtained from PCA (see Section 4.2.6). Likewise, we use the set of variables to represent SME characteristics similar to those used in the export engagement model, including *FirmAge*, *TotalEmployee*, *OwnerGender*, *OwnerAge* and *OwnerEducation*.

In Section 3.3, we discussed how export stimuli are crucial not only for SMEs to initiate exporting (at the pre-export stage) but also to sustain and expand exporting (exporting stage) (Acedo & Galán, 2011; Morgan & Katsikeas, 1997). Hence, we use a set of enhancing factors similar to those in the export engagement model (see Table 4.8). However, we add two explanatory variables of enhancing factors: *ExportASEAN* (whether ASEAN is one of SMEs' destination markets) and *YearsExporting* (number of years the SMEs have been exporting at the time of the survey). SMEs are expected to have higher export intensity if they export to ASEAN markets (regardless of whether they also export to other markets), due to the ASEAN free trade agreement that took effect in 1992. *YearsExporting* is hypothesised to have a positive effect on export intensity. As SMEs accumulate export experience, they also accumulate foreign market knowledge that might be crucial for export development (Ciszewska-Mlinaric, 2016).

Table 4-8: Independent Variables for Export Intensity Estimation

Variables	Description	Prior Sign
Enhancing Factors		
<i>OwnerStudyAbroad</i>	SME owner's overseas study experience, where 1 if SME owner ever studied overseas, 0 otherwise	+
<i>OwnerTrainAbroad</i>	SME owner's training/short courses experience, where 1 if SME owner ever had training/short courses overseas, 0 otherwise	+
<i>OwnerWorkAbroad</i>	SME owner's overseas work experience, where 1 if SME owner previously worked overseas, 0 otherwise	+
<i>OwnerWorkMNC</i>	SME owner's MNC/exporting firm work experience, where 1 if SME owner previously worked with MNC or exporting firms, 0 otherwise	+
<i>GovCentral_Assist</i>	1 if SME received either promotional, business management, finance or production assistance from any central government agencies	+
<i>GovtLocal_Assist</i>	1 if SME received technical or managerial training, grants or promotional assistance from any local (provincial, regency or municipal) government agencies	+
<i>NonGovt_Assist</i>	1 if SME received any type of assistance from either business associations/chambers, universities/research institutes, private companies/SOEs, business partners/associates, family/relatives or Indonesian emigrant communities	+
<i>ExportASEAN</i>	SME's export destination, where 1 if SME exports to one or more ASEAN countries (regardless of whether the SME also exports to Non-ASEAN markets or not), 0 otherwise	+
<i>YearsExporting</i>	Number of years the SME had been exporting at the time of the survey	+
<i>ProductXNational</i>	SME's type(s) of product's share in Indonesia's total national non-oil and gas exports	+
<i>ProvinceXNational</i>	Province's share in Indonesia's total national non-oil and gas export	+
Inhibiting Factors		
Export Barriers	Factor scores/summated scale of export barrier components/dimensions resulting from the principal component analysis.	-
SMEs Characteristics		
<i>FirmAge</i>	Number of years the firm has been operating by the time of the survey since the firm's establishment	+
<i>TotalEmployee</i>	Total number of employees	+
<i>OwnerGender</i>	Owner's gender, where 1 = male, 0 = female	+/-
<i>OwnerAge</i>	Owner's age at the time of the survey	+
<i>OwnerEducation</i>	Owner's educational attainment, where 1 = primary school or no formal education, 2 = junior or senior high school, 3 = college, diploma or vocational school, 4 = bachelor degree, 5 = postgraduate degree	+

As in export engagement model, in the export performance model we also employ three explanatory variables to represent external assistance received by SMEs, namely *GovCentral_Assist* (export assistance by central government agencies), *GovtLocal_Assist* (export assistance by provincial, regency and municipal government agencies), and *NonGovt_Assist* (export assistance by non-government agencies). These variables may give rise to endogeneity problem if the external actors (mainly the government agencies) tend to assist the exporting SMEs than non-exporting SMEs (picking the winners). However, the exogeneity of those variables can be assumed because the export performance model only includes observations of exporting SMEs, many of which are not recipient of external assistance. For example, of 271 surveyed exporting SMEs, only 121 SMEs participated in international trade fairs and only 58 SMEs participated in managerial training provided by central government agencies. For further discussion on export assistance provision by government agencies, see Section 5.5.2 and 5.5.3.

Therefore, the export intensity model is expressed in the following equation:

$$E(EXINTEN_i|X_i) = \alpha + \sum_{j=1}^n \beta_j STIMULI_{ij} + \sum_{k=1}^p \gamma_k BARRIERS_{ik} + \sum_{l=1}^q \delta_l FIRM_{il} + \epsilon_i \quad (4-18)$$

Where $EXINTEN_i$ is firm i 's export intensity with fractional/proportional values in the unit interval, i.e. $EXINTEN_i \in [0,1]$; $STIMULI_{ij}$ is a vector of export stimuli; $BARRIERS_{ik}$ is a vector of export barriers; $FIRM_{il}$ is a vector of firm characteristics; and ϵ_i is the error term. The notations n , p and q represent the total number of variables representing export stimuli, export barriers and firm characteristics, respectively. The symbols α , β , γ and δ represent the constant and the vector of coefficients for the export stimuli export barriers and firm characteristics, respectively.

Owing to the fractional nature of the target variable (export intensity), OLS and binary logit regression models are not appropriate estimation methods (Papke & Wooldridge, 1993; Papke & Wooldridge, 2008). OLS cannot ensure the predictions fall within the unit interval (within the 0-1 range). The log-odds ratio model requires adjustment for all observations taking on extreme values 0 and 1. Instead, we adopt a fractional logit model, which can overcome OLS and log-odds methods' shortcomings in modelling proportion/fraction. Moreover, it allows for direct estimation of the desired fractional response variable and it only requires that the conditional mean be specified correctly to obtain consistent parameter estimates, as follows:

$$E(EXINTEN|x) = \frac{\exp(x\beta)}{1+\exp(x\beta)} = \Lambda(x\beta) \quad (4-19)$$

Where $\Lambda(\cdot)$ denotes the logistic cumulative distribution function of export intensity, specified by $P_i = P\{EXINTEN_i = 1|X_i; \beta\}$, and $EXINTEN_i \in [0,1]$, which differs from binary logit that limits y to values of 0 or 1. Accordingly, the maximum likelihood estimation technique (MLE) is not appropriate for a fractional logit model because it is not robust to distributional failure. Rather, the following quasi-MLE method is considered:

$$L_i = \sum_{n=1}^N EXINTEN_n \ln P_n + \sum_{n=1}^N (1 - Y_n) \ln(1 - P_n) \quad (4-20)$$

4.2.8 Impact of Exporting on Firm Performance

In the survey, the exporting SME respondents were asked whether they perceived an improvement in firm performance since they began exporting. Eight indicators of firm performance were used in the questionnaire including total profit, total sales, domestic sales, labour productivity, product quality, production techniques and technology, cost efficiency, and marketing and networking. The respondents were asked to indicate the level of improvement in each firm performance indicator in a three point Likert-scale (where 1 = no improvement, 2 = improved and 3 = improved significantly).³⁸

We expect that the level of improvement of firm performance would vary across exporting SMEs. Hence, we estimate the determinants of firm performance improvement with regression analysis. The dependent variable is the average Likert response score of the eight firm performance indicators mentioned above whose value ranges between 1 (no improvement in all eight indicators) and 3 (significant improvement in all eight indicators).

Table 4.9 gives the description and the *a priori* sign of each independent variable. We employ five SME characteristics identical to those used in the export engagement and export intensity models (see Sections 4.2.6 and 4.2.7). We use three variables to represent assistance received by external actors (central government agencies, local government agencies and non-government actors in the network), similar to those used in the export engagement and export intensity models. However, we add three variables representing SMEs' international activities (years of exporting, foreign investors, and export intensity). SMEs' performance improvement after exporting is hypothesized to be influenced by the presence of foreign investors. Foreign investors may bring innovations, entrepreneurship, specific resources and capabilities, all of which are expected to have positive

³⁸ For the advantages and disadvantages of three-point Likert-scale without neutral scale/mid-point, see Section 4.2.1.

effects on SMEs' performance improvement (Filatotchev, Stephan, & Jindra, 2008). Export intensity is added to represent the degree of internationalisation of the SMEs, along with its squared term to capture the possibility of a non-linear relationship between firm performance and the degree of internationalisation (Ruigrok, Amann, & Wagner, 2007).

Table 4-9: Independent Variables for Export Impact Estimation

Variables	Description	Priori Sign
Firm Characteristics		
<i>FirmSize</i>	Firm size by number of employees, where 1 = medium-sized enterprise (20-99 employees) and 0 = small-sized enterprise (5-19 employees)	+
<i>FirmAge</i>	Number of years the firm has been operating by the time of the survey since the firm's establishment	+
Owner's Characteristics		
<i>OwnerGender</i>	Owner's gender, where 1 = male, 0 = female	+/-
<i>OwnerEducHigh</i>	Owner's educational attainment, where 1 if the owner is a college graduate or higher and 0 if a high school graduate or lower	+
<i>OwnerAge</i>	Owner's age at the time of the survey	+
SME's International Activities		
<i>Exportintensity</i>	Share of export sales in total sales	+
<i>ExportIntensitySq</i>	The squared term of <i>Exportintensity</i>	+/-
<i>YearsExporting</i>	Number of years the SME had been exporting at the time of the survey	+
<i>ForeignInvestor</i>	1 if the SME is partially or fully owned by foreign investors, 0 otherwise	+
Network Relationships and External Assistance		
<i>GovCentral_Assist</i>	1 if SME received either promotional, business management, finance or production assistance from any central government agencies	+
<i>GovtLocal_Assist</i>	1 if SME received technical or managerial training, grants or promotional assistance from any local (provincial, regency or municipal) government agencies	+
<i>NonGovt_Assist</i>	1 if SME received any type of assistance from either business association/chambers, universities/research institutes, private companies/SOEs, business partners/associates, family/relatives or Indonesian emigrant communities	+

The export impact model is estimated with OLS and GLM regression techniques. OLS regression is applicable because the dependent variable (average Likert response score of eight indicators of firm

performance) is a continuous number that can take any value between 1 (minimum average Likert score response) and 3 (maximum average Likert score response). However, OLS may not give the best estimators because the dependent variable is bounded (i.e. it has a minimum value of 1 and a maximum value of 3). Papke and Wooldridge (1993) proposed a fractional logit regression model – a Generalized Linear Model (GLM) estimation procedure to model proportion/fractional outcomes with extreme values of the dependent variable (i.e. the minimum proportion of 0 and maximum of 1). The fractional logit model is specified by Equation (4.19) and (4.20) in Section 4.2.7. To apply the fractional logit regression, we must first transform our target variable (average Likert score of firm performance improvement) into the index of firm performance improvement as follows:

$$y_i^* = \frac{y - \underline{y}}{\bar{y} - \underline{y}} \quad (4-21)$$

Where:

y_i^* = the firm performance improvement index (will range from 0 to 1).

y = the original average Likert response score (taking a value between 1 and 3).

\underline{y} = the minimum value of the original average Likert response score (i.e., 1).

\bar{y} = the maximum value of the original average Likert response score (i.e., 3)

With equation (4.21), the average Likert response score of firm performance improvement (taking a value between 1 and 3) will be transformed into the index of firm performance improvement (ranging from 0 to 1), and therefore fractional logit regression is applicable.

4.3 Chapter Summary

The chapter provides the data specification and the empirical methods used to answer the research questions of this study. The study used primary data collected through a survey of SMEs and central government agencies. The SMEs survey yielded a total of 497 useable questionnaires from SMEs in 7 provinces in Java, Madura and Bali islands where more than 60% of Indonesian SMEs are located. In addition, secondary data from various government institutions were used to highlight the research context and to form SMEs' databases from which the samples were drawn.

The data were analysed in several different methods. For each research question, the descriptive statistics and bivariate analysis of the survey responses were performed to find out how the export stimuli, barriers, assistances and networking varied across SMEs' export status. PCA was used to reduce the dimensions of export stimuli and export barriers. Finally, OLS, binary logit and fractional

logit regressions were conducted to examine the factors that influence SMEs' export engagement, export intensity and performance improvement due to exporting, respectively.

Chapter 5

Descriptive Statistics and Principal Component Analysis Results

This chapter presents the descriptive statistics and the principal component analysis (PCA) results of the survey data. Section 5.1 provides the firm characteristics of the surveyed SMEs and the socio-economic profiles of SME owners. Sections 5.2 and 5.3 discuss the findings on SMEs' export stimuli (enhancing factors) and export barriers (inhibiting factors), respectively. Sections 5.4 and 5.5 discuss the roles of network relationships and the government export assistance in helping SMEs to internationalise, respectively. Section 5.6 discusses the internationalisation process and strategy adopted by SMEs. The last two sections discuss the SMEs' export performances (Section 5.7) and the impact of exporting on SMEs' performances (Section 5.8).

5.1 Firm and Owner Characteristics of Surveyed SMEs

5.1.1 Firm Characteristics

Exporters, aspiring-exporters and non-intenders (non-exporters with neither intention nor plan to export) differ considerably in terms of firm characteristics. Table 5.1 shows SMEs' average firm age (the number of years the firm had been operating at the time of the survey) differs significantly across the three export statuses (F value is significant at the 5% level). On average, the exporters have been operating longer (more experienced) than non-exporters. However, within the non-exporter group, the aspiring-exporters are younger than the non-intenders. Hence, despite the importance of firm experience in exporting, there is indication of strong international aspirations among young (newly established) firms.

Table 5-1: Age and Size of Surveyed SMEs, by Export Status

Firm Characteristics	All Respondents	By SMEs' Export Status			ANOVA
		Exporter	Aspiring-exporter	Non-intender	
Firm age (year)					
Mean	18.53	19.67	15.91	18.45	F = 4.428**
Std. deviation	11.399	11.692	9.406	12.158	
Employees (person)					
Mean	30.06	37.00	23.11	20.35	F = 20.305***
Std. deviation	27.806	29.530	23.450	22.617	

Note: (**) and (***) represent significance at the 5% and 1% levels, respectively

Source: Author's calculation based on survey data

Table 5.1 also shows that the number of employees varies greatly across the three export statuses (F value is significant at the 1% level). Exporters have larger average firm size than non-exporters. Further, within the non-exporter group, the firm size of aspiring-exporters is larger than non-intenders. Hence, firm size is related to SMEs' behaviour towards internationalisation at the pre-exporting stage as well as at the exporting stage.

5.1.2 Profile of SME Owners

The surveyed SME owners have diverse socio-demographic backgrounds. Table 5.2 shows that SME owners' age and experience differ significantly across SMEs' export status. In terms of age, Table 5.2 shows that on average non-intender owners are the oldest, followed by exporter owners and aspiring-exporter owners, respectively. However, owners' age does not necessarily reflect their work/business experience. Table 5.2 shows that exporter owners have the longest average experience among the three SME groups, which indicates the relevance of owner experience in SME internationalisation. However, within the non-exporting group, the aspiring-exporter owners have less experience than non-intender owners, which indicates a strong international orientation of the young entrepreneurs.

Table 5-2: SME Owners' Age and Experience, by Export Status

Owner Characteristics	All Respondents	By SMEs' Export Status			ANOVA
		Exporter	Aspiring-exporter	Non-intender	
Age (year)					
Mean	48.87	49.37	46.32	50.25	F = 4.853***
Std. deviation	10.359	11.298	8.518	9.267	
Business/work experience (year)					
Mean	17.92	18.71	16.27	17.67	F = 3.087**
Std. deviation	8.902	9.090	8.540	8.630	

Note: (**) and (***) represent significance at the 5% and 1% levels, respectively

Source: Author's calculation based on survey data

Table 5.3 shows the composition of SME owners' gender, age group and educational background across SMEs' export status. The Chi-square test statistics provide evidence that SMEs' export status is not related to SME owners' gender but related to SME owners' age group and education. In terms of owners' gender, the overall surveyed SME owners are predominantly male (72.4%) and quite similar proportions are found in the three export status groups. The insignificant Chi-square test confirms that SMEs' export status is not related to the gender of the owners.

In terms of SME owners' age group, 83% of exporting SME owners are aged between 36 and 65 years as compared to 91.3% of aspiring-exporter owners and 93.7% of non-intender owners that fall in those age groups. The χ^2 value (significant at the 5% level) confirms that exporting SME owners' age is more dispersed across various age groups than aspiring-exporter and non-intender owners.

Table 5-3: SME Owners' Gender, Age Group and Education, by Export Status

Owners' Profile	All Respondents	By Export Status			Statistical Test
		Exporter	Aspiring-Exporter	Non-Intenders	
<u>Owners' Gender</u>	100%	100%	100%	100%	$\chi^2 = 1.883$
Male	360 (72.4%)	203 (74.9%)	80 (70.2%)	77 (68.8)	
Female	137 (27.6%)	68 (25.1%)	34 (29.8%)	35 (31.2%)	
<u>Owners' Age</u>	100%	100%	100%	100%	$\chi^2 = 23.239^{**}$
Under 25	9 (1.8%)	6 (2.2%)	2 (1.7%)	1 (0.9%)	
26-35	32 (6.4%)	21 (7.8%)	6 (5.3%)	5 (4.5%)	
36-45	145 (29.2%)	71 (26.2%)	44 (38.6%)	30 (26.8%)	
46-55	180 (36.2%)	92 (33.9%)	45 (39.5%)	43 (38.3%)	
56-65	109 (21.9%)	62 (22.9%)	15 (13.2%)	32 (28.6%)	
66 or older	22 (4.4%)	19 (7.0%)	2 (1.7%)	1 (0.9%)	
<u>Educational Attainment</u>	100%	100%	100%	100%	$\chi^2 = 64.338^{***}$
Primary school or less	25 (5.0%)	10 (3.7%)	4 (3.5%)	11 (9.8%)	
Junior high	35 (7.0%)	8 (3.0%)	10 (8.8%)	17 (15.2)	
Senior high	158 (31.8%)	66 (24.4%)	38 (33.3%)	54 (48.2%)	
College	39 (7.8%)	27 (10.0%)	7 (6.1%)	5 (4.5%)	
Degree	209 (42.1%)	139 (51.3%)	49 (43.0%)	21 (18.7%)	
Postgraduate	31 (6.2%)	21 (7.7%)	6 (5.3%)	4 (3.6%)	

Note: (**) and (***) represent 5% and 1% significance levels, respectively

Source: Author's calculation based on the survey data

SME owners' educational attainment also shows great variation across the three export statuses. More than half of exporter owners have bachelor degrees whereas aspiring-exporter owners have an equally large share of bachelor degrees and high school graduates and more than 73% of non-intender owners are high school graduates or with lower education. The χ^2 value (significant at the 1% level) provides strong evidence that there is a positive association between owners' education and SME internationalisation.

Table 5.4 shows the variation of SME owners' international exposures across export status. In terms of overseas study experience, 14.0% of exporting SME owners had studied abroad while in contrast only 4.4% of aspiring-exporter owners and 0.9% of non-intender owners have such experiences. SME owners also differ in overseas training/short courses experiences. Ten percent of the exporting SME

owners previously participated in overseas training/short courses while only 1.8% of aspiring-exporter owners and none of the non-intender owners have such experiences. The Chi-square test results confirm significant positive associations between SMEs' export status and SME owners' overseas study experience or overseas training/short courses experiences.

Table 5-4: SME Owners' International Exposure, by Export Status

Owners' Profile	All Respondents	By Export Status			Statistical Test
		Exporter	Aspiring-Exporter	Non-Intender	
<u>Overseas Education</u>	100%	100%	100%	100%	$\chi^2 = 20.587^{***}$
Yes	44 (8.9%)	38 (14.0%)	5 (4.4%)	1 (0.9%)	
Never	453 (91.1%)	233 (86.0%)	109 (95.6%)	111 (99.1%)	
<u>Overseas Training/Short Courses</u>	100%	100%	100%	100%	$\chi^2 = 18.800^{***}$
Yes	29 (5.8%)	27 (10.0%)	2 (1.8%)	0 (0%)	
Never	468 (94.2%)	244 (90.0%)	112 (98.2%)	112 (100%)	
<u>Overseas Working Experience</u>	100%	100%	100%	100%	$\chi^2 = 23.493^{***}$
Yes	38 (7.6%)	35 (12.9%)	2 (1.8%)	1 (0.9%)	
Never	459 (92.4%)	236 (87.1%)	112 (98.2%)	111 (99.1%)	
<u>Experience in exporting/MN firms</u>	100%	100%	100%	100%	$\chi^2 = 14.341^{***}$
Yes	58 (11.7%)	45 (16.6%)	6 (5.3%)	7 (6.2%)	
Never	439 (88.3%)	226 (83.4%)	108 (94.7%)	105 (93.8%)	

Note: (***) represents the 1% significance level

Source: Author's calculation based on the survey data

In terms of overseas work experience, Table 5.4 shows that 12.9% of exporting SME owners had previously worked abroad as compared to only 1.8% of aspiring-exporter owners and 0.9% of non-intender owners with such experience. Table 5.4 also shows that 16.6% of exporting SME owners had previously worked for MNC/exporting firms, in contrast to only 5.3% of aspiring-exporter owners and 6.2% of non-intender owners with similar work experience. The Chi-square test results confirm significant positive associations between SMEs' export status and SME owner's overseas work experience or MNC/exporting firm work experience.

5.2 Export Stimuli

This section discusses the results of the survey data related to export stimuli including: 1) export stimuli item ranks based on average Likert-scale response scores; 2) export stimuli at different exporting stages; and 3) main export stimuli identification with PCA.

5.2.1 Overall Export Stimuli Ranks based on Likert-scale Responses

Table 5.5 shows the ranks of the 22 export stimuli items based on Likert-scale average response scores (the scale ranges from 1 = not motivating, 2 = motivating and 3 = very motivating). Overall, the main factor that stimulates SMEs to export is the presence of foreign buyers. This reflects SMEs' risk aversion in exporting, thus many SMEs commence exporting activities after the presence of fortuitous foreign orders (Samiee, Walters, & DuBois, 1993; Wiedersheim-Paul et al., 1978). It is also common that foreign buyers are actively seeking to purchase products and initiating transaction with SMEs.

The second and the fourth most important export stimuli are related to SMEs' aspirations to find new markets with large consumer bases and a high-income population. Despite a large domestic population, Indonesia still falls within the lower middle income category (World Bank, 2016b) which may limit the domestic demand for SMEs' unique or artistic products.

The third and the fifth most important export stimuli are related to SMEs' product uniqueness, quality, and their ability to innovate the product. SMEs are motivated to export if they are confident that their products are competitive in the foreign markets. In addition, owing to their small scale and non-automated production techniques, SMEs can manufacture a variety of small scale non-customized products or built-to-order products (Svensson & Barfod, 2002).

The two least important export stimuli are emigrant communities and government support. The low importance of government support probably indicates that the current export assistance is either of limited accessibility, inadequate or ineffective. The low importance of emigrant communities indicates that Indonesian business people have not utilized the Indonesian diaspora network to access foreign markets or that Indonesian emigrant communities worldwide are not strongly tied to their home country's business communities. This contrasts with the strong international social networking of other communities such as *guanxi* (China), *kankei* (Japan) and *immak* (Korea) that have played crucial roles in the internationalisation of the firms in their respective countries (Zhou et al., 2007).

Table 5-5: Export Stimuli Ranks based on Likert Response Scores

No	Export Stimuli Items	N	Mean	Std. Deviation
1	(S15) Foreign buyers	385	2.49351	.582366
2	(S1) Find new markets	385	2.44416	.561456
3	(S10) Product's quality & uniqueness	385	2.43636	.587834
4	(S2) Find large & high income markets	385	2.38182	.643219
5	(S9) Product innovation	385	2.29091	.632081
6	(S13) Social networks	385	2.15844	.667971
7	(S3) Find stable markets	384	2.15625	.610237
8	(S21) Low transportation cost	384	2.13281	.578615
9	(S19) Home country's good image	384	2.10156	.656438
10	(S11) Revenue in foreign currencies	385	2.10130	.734296
11	(S7) Manager's global awareness	384	2.04167	.624423
12	(S22) Simplified export procedures	385	2.01818	.655253
13	(S12) International business networks	385	2.00519	.616588
14	(S8) Firm's maturity	385	1.99221	.579549
15	(S17) Stiff domestic competition	385	1.95325	.727364
16	(S4) First mover advantage	385	1.93247	.700157
17	(S5) Follow peer firms' action	385	1.92727	.714368
18	(S20) Close distance to target market	385	1.85455	.661151
19	(S6) Manager's international exposure	385	1.83896	.696000
20	(S16) Limited domestic market	385	1.81558	.633086
21	(S18) Government support	383	1.79634	.745167
22	(S14) Emigrant communities	385	1.74545	.690438

Note: Total respondents = 385, including 271 exporting SMEs and 114 aspiring-exporters

Source: Author's calculation based on the survey data

5.2.2 Export Stimuli at Different Exporting Stages

Table 5.6 compares aspiring-exporters' and exporters' average Likert-scale response scores and the ranks of each export stimuli item. The last column in Table 5.6 shows that exporting SMEs gave higher average Likert response scores than aspiring-exporters on 19 export stimuli items, 12 of which are statistically significant at least at the 10% level. In other words, exporting SMEs are driven by stronger motivation to export than aspiring-exporters for most of the export stimuli items. These findings reaffirm that export stimuli are crucial in driving the SMEs to venture abroad (Acedo & Galán, 2011; Morgan & Katsikeas, 1997).

We next investigate whether the export activities of aspiring-exporters (pre-exporting stage) and exporters (exporting stage) are motivated by different main export stimuli. In Table 5.6, the numbers

in the parentheses (next to the average Likert-scale response score) in the second and third columns indicate the ranks of importance of each export stimuli item for aspiring-exporters and exporters, respectively. For example, the most important export stimuli for the aspiring-exporters are “(S1) Find new markets”, followed by “(S15) Foreign buyers” and “(S10) Product’s quality and uniqueness”, respectively. Differently, the main export stimuli for the exporters are “(S15) Foreign buyers”, followed by “(S10) Product’s quality and uniqueness” and “(S2) Find large and high income markets”. Hence, SMEs at the pre-exporting stage (aspiring-exporters) are mainly stimulated to export because they intend to exploit new markets overseas or they are confident with their products’ competitiveness, whereas SMEs at the exporting stage (exporters) are motivated to sustain and expand their exports because of the presence of the established relationships with foreign buyers.

Table 5-6: Export Stimuli at Different Exporting Stages

Export Stimuli Items	Mean Likert Score (Rank)		Statistical Tests	
	Aspiring-exporter N = 114	Exporter N = 271	Equality of Variances	Mean Difference
(S1) Find new markets	2.412 (1)	2.458 (4)	1.214	0.722
(S2) Find large & high income markets	2.184 (4)	2.465 (3)	3.021*	3.931***
(S3) Find stable markets	2.035 (8)	2.207 (6)	4.992**	2.540**
(S4) First mover advantage	1.781 (18)	1.996 (15)	1.763	2.783***
(S5) Follow peer firms’ action	1.912 (12)	1.934 (17)	5.009**	0.282
(S6) Manager’s international exposure	1.658 (22)	1.915 (18)	.889	3.355***
(S7) Manager’s global awareness	1.825 (16)	2.133 (11)	.392	4.539***
(S8) Firm’s maturity	1.825 (16)	2.062 (12)	2.097	3.743***
(S9) Product innovation	2.158 (6)	2.347 (5)	4.069**	2.687***
(S10) Product’s quality & uniqueness	2.272 (3)	2.506 (2)	.909	3.615***
(S11) Revenue in foreign currencies	1.982 (9)	2.151 (8)	5.383**	2.114**
(S12) International business networks	1.912 (12)	2.044 (13)	.019	1.924*
(S13) Social networks	2.175 (5)	2.151 (8)	6.561**	-0.348
(S14) Emigrant communities	1.781 (18)	1.731 (22)	.346	-0.649
(S15) Foreign buyers	2.333 (2)	2.561 (1)	10.481***	3.258***
(S16) Limited domestic market	1.763 (20)	1.838 (20)	1.425	1.054
(S17) Stiff domestic competition	1.912 (12)	1.970 (16)	.089	0.716
(S18) Government support	1.702 (21)	1.836 (21)	.333	1.621
(S19) Home country’s good image	1.956 (11)	2.163 (7)	2.757*	2.865***
(S20) Close distance to target market	1.860 (15)	1.852 (19)	3.697*	-0.103
(S21) Low transportation cost	2.096 (7)	2.148 (10)	3.026*	0.824
(S22) Simplified export procedures	1.974 (10)	2.037 (14)	.005	0.864

Note: Equality of variances assumptions were checked with Levene’s test
 (*), (**) and (***) represent 10%, 5% and 1% significant levels, respectively

Source: Author’s calculation based on the survey data

5.2.3 Main Export Stimuli Identification with Principal Component Analysis

Principal component analysis (PCA) was performed on the survey responses for the 22 export stimuli items' Likert-scale questions to reduce the dimension of the items into smaller numbers of variables (principal components) that may represent broader dimensions of export stimuli. The correlation matrix indicates that 97 of 120 correlation values (80.8%) are significant at the 5% level and the Bartlett's Test of Sphericity is significant at the 1% level (see Appendix A2), both of which indicate the appropriateness of PCA for the export stimuli survey data. Six export stimuli items (S5, S9, S11, S12, S20 and S210) were eliminated from the analysis because the initial PCA factor extraction results showed that they either had low levels of communalities (below 0.40), showed cross-loading problems or had insignificant factor loadings (below 0.40). The PCA factor extraction was repeated six times which resulted in 16 retained export stimuli items. The Kaiser-Mayer-Olkin (KMO) test value of 0.731 and the measures of sampling adequacy (MSA) value for each export stimuli item (all above 0.60) indicate the adequacy of overall and individual items' sample size.

Table 5-7: Rotated Component Analysis Factor Matrix of Export Stimuli Items

Export Stimuli Items	Factors						Communality	MSA
	1	2	3	4	5	6		
(S6) Manager's international exposure	.820						.721	.657
(S7) Manager's global awareness	.798						.734	.687
(S8) Firm's maturity	.608						.506	.823
(S18) Government support		.796					.684	.765
(S19) Home country's good image		.723					.604	.781
(S22) Simplified export procedures		.592					.443	.816
(S2) Find large & high income markets			.789				.700	.726
(S1) Find new markets			.686				.599	.722
(S3) Find stable markets			.682				.693	.737
(S17) Stiff domestic competition				.818			.686	.601
(S16) Limited domestic market				.753			.614	.684
(S15) Foreign buyers					.645		.488	.753
(S10) Product's quality & uniqueness					.636		.622	.730
(S4) First mover advantage					.616		.533	.838
(S14) Emigrant communities						.781	.698	.680
(S13) Social networks						.608	.542	.704
							Total	
Sum of squares (eigenvalue)	3.644	1.520	1.420	1.201	1.068	1.012	9.865	
% of Variance explained	22.776	9.502	8.877	7.505	6.678	6.326	61.664	

Note: Extraction Method: Principal Component Analysis
 Rotation Method: Varimax with Kaiser Normalization
 Rotation converged in 7 iterations

Source: Author's calculation based on the survey data

The PCA extracted all factors with latent root criterion (eigenvalues) exceeding 1 (i.e. no certain number of factors was specified to be extracted). The PCA gave a six-factor solution as shown by the rotated component matrix result in Table 5.7. The six extracted factors explain 61.664% of the total variance (see the total variance matrix in Appendix A2). The six factors are labelled as follows: (1) SME owner/manager's international exposure and firm's maturity; (2) Home government support; (3) The attractiveness of the target markets; (4) Domestic market demand and competition; (5) Actual order and product competitiveness; and (6) Network relationships. Those six factors represent six dimensions of export stimuli for our survey data that exhibit consistency, albeit slightly different (more specific) from internal-external, proactive-reactive or four export stimuli typologies proposed by Leonidou (1995b), Morgan (1997) and OECD (2009), respectively.

5.3 Export Barriers

This section discusses the results of the survey data related to export barriers encountered by SMEs including: 1) export barrier ranks based on average Likert-scale response scores; 2) identification of general and specific export barriers; 3) export barriers at different export stages; 4) export barriers in different industries; and 4) main export barriers identification with PCA.

5.3.1 Overall Export Barrier Ranks Based on Likert-scale Responses

Table 5.8 shows the ten most difficult export barriers faced by SMEs based on average Likert-scale response scores. The complete ranks of the 50 export barrier items are provided in Appendix B2. Overall, the most severe export barrier is the foreign currency exchange risks. The literature suggests at least three ways in which the exchange rate can adversely affect SMEs. First, foreign market demand for SMEs' products may fluctuate with the exchange rate (Geng & Geng, 2012). Second, sometimes the contract with foreign buyers fixes the product price in terms of foreign currency value, therefore exchange rate fluctuation may affect SMEs' actual revenue in domestic currency terms (Helísek, 2013). Third, SMEs' production often requires imported raw materials, whose prices may fluctuate with exchange rates and in turn affect SMEs' costs of production.

Table 5-8: Ten Main Export Barriers based on Likert Response Scores

Rank	Export Barriers	N	Mean	Std. Dev.
1	B37 High risks of foreign exchange	496	2.35	.672
2	B9 Shortage of export insurance	496	2.33	.689
3	B10 Granting credit facilities or payment delay to foreign customers	497	2.30	.688
4	B36 Economic fluctuations in target markets	496	2.30	.628
5	B32 Unequal treatment in business competition law in target markets	496	2.29	.620
6	B26 Enforcing contracts/resolving disputes in target markets	495	2.22	.639
7	B21 Offering technical/after-sales service in target markets	493	2.20	.675
8	B29 Restriction of asset ownership in target markets	496	2.20	.617
9	B33 Sophisticated target markets' laws/ regulations	494	2.20	.624
10	B45 (Intellectual) property rights protection in target markets	495	2.19	.650

Note: The Likert-scale ranges from 1 = not difficult, 2 = difficult and 3 = very difficult
The full ranks of barriers based on Likert-scale responses are provided in Appendix B2

Source: Author's calculation based on survey data

5.3.2 General and Specific Export Barriers

Table 5.9 provides the ten most difficult export barriers faced by SMEs based on the top-of-mind survey question method (the complete ranks of the fifty export barrier items are provided in Appendix B2). The main export barrier given by the top-of-mind method is SMEs' shortage of

working capital for exporting. SMEs need extra funds to finance working capital for raw materials, wages, product development or travelling to target markets (OECD, 2009).

Table 5-9: Ten Main Export Barriers based on the Top-of-Mind Method

Rank	Export Barriers	Score
1	B7 Shortage of working capital	374
2	B23 Unfamiliar exporting procedures/paperwork	371
3	B37 High risks of foreign exchange	316
4	B10 Granting credit facilities or payment delay to foreign customers	308
5	B36 Economic fluctuations in target markets	287
6	B6 Inadequate quantity and capability of personnel	260
7	B5 Devoting managerial time to deal with internationalisation	254
8	B32 Unequal treatment in business competition law in target markets	239
9	B35 Stiff competition in target markets	235
10	B28 Unfavourable home country's export rules and regulations	234

Note: The top-of-mind method gives the score of five to the export barrier mentioned first, four for the 2nd barrier, 3 for the 3rd barrier, 2 for the 4th barrier and 1 for the 5th barrier

Source: Author's calculation based on survey data

Some export barrier items including B37, B10, B36 and B32 exhibit high scores in both the Likert-scale and top-of-mind methods despite the differences in their rank orders. However, there are some barriers that only have high scores with the Likert-scale method (e.g. B9 and B26), while some other barriers only have high scores with the top-of-mind method (e.g. B7 and B23). One possible explanation for the differences is that the scores resulting from the two methods represent two different types of barriers faced by SMEs (OECD-APEC, 2006; OECD, 2008). In the Likert-scale method, the respondents were asked to indicate the difficulty level of each of the fifty export barrier items. Consequently, each respondent is likely to give responses to most of the fifty export barrier items (although they still can skip some questions/items). Hence, an export barrier item will receive a high average Likert-scale response score if that export barrier item is generally perceived as difficult by most SMEs (i.e. indicated as highly difficult by most respondents). On the contrary, in the top-of-mind method the respondents would only identify/mention an export barrier item as among the five most impeding if the item is extremely severe for that particular respondent. Hence, a high total score in the top-of-mind method may indicate that an export barrier item is a specific impediment for SMEs in particular region(s) or industry(s).



Figure 5-1: Plot of Export Barriers with Likert Scale and Top-of-Mind Methods

Source: Author's configuration based on survey data

Figure 5.1 plots the perceived difficulties of export barrier items obtained by the two methods with average Likert-scale response scores on the vertical axis and top-of-mind method total scores on the horizontal axis. Following Lloyd-Reason and Mughan (2008) and OECD-APEC (2006), the plot can be interpreted as follows. Some barriers are located in the upper-right quadrant, which indicates that the barriers are perceived consistently as very difficult in both methods. For example, the three most upper-right barriers are B37 (*High risk of foreign exchange*), B10 (*Granting credit facilities or payment delay to foreign customers*) and B36 (*Economic fluctuations in target markets*). This type of barrier should be the government's top priority to address because they are universally faced by most SMEs and are very problematic for some SMEs in certain region(s) or industry(s). In contrast, some barriers are located in the lower-left quadrant, indicating less importance in both methods. For example, two barriers close to the lower-left corner are B24 and B20. These barriers could be low on the government's priority to address because they are neither universally faced by overall SMEs nor very problematic to SMEs in specific regions or products.

The interpretations of the other two quadrants are less straightforward. A large number of export barriers are located in the upper-left quadrant (e.g. B9 and B45), indicating that the barriers are generally encountered by most SMEs, but are not specifically or extremely difficult. A few of barriers are located in the lower-right quadrant (e.g. B7 and B28), indicating that the barriers are not universally faced by SMEs but are very problematic for some SMEs in certain region(s) or industry(s).

Further study is required to investigate the specific industries or regions that are most severely affected by this type of barrier.

5.3.3 Export Barriers at Different Exporting Stages

Table 5.10 compares exporters and non-exporters' average Likert response scores for each export barrier item. The last column in Table 5.10 shows that exporters gave lower average scores than non-exporters on 49 export barrier items, all of which are statistically significant at the 1% level. Hence, non-exporters perceive more difficulties in most of export barrier items than exporters. In other words, non-exporters have more negative attitudes towards various types of export barriers than exporters. This finding confirms that the presence of various export barriers significantly impedes SMEs' export activities and prevents many SMEs from becoming exporters (Leonidou, 1995a, 2004).

Table 5-10: Export Barriers Faced by Exporting and Non-exporting SMEs

Export Barriers	Mean Likert Score		Statistical Test	
	Exporter	Non-Exporter	Equality of Var.	Mean Diff.
1 Obtaining information about potential markets	1.46	1.81	.767	-6.35***
2 Obtaining reliable data on target markets' economy	1.55	1.98	20.52***	-7.44***
3 Identifying business opportunities in target markets	1.85	2.32	3.42*	-8.15***
4 Contacting potential customers in target markets	1.48	2.01	4.02**	-8.82***
5 Devoting managerial time to deal with export activities	1.88	2.23	2.15	-6.04***
6 Inadequate quantity and capability of personnel	1.82	2.27	.001	-7.81***
7 Shortage of working capital	1.83	2.18	.102	-5.96***
8 Shortage of investment capital	1.99	2.26	1.97	-4.30***
9 Shortage of export insurance	2.20	2.48	2.16	-4.70***
10 Granting credit facilities or payment delay to foreign customers	2.20	2.42	1.66	-3.69***
11 Developing new products for foreign markets	1.60	1.85	7.95***	-4.46***
12 Adapting product design/style demanded by foreign customers	1.50	1.87	2.75*	-5.82***
13 Meeting foreign product quality/standards/specifications	1.72	2.19	.011	-7.39***
14 Offering satisfactory prices to foreign customers	1.80	2.09	2.28	-5.05***
15 Matching competitors' prices in target markets	1.93	2.16	.795	-4.15***
16 Lack of excess production capacity for exports	1.85	2.15	1.09	-5.32***
17 Establishing/using distribution channels in target markets	1.89	2.22	.145	-5.51***
18 Obtaining reliable representation in foreign markets	2.03	2.32	5.09**	-4.63***
19 Supplying inventory abroad	1.89	2.29	5.54**	-7.18***
20 Excessive export insurance/transportation costs	1.77	2.26	9.20***	-8.67***
21 Offering technical/after-sales service in target markets	2.05	2.37	.005	-5.33***
22 Adjusting promotional activities to the target markets	1.82	2.09	3.14*	-4.91***
23 Unfamiliar exporting procedures and paperwork	1.80	2.24	4.23**	-7.37***
24 Communicating with overseas customers	1.41	1.89	1.07	-8.70***
25 Slow collection of payments from abroad	1.82	2.37	.019	-9.37***
26 Enforcing contracts/resolving disputes in target markets	2.07	2.39	.885	-5.58***
27 Lack of home government's export assistance and incentives	2.07	2.15	.007	-1.25
28 Unfavourable home country's export rules and regulations	1.91	2.09	2.52	-2.86***
29 Restriction of asset ownership in target markets	2.13	2.29	.291	-2.94***

Export Barriers	Mean Likert Score		Statistical Test	
	Exporter	Non-Exporter	Equality of Var.	Mean Diff.
30 Unequal treatment in tax/eligibility to affiliate in target markets	2.03	2.27	8.19***	-4.12***
31 Restriction for the movement of people in target markets	1.81	2.17	.563	-6.12***
32 Unequal treatment in business competition law in target markets	2.14	2.46	5.89**	-5.96***
33 Sophisticated target markets' laws/ regulations	2.06	2.38	16.57***	-5.96***
34 Different foreign customer attitudes/habits	1.62	2.05	.776	-7.11***
35 Stiff competition in target markets	2.00	2.30	2.06	-5.48***
36 Economic fluctuations in target markets	2.21	2.42	1.10	-3.81***
37 High risks of foreign currency	2.23	2.51	15.25***	-4.89***
38 Unfamiliar business practices in target markets	1.78	2.12	5.65**	-5.98***
39 Different socio-cultural traits	1.53	2.02	.653	-7.90***
40 Verbal/nonverbal language differences	1.46	1.92	6.91***	-7.96***
41 Lack of e-commerce infrastructure in target markets	1.67	2.01	17.40***	-5.74***
42 Political instability in target markets	2.01	2.25	5.53**	-4.79***
43 Negative image of Indonesia or Indonesian products	1.81	2.10	11.88***	-5.18***
44 High tariff costs in target markets	1.97	2.33	7.25***	-6.32***
45 (Intellectual) property rights protection in target markets	2.06	2.35	5.25**	-5.26***
46 Health, safety & technical standards in target markets	1.88	2.19	.201	-5.10***
47 Tariff classification & reclassification in target markets	1.93	2.25	10.81***	-6.06***
48 Quotas and/or embargoes imposed by target markets	1.97	2.18	1.56	-3.54***
49 Customs administration cost in target markets	1.95	2.27	10.61***	-6.09***
50 Preferential tariff for exporters from other countries	2.03	2.27	11.71***	-4.85***

Note: N = 271 exporting SMEs and 226 non-exporting SMEs

(*), (**) and (***) represent 10%, 5% and 1% significant levels, respectively

Source: Author's calculation based on survey data

Table 5-11: Main Export Barriers in Different Exporting Stages (Likert Scale Method)

Rank	Export Barriers Average Likert Score					
	Non-exporting SMEs		Exporting SMEs			
1	B37	High risks of foreign currency	2.51	B37	High risks of foreign currency	2.23
2	B9	Shortage of export insurance	2.48	B36	Economic fluctuations in target markets	2.21
3	B32	Unequal treatment in business competition law in target markets	2.46	B9	Shortage of export insurance	2.20
4	B10	Granting credit facilities or payment delay to foreign customers	2.42	B10	Granting credit facilities or payment delay to foreign customers	2.20
5	B36	Economic fluctuations in target markets	2.42	B32	Unequal treatment in business competition law in target markets	2.14
6	B26	Enforcing contracts/resolving disputes in target markets	2.39	B29	Restriction of asset ownership in target markets	2.13
7	B33	Sophisticated target markets' laws/ regulations	2.38	B26	Enforcing contracts/resolving disputes in target markets	2.07
8	B21	Offering technical/after-sales service in target markets	2.37	B27	Lack of home government's export assistance and incentives	2.07
9	B25	Slow collection of payments from abroad	2.37	B33	Sophisticated target markets' laws/ regulations	2.06
10	B45	(Intellectual) property rights protection in target markets	2.35	B45	(Intellectual) property rights protection in target markets	2.06

Source: Author's calculation based on survey data

We next investigate whether the non-exporters (pre-exporting stage) and exporters (exporting stage) encounter different main export barriers. Table 5.11 excerpts ten main barriers (ten highest average Likert response scores) for exporters and non-exporters from Table 5.10. Both SME groups identified (B37) “High risk of foreign currency” as the most difficult export barriers. The next four most difficult export barriers (ranked 2nd to 5th) for non-exporting SMEs are B9, B32, B10 and B36, respectively, whereas for exporting SMEs they are B36, B10, B9 and B32, respectively. Hence, although foreign exchange risk is the main concern for overall SMEs, the next most difficult barriers faced by non-exporters differ from those faced by exporters. For example, the second main barrier for SMEs at the pre-exporting stage is the lack of export insurance while for SMEs at the exporting stage it is the uncertainty in the destination markets. This finding indicates that SMEs in different exporting stages face a different order of main export barriers and therefore may need different types of assistance (Bilkey & Tesar, 1977; Leonidou, 2004; OECD-APEC, 2006).

5.3.4 Export Barriers in Different Industries

We also investigate whether the main export barriers vary across industries. Table 5.12 shows the main five export barriers faced by SMEs in each type of commodities/industries. The results in Table 5.12 show considerable variation in the main export impediments across industries. Some types of export barrier are perceived as serious impediments by SMEs in specific industries such as intellectual property rights protection in target markets (in garment and machinery component industries), offering technical/after-sales service in target markets (in garment and household utensils industries) and high tariff costs in target markets (in agricultural products and food and beverages industries).

However, financial constraints and external factors such as foreign business environment, competition and foreign government policy appear as the main themes of export barriers in all industries. For example, SMEs in all industries are impeded to exports by their financial limitations including their inability to grant credit facilities and payment delay to foreign customers, to obtain export insurance and to collect payment from abroad. Exchange rate risks appear as the main export barriers in all industries except garment. Business competition in target market is perceived as severe export barriers in most industries except food and beverages, garments and household utensils. Economic uncertainty and fluctuations in target markets adversely affect SMEs’ exports in all industries except those in food and beverages and garment industries.

Table 5-12: Main Export Barriers in Different Industries/Commodities

Commodities	Export Barriers	Average Score
Agricultural Products	B37 High risks of foreign currency	2.516
	B32 Unequal treatment in business competition law in target markets	2.484
	B36 Economic fluctuations in target markets	2.452
	B44 High tariff costs in target markets	2.387
	B10 Granting payment delay or credit facilities to foreign customers	2.387
Food and Beverages	B37 High risks of foreign currency	2.661
	B9 Shortage of export insurance	2.518
	B25 Slow collection of payments from abroad	2.500
	B44 High tariff costs in target markets	2.446
	B10 Granting payment delay or credit facilities to foreign customers	2.446
Furniture	B36 Economic fluctuations in target markets	2.413
	B37 High risks of foreign currency	2.400
	B32 Unequal treatment in business competition law in target markets	2.313
	B10 Granting credit facilities or delay payment to foreign customers	2.300
	B9 Shortage of export insurance	2.288
Handicrafts	B9 Shortage of export insurance	2.352
	B32 Unequal treatment in business competition law in target markets	2.319
	B37 High risks of foreign currency	2.286
	B10 Granting payment delay or credit facilities to foreign customers	2.253
	B36 Economic fluctuations in target markets	2.231
Garments	B10 Granting payment delay or credit facilities to foreign customers	2.507
	B9 Shortage of export insurance	2.456
	B8 Shortage of investment fund	2.333
	B45 (Intellectual) property rights protection in target markets	2.319
	B21 Offering technical/after-sales service in target markets	2.319
Leather Products and Fashion Accessories	B9 Shortage of export insurance	2.469
	B32 Unequal treatment in business competition law in target markets	2.406
	B37 High risks of foreign currency	2.375
	B36 Economic fluctuations in target markets	2.344
	B33 Sophisticated target markets' laws/ regulations	2.344
Household Utensils	B25 Slow collection of payments from abroad	2.370
	B26 Enforcing contracts/resolving disputes in target markets	2.370
	B36 Economic fluctuations in target markets	2.370
	B21 Offering technical/after-sales service in target markets	2.333
	B37 High risks of foreign currency	2.296
Machinery Components	B37 High risks of foreign currency	2.611
	B45 (Intellectual) property rights protection in target markets	2.500
	B9 Shortage of export insurance	2.333
	B32 Unequal treatment in business competition law in target markets	2.333
	B36 Economic fluctuations in target markets	2.333

Source: Author's calculation based on survey data

5.3.5 Main Export Barriers Identification with Principal Component Analysis

Principal component analysis (PCA) was performed on the survey responses for the 50 export barrier items' Likert scale questions to reduce the dimensions of the items into a smaller number of variables (principal components) that may represent a broader dimension of export barriers. The correlation matrix indicates that 981 of 990 correlation values (99.1%) are significant at the 5% level and the Bartlett's Test of Sphericity is significant at the 1% level (see Appendix B3), both of which indicate the appropriateness of PCA for the export barrier survey data. Five export barrier items (B16, B31, B39, B40 and B43) were eliminated from the analysis because the initial PCA factor extraction results showed that they either had a low level of communalities (below 0.40), showed cross-loadings problems or had insignificant factor loadings (below 0.40). The PCA factor extraction was estimated five times which resulted in 45 retained export barrier items. The KMO test value of 0.906 and the MSA value for each export stimuli item (all above 0.60) indicate the adequacy of overall and individual items' sample size.

Table 5-13: Factor Solutions for Export Barriers based on PCA Rotated Component Matrix

Factor	Export Barriers Items with High Factor Loadings	Factor Label/Name
1	B38, B46, B47, B48, B49, B50	Tariff & Non-Tariff Export Barriers in Host Countries
2	B1, B2, B3, B4, B5, B6	Informational and Human Resources Barriers
3	B17, B18, B19, B20, B21, B22	Distribution, Logistics and Promotional Barriers
4	B36, B37, B42, B44, B45	Business Environment Barriers in Host Countries
5	B11, B12, B13, B41	Product and Transaction Barriers
6	B7, B8, B9, B10	Financial Barriers
7	B29, B30, B32, B33	Foreign Government Barriers
8	B23, B24, B25, B26	Procedural Barriers
9	B14, B15	Price Barriers
10	B27, B28	Home Government Barriers
11	B34, B35	Foreign Customer and Competitor Barriers

Note: For the rotated component matrix, see Appendix B.3

Source: Author's configuration based on the survey data

The PCA extracted all factors with latent root criterion (eigenvalues) that exceeded 1 (i.e. no certain number of factors was specified to be extracted). The PCA gave an eleven-factor solution and Table 5.13 shows the summary of the eleven extracted factors (for the detailed PCA matrices results, see

Appendix B3). The eleven extracted factors explain 59.703% of the total variance. Table 5.13 also shows the names/labels for the extracted factors based on the export barrier items that have high loadings on each factor.

The extracted factors represent eleven broad dimensions of export barriers from our survey data. The eleven dimensions of export barriers have a high degree of consistency/similarities to the group of export barriers suggested by OECD (2012), OECD-APEC (2006) and Lloyd-Reason and Mughan (2008). The results of those studies were based on the survey of SMEs in developed countries using Ward's clustering method. The similarities of the findings indicate that SMEs in developing countries generally encounter similar export barrier challenges as SMEs in developed countries.

5.4 Network Relationships for Internationalisation

This section discusses the survey results related to the network relationship developed by SMEs for their export activities. The discussion of the results includes: 1) the types of networking mostly accessed by SMEs; 2) the types of relationships developed by SMEs with various networking sources; and 3) how the network relationships help SMEs to overcome various export barriers.

5.4.1 Types of Networking Sources and Network Relationships Used by SMEs

Table 5.14 shows the frequency of contact/interaction the SMEs made with eight types of networking sources. Exporting and non-exporting SMEs have some similarities as well as dissimilarities with regard to the types of networking sources they mostly access. Both exporting and non-exporting SMEs interact mostly with business partners/associates and business associations/chambers but have very limited interaction with the Indonesian emigrant communities overseas. However, exporting SMEs reported almost twice as many interactions as non-exporting SMEs (1144 compared to 694). Hence, the frequency of interactions with various networking sources might be one factor that distinguishes exporting and non-exporting SMEs.

Table 5.14 also shows that exporting SMEs exhibit balanced interaction frequency with central and local government agencies (15.30% and 15.12%, respectively) whereas non-exporting SMEs tend to interact much more closely with local government agencies than central government agencies (18.30% and 9.08%, respectively). The local government agencies may have stronger local or domestic market orientation in their assistance, while on the contrary the central government agencies may have better vision on global market opportunities for SMEs (Uchikawa & Keola, 2008).

Table 5-14: SMEs' Interaction with Various Networking Sources

Networking Sources	Exporter		Non-Exporter		Statistical Test
	Count	%	Count	%	
Central Government Agencies	175	15.30%	63	9.08%	$\chi^2 = 22.888^{***}$
Regional Government Agencies	173	15.12%	127	18.30%	
Business Association/Chambers	254	22.20%	147	21.18%	
Universities/Research Institutes	41	3.58%	38	5.48%	
Private Companies /SOEs	115	10.05%	82	11.82%	
Business Partners/Associates	270	23.60%	158	22.77%	
Family/Relatives	99	8.65%	72	10.37%	
Indonesian Emigrant Communities	17	1.49%	7	1.01%	
Total	1144	100.00%	694	100.00%	

Note: (***) represent the 1% significance level

The counts exceed the number of respondents because each respondent may interact with more than one source of networking

Source: Author's calculation based on the survey data

We next investigate how SMEs build and maintain the types of interaction with various networking actors/sources. Table 5.15 shows nine types of formal and informal interactions/relationships between SMEs and various networking sources, ranging from intense and regular interaction (*Regular participant in all supporting programmes for SMEs*) to informal and irregular interaction (*Indirect contact through other party*).

Table 5-15: Types of Relationships Maintained with the Networks

Types of Relations Maintained	Exporter		Non-Exporter		Statistical Test
	Count	%	Count	%	
Regular participant in all supporting programmes for SMEs	147	12.85%	83	11.96%	$\chi^2 = 45.2777^{***}$
Irregular participant in all supporting programmes for SMEs	121	10.58%	63	9.08%	
Regular contact through formal/official discussions/seminars	57	4.98%	30	4.32%	
Irregular contact through formal/official discussions/seminars	68	5.94%	22	3.17%	
Member of forum set up by agencies/associations/institutes	111	9.70%	51	7.35%	
Strategic partnership(s)	177	15.47%	89	12.82%	
Joint project(s)	142	12.41%	68	9.80%	
Personal relation with key persons	190	16.61%	143	20.61%	
Indirect contact through other party	131	11.45%	145	20.89%	
Total	1144	100.00%	694	100.00%	

Note: (***) represents the 1% significance level

The counts exceed the number of respondents because each respondent may maintain different types of interaction and may interact with more than one source of networking

Source: Author's calculation based on survey data

Table 5.15 shows that exporting and non-exporting SMEs differ in the way they interact and maintain the relationship with external actors (the Chi-square statistics is significant at the 1% level). Exporting SMEs use various types of interactions including regular and irregular as well as formal and informal interactions with various actors in the network. On the contrary, non-exporting SMEs tend to rely heavily on personal relations with key persons in governmental and private institutions or using indirect contact through other parties, which can in turn help them make contact with public or private agencies. In short, the form of relationships that the SMEs develop and maintain with various networking sources is an important factor that can distinguish exporting and non-exporting SMEs.

5.4.2 Export Assistance from the Networks

This section further explores how SMEs use networking sources to assist them in their export activities. Table 5.16 summarises the counts of assistance that SMEs received from all external actors in the network for various export tasks/functions. The last two columns in Table 5.16 show the ranks and the average helpfulness score of each type of assistance received, measured on a three-point Likert Scale (1 = not helpful, 2 = helpful, 3 = very helpful).

Table 5.16 shows that based on the counts (number of assistance received by SMEs) the export task that has received most assistance (from all networking sources) is the supply of information regarding foreign market business opportunities (636 counts). Other notable assistance provided by the external actors are for marketing and promotional activities (299), working capital (273) and improvement in managerial team capabilities (259). Export functions that received least attention (from all networking sources) include unequal treatment in foreign markets (69 counts of assistance), export guarantees and insurance (71), contracts and dispute settlement with foreign customers (90) and anticipation of foreign market turbulent economic conditions (93).

However, the counts of assistance received in a particular export function do not always reflect its helpfulness. The last column in Table 5.16 shows that based on the average helpfulness score the most beneficial assistance received by SMEs is the working capital (average score 2.48). Other notable beneficial assistances include information regarding export opportunities (2.47) and promotional activities (2.46). The least helpful types of assistance received are mostly for business environment functions, including unequal treatment in foreign countries (2.27), followed by differences in business practices (2.28) and difference in regulation in foreign countries (2.29).

Table 5-16: Assistance Received by SMEs from the Networks for Various Export Functions

Export Tasks/Functions	Assistance Counts		Assistance Helpfulness	
	Rank	Count	Rank	Score
FINANCE: Working capital or investment funds for internationalisation or credit facilities for foreign customers	(3)	273	(1)	2.48
INFORMATION: Obtaining information on foreign markets' data and analysis, business opportunities and potential customers	(1)	636	(2)	2.47
MARKETING: Designing promotional activities and competition strategy in target markets	(2)	299	(3)	2.46
DISTRIBUTION: Obtaining reliable foreign representations/contacts (who are communicative, reputable and have solid operating networks)	(7)	163	(4)	2.42
BUSINESS ENVIRONMENT: Enforcing contracts/resolving disputes in foreign markets and collecting payment from foreign customers	(14)	90	(5)	2.41
BUSINESS ENVIRONMENT: Anticipating target markets' change in economic conditions, exchange rate risks and political instability	(13)	93	(6)	2.40
HUMAN RESOURCES: Increase the capacity/capability of managerial team & personnel for internationalisation	(4)	259	(7)	2.39
PRODUCT: Developing new products & adapting product design/style for foreign market	(5)	208	(8)	2.39
PROCEDURE: Understanding export procedures/paperwork, both in Indonesia or across borders	(6)	198	(9)	2.39
PRODUCT: Meeting foreign markets' product quality/standards/specifications or health, safety and technical standards in foreign markets	(9)	136	(10)	2.38
PROCEDURE: Export guarantee or insurance for both products and assets abroad	(15)	71	(11)	2.38
DISTRIBUTION: Supplying inventory and spare-parts abroad on time, providing warehouse/inventory facilities and offering technical/after-sales service abroad	(11)	122	(12)	2.38
MARKETING: Countering negative image of Indonesian products	(8)	153	(13)	2.34
BUSINESS ENVIRONMENT: Understanding regulation in foreign countries with regard to tariff classification, quota and intellectual property rights	(12)	110	(14)	2.29
BUSINESS ENVIRONMENTS: Understanding foreign business practices, socio-cultural trait differences and different verbal/nonverbal language, communicating with overseas customers & understanding their habits/attitudes	(10)	124	(15)	2.28
BUSINESS ENVIRONMENT: Ensuring fair & equal treatment with other firms in target markets in terms of taxation, eligibility to affiliate, asset ownership, and movement of people	(16)	69	(16)	2.27

Note: The counts exceed the number of respondents because each respondent may receive assistance in more than one export function

Source: Author's calculation based on survey data

The survey results are also used to identify the types of networking sources that most actively provide export assistance to SMEs or provide the most beneficial assistance. Table 5.17 summarises the provision of export assistance for SMEs by various networking sources. Table 5.17 shows that business partners/associates provide the most export assistance for SMEs (total 1016 counts of assistance for all 16 export functions). Other important sources of assistance are central government

agencies (499) and business associations/chambers (410). In contrast, the networking sources that provide least export assistance are universities/research institutes (59) and Indonesian emigrant communities overseas (98). However, the counts of assistance provision do not necessarily reflect the helpfulness of the assistance. The last two columns in Table 5.17 show that the assistance provided by private companies and state-owned enterprises and assistance from family/relatives are perceived by SMEs as the most helpful.

Table 5-17: Main Providers of Export Assistance for SMEs

Network Sources	Assistance Counts		Assistance' Helpfulness Score	
	Rank	Count	Rank	Count
Private Companies/SOE Services	(6)	190	(1)	2.433
Family/ Relatives	(4)	367	(2)	2.423
Local Government Agencies	(5)	365	(3)	2.416
Business Partners/Associates	(1)	1016	(4)	2.408
Indonesian Emigrant Communities	(7)	98	(5)	2.405
Universities/ Research Institutes	(8)	59	(6)	2.404
Central Government Agencies	(2)	499	(7)	2.402
Business Association/Chambers	(3)	410	(8)	2.401

Note: The counts exceed the number of respondents because each respondent may receive assistance from more than one source of networking

Source: Author's calculation based on survey data

The assistance provided by central and local government agencies are neither on top of the assistance provision counts nor on top of helpfulness score. There are at least two ways in which government agencies can improve their export assistance provision. First, the government may consider increasing assistance provision related to the export functions that still have low assistance counts. In other words, the government may focus on providing assistance in export functions that have not been adequately assisted by other networking sources. In this case, the government may concentrate their effort in giving assistance related to the business environment or export procedures barriers. Alternatively, the government can focus on the export functions for which the existing assistance still has a low average helpfulness score. In other words, the government may focus on providing assistance in export functions for which the current types of assistance from various networking sources are still ineffective. In this case, the government may concentrate their effort in addressing the business environment issues.

However, it can also be argued that the government does not always have to intervene in the network relationships activities (Yamin & Ghauri, 2004). In our study context, the government may refrain from being directly involved in every export function (i.e. providing assistance for each export

function). Rather, the government may coordinate, facilitate or strengthen the relationship between SMEs and their business partners/associates, private companies/SOEs and business associates/chambers (Senik et al., 2011). For instance, the government may instead facilitate the meeting, the partnership or the cooperation between SMEs and their various networking sources. Hence, rather than heavy intervention in the form of export assistance programmes, the government may facilitate to help various networking relationships to function more effectively in their assistance for SMEs.

5.5 Government's Export Assistance

This section discusses the results of the two surveys (the survey to SMEs and to government agencies) including: 1) the policymakers' perspective on export barriers; 2) types of assistance that SMEs mostly receive from central and local government agencies; and 3) how SMEs perceive the helpfulness of the governments' various types of export assistance.

5.5.1 Policy Makers' Perspective on Export Barriers

The survey to policy makers was administered to government agencies whose policy areas are related to SMEs' exporting activities. The survey asked the key person(s) in each agency to indicate their perceptions of the difficulties of various types of export barriers faced by SMEs. The survey used 50 export barrier items and the 3-point Likert scale measure similar to those used in the survey to SMEs. The complete results of the average Likert response score of the 50 export barrier items given by government agencies are provided in Appendix D1.

The government agencies develop and provide export assistance based on various factors, one of which is their own perception of export barriers encountered by SMEs. Government agencies will provide more assistance to remove the barriers that they perceive as very difficult barriers, but medium and low provision of assistance to remove the barriers that they perceive as moderately difficult and less difficult, respectively. Hence, we examine whether government agencies' perceptions are consistent with SMEs' perceptions on export barriers. Figure 5.2 plots the policy makers' perceptions of the export barriers on the vertical axis against SMEs' perceptions (previously discussed in Section 5.3) on the horizontal axis.

The interpretation of Figure 5.2 is as follows. Cell G includes all the barriers that both SMEs and government agencies perceive as less difficult. Hence, the current minimum government attention to remove B1, B12, B14, B2, B24, B39, B40 and B41 can be retained. Cell E includes all the barriers that both SMEs and government agencies perceive as moderately difficult. Hence, the current

medium level of government assistance to remove B16, B17, B19, B20, B22, B25, B3, B38, B42, B47, B49, B5, B6 and B7 can be retained. Analogously, Cell C includes all the barriers that both SMEs and government agencies perceive as very difficult. Hence, the current government maximum attention to remove to B21, B26, B29, B30, B32, B33, B37 and B45 should be retained.

Cells F, H and I include all the export barriers that the government agencies perceive to be not as difficult as SMEs perceive them. Hence, the government’s current level of assistance provision to remove B10, B18, B35, B36, B9, B15, B23, B27, B28 and B31 are probably lower than the SMEs actually need. Thus, the government may increase the provision of assistance to remove those barriers.

Government agencies’ perspectives	Very Difficult (Top 25%)	(B) Reconsider	(B) Reconsider: B44, B46, B48, B50, B8	(C) Sustain: B21, B26, B29, B30, B32, B33, B37, B45
	Moderately difficult (Mid 50%)	(D) Reconsider: B11, B13, B34, B4, B43	(E) Sustain: B16, B17, B19, B20, B22, B25, B3, B38, B42, B47, B49, B5, B6, B7	(F) Increase: B10, B18, B35, B36, B9
	Less Difficult (Bottom 25%)	(G) Sustain: B1, B12, B14, B2, B24, B39, B40, B41	(H) Increase: B15, B23, B27, B28, B31	(I) Increase
Export Barriers’ Rank based on Likert Score	Less Difficult (Bottom 25%)	SMEs’ Perspectives		Very Difficult (Top 25%)

Figure 5-2: Policy Options to Overcome Export Barriers Faced by SMEs

Source: Author’s calculation based on survey data

Cells A, B and D include all the export barriers that the government agencies perceive as more difficult than SMEs perceive. Hence, the government’s current levels of assistance provision to remove B44, B46, B48, B50, B8, B11, B13, B34, B4 and B43 are possibly higher than SMEs actually need. Thus, the government may reconsider (reduce) the assistance to remove those barriers.

5.5.2 Export Assistance Provision by Central Government Agencies

The surveyed SMEs were asked to indicate their participation in various types of central government export assistance. Table 5.18 summarises the SMEs’ participation in five different central government agencies export assistance programmes. Overall, the exporting SMEs receive more assistance (total 264 counts) than non-exporting SMEs (total 116 counts). The most accessed export

assistance is international trade fairs (e.g. international shows, exhibitions and expos) followed by technical training (including specific production processes, packaging, logistics or machinery aimed at specific markets) and managerial training (such as business planning, marketing, cultural differences awareness, language skills and knowledge of export procedures). On the other hand, the financial support (including export financing, export insurance and export guarantees) and *SME Catalogue* publications are the least accessed programmes. However, the Chi-square test (insignificant at the 5% level) indicates that there is no significant association between SMEs' export status (exporting and non-exporting) and the types of central government export assistance they access.

Table 5-18: SMEs' Participation in Central Government Export Assistance Programmes

Export Assistance Programmes	Exporters		Non-Exporters		All Respondents		Statistical Test
	Count	%	Count	%	Count	%	
International trade fairs	121	45.83%	48	41.38%	169	44.47%	$\chi^2 = 6.088$
Publication of SME Catalogue	33	12.50%	11	9.48%	44	11.58%	
Managerial training	58	21.97%	25	21.55%	83	21.84%	
Technical training	40	15.15%	29	25.00%	69	18.16%	
Export financing, insurance and guarantee	12	4.55%	3	2.59%	15	3.95%	
Total	264	100.00%	116	100.00%	380	100%	

Source: Author's calculation based on survey data

We next investigate whether SMEs at the pre-export stage (non-exporters) and those at the exporting stage (exporters) have the same needs for those five types of export assistance programmes. Table 5.19 summarises the SMEs' perceived helpfulness of each export assistance programme (measured in a 3 point Likert scale where 1 = not helpful, 2 = helpful and 3 = very helpful). Non-exporting SMEs reported export financial support as the most beneficial assistance, followed by international trade fairs. Differently, exporting SMEs perceived *SME Catalogues* as the most beneficial programme, followed by international trade fairs. This indicates that the most required export assistance for the exporters (exporting stage) differs from those needed by non-exporting SMEs (pre-exporting stage).

In addition, the mean difference test results suggest that exporting and non-exporting SMEs differ significantly in their perceived helpfulness in two export assistance programmes: international trade fairs and export financial support (see the last column in Table 5.19). These two types of export assistance programmes are perceived as more beneficial by non-exporting SMEs than exporting SMEs. One possible explanation is that these types of export assistance are more effective in helping

SMEs to initiate/attempt exporting (early stage of exporting) but less helpful in sustaining or expanding the export (advanced stage of exporting) (OECD-APEC, 2006).

Table 5-19: Helpfulness of Central Government Export Assistance Programmes

Export Assistance Programmes	Mean Helpfulness Score			Statistical Test	
	Exporter	Non Exporter	All Respondents	Equality of Variances	Mean Difference
International trade fairs	2.57	2.77	2.63	14.997***	-2.538**
Publication of SME Catalogue	2.64	2.45	2.59	.086	.837
Managerial training	2.54	2.60	2.56	1.032	-.460
Technical training	2.43	2.62	2.51	.583	-1.612
Export financing, insurance and guarantee	2.42	3.00	2.53	12.740***	-3.023**

Note: Equality of variances assumption is checked with Levene's test (***) and (**) represent 5% and 1% significant levels, respectively

Source: Author's calculation based on survey data

5.5.3 Export Assistance Provision by Local Government Agencies

The surveyed SMEs were asked to indicate their participation in various types of export assistance provided by local government agencies (government agencies at provincial, municipal and rency levels). Table 5.20 summarises the SMEs' participation in five different provincial government agencies' export assistance programmes. Overall, the exporting SMEs receive more assistance (total 238 counts) than non-exporting SMEs (total 138 counts). Exporting SMEs participate more actively in all export assistance programmes, except for the grants of capital.

Table 5-20: SMEs' Participation in Provincial Government Export Assistance Programmes

Export Assistance Programme	Exporters		Non-Exporters		All Respondents		Statistical Test
	Count	%	Count	%	Count	%	
Technical training	66	27.73%	30	21.74%	96	25.53%	$\chi^2 = 9.946^{**}$
Managerial training	66	27.73%	37	26.81%	103	27.39%	
Grants of equipment	23	9.66%	20	14.49%	43	11.44%	
Grants of capital	21	8.82%	24	17.39%	45	11.97%	
International trade fairs	62	26.05%	27	19.57%	89	23.67%	
Total	238	100.00%	138	100.00%	376	100.00%	

Note: (**) represents 5% significance level

Source: Author's calculation based on survey data

In addition, the Chi-square test (significant at the 5% level) indicates that there is a significant relationship between SMEs' export status (exporting and non-exporting) and the types of export assistance they access. The exporters' participation is highly concentrated in three programmes –

technical training, managerial training and international trade fairs (81.51% from total participation). On the contrary, non-exporting SMEs' participations varied across five provincial government export assistance programmes.

Table 5.21 summarises the surveyed SMEs' participation in municipal/regency government agencies' export assistance programmes. Overall, the most accessed municipal government programmes are technical and managerial training, respectively. However, the insignificant Chi-square test indicates that there is no relationship between the SME's export status (exporting and non-exporting) and the types of export assistance participated in by SMEs.

Table 5-21: SMEs' Participation in Municipal Government Export Assistance Programmes

Export Assistance Programme	Exporters		Non-Exporters		All Respondents		Statistical Test
	Count	%	Count	%	Count	%	
Technical training	38	31.40%	41	39.42%	79	35.11%	$\chi^2 = 6.559$
Managerial training	39	32.23%	20	19.23%	59	26.22%	
Grants of equipment	11	9.09%	13	12.50%	24	10.67%	
Grants of capital	21	17.36%	23	22.12%	44	19.56%	
International trade fairs	12	9.92%	7	6.73%	19	8.44%	
Total	121	100.00%	104	100.00%	225	100.00%	

Source: Author's calculation based on survey data

Table 5-22: Helpfulness of Regional Government Programmes

Export Assistance Programmes	Mean Helpfulness Score			Statistical Test	
	Exporter	Non-Exporter	All Respondents	Equality of Variances	Mean Difference
Technical training	2.28	2.40	2.33	4.301**	-1.217
Managerial training	2.22	2.40	2.29	3.062*	-1.715*
Grant of equipment	2.24	2.42	2.32	.241	-.985
Grant of capital	2.40	2.59	2.50	1.142	-1.307
International trade fairs	2.59	2.64	2.60	.000	-.442

Note: Equality of variance assumption is checked with Levene's test
 (*) and (**) represent 10% and 5% significance levels, respectively

Source: Author's calculation based on survey data

We next investigate the helpfulness of the local government agencies' (at both provincial and municipal levels) export assistance for SMEs' export activities. Table 5.22 summarises the perceived helpfulness of each export assistance programme. Overall, the exporting SMEs receive more assistance (total 121 counts) than non-exporting SMEs (total 104 counts). Both exporting and non-exporting SMEs perceived international trade fairs and grants of capital as the first and the second

most beneficial assistance, respectively. However, the mean difference test results suggest that the exporting and non-exporting SMEs differ significantly in the perceived helpfulness of one type of assistance- managerial training. Interestingly, the managerial training is perceived as more beneficial by non-exporting SMEs than exporting SMEs. The possible explanation is that such export assistance could be more effective in helping SMEs to initiate/attempt exporting but less helpful in sustaining or expanding it (OECD-APEC, 2006).

5.6 Export Process and Strategy

This section provides the descriptive statistics of the survey data related to SMEs' internationalisation process and strategy. Sections 3.2 and 4.2.5 previously showed that internationalisation can be perceived as the way SMEs address six questions (six elements) in their attempt to become exporters including firm and owner characteristics (*who*), export motivating factors (*why*), product selection (*what*), target market selection (*where*), entry modes (*how*) and points of entrance (*when*).

5.6.1 Export Stimuli (*why*)

Section 5.2 previously discussed how export stimuli is crucial in driving SMEs to export. In this section, we briefly recap the results in Section 5.2 and show their relevance to SMEs' internationalisation process and strategy. We found that SMEs are driven by stronger export stimuli than aspiring-exporters. In addition, SMEs in the pre-exporting stage (aspiring exporters) and those in the exporting stage (exporting SMEs) are driven by different sets of export stimuli. The aspiring exporters indicate that their most important export stimulus is to "*Find new markets (S1)*" while the exporting SMEs indicated that their most important export stimulus is "*Foreign buyers (S15)*". The result shows that SMEs, with their limited internal resources, view exporting as a high-risk activity (Hessels & Terjesen, 2010; Wilkinson & Brouthers, 2006). Hence, SMEs may initially be stimulated to export because they want to exploit new markets overseas or because they are confident with the competitiveness of their products, but they only begin to devote resources to export activities after they actually receive enquiries or orders from potential foreign customers.

5.6.2 Firm and Owner Characteristics (*who*)

Section 5.1 previously showed how exporters and aspiring-exporters' firm and owners' characteristics differ. In this section, we recap the results in Section 5.1 and show its relevance to SMEs' internationalisation process and strategy. In terms of firm characteristics, firms' operational

experience and size matter in exporting but there is an indication of strong international aspiration among young firms. In terms of owner characteristics, age and work/business experience do matter in exporting, but there is an indication of strong international orientation among young entrepreneurs. In addition, there is a positive association between SMEs' internationalisation and owners' education and international exposure (e.g. international study, training and work experience).

5.6.3 Sources of Information regarding Export Opportunities (*how*)

SMEs use various sources to obtain information regarding export opportunities. In the survey, the respondents who identified themselves as exporters or aspiring-exporters were asked which sources of information they used to identify export opportunities in foreign target markets. Table 5.23 shows that both exporters and aspiring-exporters used ten sources of information, but the Chi-square test indicates that the two SME groups differ in the extent to which they use those information sources.

Table 5-23: Sources of Information regarding Export Opportunities

Source of Information	Exporter		Aspiring Exporter		Statistical Test
	Count	%	Count	%	
Newspapers and television	31	4.9%	23	8.3%	$\chi^2 = 42.049^{***}$
Web/internet resources	68	10.8%	51	18.3%	
Business association	72	11.4%	25	9.0%	
Business partners/associates	152	24.1%	68	24.5%	
Central government agencies	59	9.4%	13	4.7%	
Regional government agencies	36	5.7%	12	4.3%	
Family/relatives	39	6.2%	23	8.3%	
Indonesian emigrant societies in target markets	7	1.1%	8	2.9%	
Contact made by buyer	148	23.5%	54	19.4%	
Trade Show/Expo	19	3.0%	1	0.4%	
Total		100%		100%	

Note: (***) represents a 1% significance level

The counts exceed the number of respondents because each respondent may identify more than one source of information

Source: Author's calculation based on survey data

Business partners/associates and potential buyers are the two most important sources of information for both exporters and aspiring exporters. However, the exporters reported that business association and web/internet resources are the third and fourth most important sources of information, while for aspiring exporters the order of importance is reversed. In addition, central government agencies are the fifth most important source of information for exporters, while for

aspiring-exporters it was newspapers, television and internet media as well as family/relatives. These findings indicate that exporting SMEs appeared to have better network relationships with business associations and central government agencies than aspiring-exporters.

5.6.4 Export Destinations/Target Markets (*where*)

Given the abundant sources of information, SMEs may receive enormous amounts of information on foreign market opportunities prior to exporting. However, they must eventually decide which foreign market they will initially attempt to enter. Hence, in the survey, the exporting SMEs were asked to indicate which market(s) they initially entered while the aspiring-exporters were asked which market(s) they plan to initially enter. Table 5.24 shows that the aspiring-exporters mostly plan to initiate exporting to neighbouring ASEAN countries (37.4%), followed by East Asia (17.4%), Europe (14.8%), Australia and Oceania (13.9%) and America (continent) (12.2%).³⁹ These target market selections indicate that for aspiring-exporters the distance to the target markets is a more important factor for their initial export plans than the target markets' purchasing power and size.

Table 5-24: Foreign Markets Targeted for Initial Export

Foreign Market Destinations	Exporter (Actual)		Aspiring-exporter (Planned)		Chi-square Test
	Count	%	Count	%	
ASEAN	59	21.1%	43	37.4%	$\chi^2 = 22.640^{***}$
East Asia	65	23.2%	20	17.4%	
Rest of Asia	14	5.0%	4	3.5%	
Oceania	36	12.9%	16	13.9%	
Europe	76	27.1%	17	14.8%	
America	24	8.6%	14	12.2%	
Africa	6	2.1%	1	0.9%	
Total		100%		100%	

Note: The counts exceed the number of respondents because each respondent may identify more than one target market

(***) represents a 1% significance level

Source: Author's calculation based on survey data

However, the exporters reported that their actual initial exports were shipped mainly to Europe (27.1%) and East Asia (23.2%), while the neighbouring ASEAN countries are only the third most important destination (21.1%) and the neighbouring Australia and Oceania countries are the fourth most important markets (12.9%). These initial export market compositions reported by the

³⁹ For detailed first export market by sub-continent, see Appendix E.1.

exporters indicate that purchasing power and size of targets markets are more important in initial export attempts than the distance factor.

Thus, aspiring-exporters' market selection plans differ from the actual initial export market reported by the exporters. The Chi-square test (significant at the 1% level) confirms that SMEs' planned target markets are different from the markets they actually enter when they export for the first time. At the pre-exporting stage, most SMEs plan to export to close-distant foreign markets or foreign markets with many similarities with domestic markets. However, SMEs make their initial exporting to the market from where the actual demand comes, mostly from the high income and large countries.

SMEs that were successful in their initial exporting may consider expanding their exports to other markets. Hence, the survey also asked the exporting SMEs how they expanded their market after the first export - whether they succeeded in exporting to other markets and, if they did, to which markets they expanded. Table 5.25 summarises the export expansion pattern of the surveyed SMEs.⁴⁰

Table 5-25: Market Expansion after Initial Exporting

First Export		Expand after First Export	Export Expansion Destinations (counts)						
Markets	Count		ASEAN	East Asia	Rest of Asia	Oceania	Europe	America	Africa
ASEAN	59	51 (86.4%)	41	16	20	15	13	16	4
East Asia	65	62 (95.4%)	44	44	22	18	23	21	4
Rest of Asia	14	12 (85.7%)	9	6	10	6	4	1	1
Oceania	36	34 (94.4%)	26	22	14	23	19	15	9
Europe	76	72 (94.7%)	41	39	33	30	67	43	13
America	24	23 (95.8%)	9	12	8	11	15	14	2
Africa	6	5 (83.3%)	4	2	3	2	3	2	4

Source: Author's calculation based on survey data

There are at least three export expansion patterns shown in Table 5.25. First, most of the exporting SMEs (more than 80%) were not content with initial export market, regardless of their first export destinations, and therefore they expanded the export market thereafter. Second, the export market expansion mostly begins from the initial export markets' neighbouring countries. For example, SMEs that initially exported to a European country (76 cases) expanded their exports mainly to other European countries (67 out of 76 cases) and the same is also true for SMEs that initially exported to

⁴⁰ For detailed export market expansion by sub-continent, see Appendix E.2.

other regions. Third, SMEs that begin exporting from close-distant markets expanded their exports gradually to the next less-distant markets, while SMEs that began exporting from distant markets or high-income markets exhibit a more varied pattern in their export expansion path. For example, of the 51 SMEs that initially exported to ASEAN countries, 36 later expanded their export market mostly to other countries in Asia. On the contrary, of the 76 SMEs that initially exported to European countries, many of them later expanded their export markets beyond Europe including to the American continent (43 cases), ASEAN (41 cases) and East Asia (39 cases).

5.6.5 Export Products and Timing to Become Exporters (*what and when*)

Exporting SMEs differ in the time taken (number of years) after their business establishment until they begin exporting. In the survey, the exporting SMEs were asked the year the firms were established and the year they began exporting. This enables us to calculate the number of years they operated domestically before they begin to export. Table 5.26 shows that the exporting SMEs on average take 6.2 years to internationalise but the timing differs across product groups. SMEs that produce furniture or multi-products (more than one type of product) become exporters in a relatively short time (3.77 and 4.02 years, respectively) compared to SMEs that produce other types of products. In contrast, SMEs that produce agricultural products and food and beverages took the longest time to make their first export (9.57 and 11.12 years, respectively). The ANOVA test result in Table 5.26 confirms the time taken by SMEs to internationalise differs across commodities. However, Table 5.26 also shows that none of these product groups can internationalise within less than 3 years (i.e. no indication of born global enterprises).

Table 5-26: Time Taken to Become Exporters (years), by Products

Products	N	Mean	Std. Dev.	Min.	Max.	ANOVA
Furniture	43	3.77	6.803	0	34	
Handicrafts	59	6.46	7.923	0	38	
Garments	33	6.58	6.787	0	32	
Household Utensils	15	7.13	3.461	1	13	
Leather Products & Fashion Accessories	15	5.93	5.982	0	20	
Food & Beverages	17	11.12	12.237	1	44	F = 2.203**
Agro Products	23	9.57	8.500	0	29	
Machinery Components	7	6.29	5.407	1	16	
Other Products	9	7.78	8.497	0	27	
Multiproduct	50	4.02	7.121	0	41	
Total	271	6.20	7.736	0	44	

Note: (**) represent a 5% significance level

Source: Author's calculation based on survey data

Paired t-tests were performed to check the cross-product pairwise differences in the time taken by SMEs to internationalise.⁴¹ The results show that differences in the time taken to internationalise between products are marginal. None of the pairwise mean difference is statistically significant at the 5% level. In other words, there is no statistical evidence that SMEs with one type of product takes a shorter or longer time to become exporters than SMEs that produce other type of products.

Alternatively, the significant difference in timing to internationalise can also be shown across provinces (see Table 5.27). The ANOVA test in Table 5.27 suggests that SMEs in the seven provinces differ significantly in the time taken to begin exporting. The exporting SMEs (271 respondents) on average took 6.20 years after their establishment before exporting but this number does not uniformly represent SMEs in all provinces. SMEs in Bali and DI Yogyakarta are the fastest to become exporters (1.98 and 3.55 years after establishment on average, respectively). Those two provinces are small in size and are the main tourist destinations in Indonesia, enabling a high probability of exposure to foreign people. Particularly, there is an indication of born global enterprise in Bali Province, as they can become exporters within 3 years of establishment. On the contrary, SMEs in Jawa Timur and Jawa Tengah on average took a longer time to internationalise (10.79 and 8.92 years, respectively). These two provinces have large populations and advanced industrialisation, allowing local SMEs to concentrate on the local markets.

Table 5-27: Firms' Age at the First Export (years), by Province

Province	N	Mean	Std. Dev.	Min.	Max.	ANOVA
Bali	43	1.98	3.327	0	13	F = 9.811***
DI Yogyakarta	53	3.55	5.391	0	32	
Jawa Barat	19	3.95	6.087	0	24	
DKI Jakarta	56	5.77	5.843	0	37	
Banten	11	6.64	7.567	1	26	
Jawa Tengah	13	8.92	8.995	0	28	
Jawa Timur	76	10.79	9.763	0	44	
Total	271	6.20	7.736	0	44	

Note: (***) represent a 1% significance level

Source: Author's calculation based on survey data

Paired t-tests are performed to check the cross-province pairwise differences in the time taken by SMEs to internationalise.⁴² The most notable significant differences are that SMEs in Jawa Timur (the

⁴¹ See Appendix E.4 for the multiple comparisons of export timing across products.

⁴² See Appendix E.3 for multiple comparisons of export timing across provinces.

largest province) on average take 8.813 years and 7.242 years longer than SMEs in Bali and DI Yogyakarta (two main tourist destinations), respectively, to become exporters.

5.7 Export Performance

This section discusses the survey results related to SMEs' export performance. In the survey, two types of export performance indicators were used: (perceptual) satisfaction on export financial performances and export intensity (share of export revenue in SMEs' total revenue).

Table 5.28 presents the average Likert response scores for four export financial performance indicators including two static indicators (export sales and profit from export sales) and two growth indicators (growth in export sales and growth in export profit). A three-point Likert-scale, ranging from 1 (not satisfied), 2 (satisfied) and 3 (very satisfied), was used to measure the satisfaction of export performance in the last three years prior to the survey.

Table 5-28: Satisfaction on Export Financial Performance

Export Performance Measures	Means of Likert-Scale Responses	Std. Deviation	Std. Error Mean
Profit from exporting	1.91	.583	.038
Export sales	1.90	.559	.037
Growth in export sales	1.87	.651	.043
Growth in export profit	1.86	.620	.041

Note: N = 234 (one active exporter did not complete the questions on export performance)

Source: Author's calculation based on survey data

Overall, Table 5.28 shows that the four indicators of export financial performance have average response scores below 2.0, which implies that SMEs are less than satisfied in all four export financial performance indicators. The low satisfaction on export sales may indicate the stiff competition in international markets that drive down the product price (Lages & Montgomery, 2004). The low satisfaction on the profit from exporting may indicate the high cost of exporting beyond SMEs' initial estimation/expectation (Lu & Beamish, 2001).

The lowest satisfactions are perceived in two export performance growth indicators: the growth of export sales and the growth of export profit in the last 3 years. These may indicate that despite being able to become exporters, SMEs' export development has remained stagnant or even slightly regressed in the last 3 years. This implies that the challenges and impediments in SME internationalisation are not only encountered in the export initiation process, but are also of similar

severity at the exporting stage (Crick, 2002; Uner, Kocak, Cavusgil, & Cavusgil, 2013). In other words, the findings show that exporting SMEs encounter difficulties in expanding their exports.

However, the mean score differences across the four export performance indicators are quite narrow. Hence, we tested whether the mean scores of the four export financial performance indicators differ significantly using the paired difference tests (dependent t-test). Table 5.29 summarises the paired samples test results. The results confirm that none of paired mean differences is significant at the 5% level. In other words, SMEs are equally unsatisfied with the four indicators of export financial performances.

Table 5-29: Mean Differences of Export Performance Satisfaction Measures

Export Performance Satisfaction Differences	Paired Score Differences			t	df	Sig. (2-tailed)
	Mean	Std. Dev.	Std. Error Mean			
Export sales – Growth in export sales	.034	.531	.035	.985	233	.326
Export sales – Profit from export	-.009	.444	.029	-.294	233	.769
Export sales – Growth in export profit	.038	.543	.035	1.084	233	.280
Growth in export sales - Profit from export	-.043	.577	.038	-1.133	233	.258
Growth in export sales - Growth in export profit	.004	.495	.032	.132	233	.895
Profit from export - Growth in export profit	.047	.465	.030	1.545	233	.124

Source: Author’s calculation based on survey data

The survey also asked the exporting SME respondents to indicate the share of export sales in the firms’ total sales (export intensity). The average export intensity of 271 surveyed exporting SMEs is 0.4101 (41% of total revenue is received from export revenue). However, Table 5.30 shows that export intensity differs across firm category, owners’ gender and education level and SMEs’ province location.

Table 5.30 shows that exporting SMEs with male owners on average exhibit higher export intensity than those with female owners. However, the difference in export intensity is not statistically significant. Likewise, the medium-sized enterprises’ average export intensity is slightly higher than small-sized enterprises but the difference in export intensity between the two firm categories is not statistically significant.

Exporting SMEs whose owners have college degrees or higher education on average exhibit higher export intensity than those whose owners are high school graduates or with lower levels of education. The t-test value (significant at the 5% level) indicates that export intensity significantly differs across SME owners’ education level. SMEs’ export intensity also varies significantly by

provinces (the ANOVA test value is significant at the 1% level). Exporting SMEs in DI Yogyakarta (a small province and important tourist destination) have higher average export intensity than SMEs in the other six provinces. In contrast, exporting SMEs in DKI Jakarta (a large and industrialized province) exhibit the lowest average export intensity.

Table 5-30: Export Intensity, by Firm and Owner Characteristics

Categories	N	Mean	Std. Deviation	Mean Difference test
Firm Category				
Medium Enterprises	173	.4198	.33109	t = 0.663
Small Enterprises	98	.3930	.30105	
Owner's Gender				
Male	203	.4233	.32891	t = 1.245
Female	68	.3707	.29160	
Owner's Education Level				
College or higher	187	.4370	.31540	t = 2.071**
High school or lower	84	.3504	.32475	
Province				
DI Yogyakarta	53	.6119	.32074	F = 13.226***
Jabar	19	.5695	.39042	
Bali	43	.5537	.28557	
Banten	11	.2636	.20260	
Jateng	13	.4308	.33074	
Jatim	76	.2809	.26280	
DKI Jakarta	56	.2541	.22842	

Note: The equal variance assumption was checked with Levene's test prior to the t-test

Source: Author's calculation based on the survey data

5.8 Impact of Exporting on SMEs' Performance

This section discusses the survey results related to the impact of export activities on firm performance. In the survey, the exporters were asked whether they perceived firm performance improvement since they began exporting based on a three-point Likert-scale (1 = no improvement, 2 = improved and 3 = significantly improved). Table 5.31 shows the mean values of the Likert-scale response scores for eight firm performance indicators.

Six performance indicators have average response scores above 2.0, including four operational performance indicators (product quality, marketing and networking techniques, production techniques/technology and worker productivity) and two financial performance indicators (total

sales and total profit). The average response scores above 2.0 imply that SMEs have perceived improvement in the six performance indicators after they began exporting.

Table 5-31: Improvement in SMEs’ Performances after Exporting

Firm Performance Indicators	Means of Likert-Scale Responses	Std. Deviation	Std. Error Mean
Product quality	2.30	.591	.039
Marketing and networking techniques	2.15	.625	.041
Total sales	2.11	.616	.040
Total profit	2.09	.524	.034
Production technique/technology	2.08	.666	.044
Worker productivity	2.06	.601	.039
Efficiency (per unit cost of production)	1.86	.592	.039
Domestic sales	1.85	.687	.045

Note: N = 234 (1 active exporters did not complete the question on performance)

Source: Author’s calculation based on survey data

SMEs perceived the greatest performance improvement in product quality after exporting. Exporting SMEs should adapt to overseas customers and markets’ demand that usually require higher product quality level and standards than domestic markets (Padmadinata, 2007; Seifert & Ford, 1989). Exporting SMEs are also inclined to improve their product quality to minimize foreign buyers’ complaints and product rejection.

SMEs perceived the improvement in the marketing and networking techniques as the second largest improvement from exporting activities. SMEs’ managerial team may already have improved some skills including foreign language, the use of information and communication technology (ICT), contract arrangements, product promotion and business networking during their export initiation process. They may further improve those skillsets during the exporting stage from day-to-day interaction with foreign customers.

Exporting improves SMEs’ total sales and total profit. Improvement in total sales is expected since SMEs are likely to receive a higher price for a product sold overseas than domestically. Improvement in total profit is also anticipated since exported products may give SMEs larger margins than those sold in the domestic market (Masurel, 2001; Nazar & Saleem, 2011). However, the average score of total profit improvement (2.09) is slightly lower than that of the total sales improvement (2.11). This may indicate that additional revenues from exported products do not always fully reflect its additional profit, possibly due to the high cost of exporting.

Exporting also improves SMEs’ production technique/technology and worker productivity. These are not difficult to apprehend since foreign buyers are likely to transfer more advanced knowledge and technology, closely watch the production process and be stricter in the enforcement of the product completion deadline (Hobday, 1994; von Weltzien Høivik & Shankar, 2011). Hence, exporting may improve SMEs’ ability to detect any deficiency in the production process and improve employees’ work rate (Ganotakis & Love, 2012).

However, two indicators of firm performances have average response scores below 2.0: domestic sales and efficiency. The average response scores below 2.0 imply that exporting activities neither boosted SMEs’ domestic sales nor increased efficiency in terms of cost of production. The unit cost of production is difficult to be driven down possibly because SMEs must maintain a high quality of their exported products, which requires a high cost of raw materials and labour inputs. Moreover, exporting does not improve SMEs’ domestic sales, possibly because SMEs exhaust most of the limited resources for export production at the expense of domestic market oriented products.

Table 5-32: Paired Mean Differences for Performance Improvement after Exporting

Performance Indicators	Domestic sales	Cost efficiency	Worker productivity	Production technology	Total profit	Total sales	Marketing & networking
Product quality	.450***	.440***	.248***	.222***	.209***	.197***	.158***
Marketing & networking	.293***	.282***	.090*	.064	.051	.038	
Total sales	.253***	.244***	.051	.026	.013		
Total profit	.240***	.231***	.038	.013			
Production technology	.223***	.218***	.026				
Worker productivity	.205***	.192***					
Cost Efficiency	.022						

Note: (*), (**) and (***) represent 10%, 5% and 1% significance levels, respectively

Source: Author’s calculation based on survey data

We next examine whether the mean scores of the eight performance indicators differ significantly using the paired difference tests (dependent t-test). Table 5.32 summarises the paired sample test results. The results confirm that the improvement in product quality (highest improvement) after exporting is significantly higher than the improvement of the other seven firm performance indicators. Improvement in domestic sales (lowest improvement score) is significantly lower than the

improvement of the other seven performance indicators. Improvement in cost efficiency (2nd lowest improvement) is significantly lower than the improvement of the other six firm performance indicators that have higher average response scores. In short, it can be inferred that SMEs' improvement in product quality after exporting stands out as the highest improvement, while on the contrary, SMEs experienced least improvement in cost efficiency and domestic sales since engaging in export activities.

Chapter 6

Estimation Results

This chapter presents the estimation results of SME internationalisation models. Section 6.1 presents the estimation results of the export involvement model and discusses the factors that determine SMEs' probability to engage in direct-exporting. Section 6.2 presents the estimation results of the export performance model and discusses the factors that affect SMEs' export intensity. Section 6.3 presents the estimation results of the export-impact model and discusses the factors that determine SMEs' performance improvements due to exporting.

6.1 Factors Influencing SMEs' Engagement in Export Activities

The logistic regression analysis with maximum likelihood estimation technique is used to investigate the factors that influence SMEs' involvement in exporting activities (i.e. to estimate SMEs' probability to export). We estimate two binary logistic regression models. The first model investigates the factors that distinguish exporting SMEs and non-exporting SMEs. Accordingly, the dependent variable is SMEs' dichotomous export status with a numerical value of 1 representing exporting SMEs and 0 for non-exporting SMEs. In the second model, we exclude non-intenders (non-exporting SMEs that have no intention to export) from non-exporting SMEs in the estimation. Consequently, in the second model the non-exporting SMEs only consist of aspiring-exporters (non-exporting SMEs that have the intention and plan to export in the near future). Therefore, the second model investigates the factors that distinguish exporting SMEs and aspiring-exporters and, accordingly, the dependent variable is the SMEs' dichotomous export status with the numerical value of 1 representing exporting SMEs and 0 for aspiring-exporters.

Both regression models use the same set of explanatory variables including the export-enhancing factors (export stimuli), export-inhibiting factors (export barriers) and SMEs' characteristics (see Section 4.2.6 for the definition of each explanatory variable). The export-inhibiting factors are represented by eleven export barrier factors obtained previously from the PCA in Section 5.3.5. Hence, the export-inhibiting factors include the following eleven variables: *Barrier_Tariff*, *Barrier_Human*, *Barrier_Distribution*, *Barrier_ForeignEnviro*, *Barrier_Product*, *Barrier_Financial*, *Barrier_ForeignGovt*, *Barrier_Procedur*, *Barrier_Price*, *Barrier_HomGovt* and *Barrier_Customer*. Those variables represent tariff and non-tariff export barriers in host countries, informational and

human resources barriers, distribution, logistics and promotional barriers, business environment barriers in host countries, product and transaction barriers, financial barriers, foreign government barriers, procedural barriers, price barriers, home government barriers, and foreign customer and competitor barriers, respectively. The data series for each export barrier variable is obtained from PCA's factor scores and calculated with the Regression Score method.⁴³

The export-enhancing factors, however, are not represented by the six export stimuli factors previously obtained from the PCA in Section 5.2.3 for two reasons. First, in the survey, the export stimuli questions were meant for exporting SMEs and aspiring-exporter respondents. Consequently, the survey did not collect export stimuli perceptions from non-intender respondents. Second, the survey collected some non-perceptual data (factual/quantitative data) that can represent export-enhancing factors. These include SME owners' international exposure (overseas study experience, overseas training experience, overseas work experience and MNC/exporting firms work experience), assistance received from central and local government agencies, network relationships (assistance received from non-government sources), product type's contribution in Indonesia's total exports (*ProductXNational*) and a province's contribution in Indonesia's total exports (*ProvinceXNational*).

SMEs characteristics are represented by the firm and owner characteristics. Firm characteristics include *FirmAge* and *TotalEmployee* (to measure firm size) whereas owners' characteristics include *OwnerGender*, *OwnerAge* and *OwnerEducation*.

6.1.1 Exporter-Non-exporter Binary Model Estimation

Appendix F.1 presents SPSS outputs and the specification test results of the exporter-non-exporter binary logistic model estimation. The Omnibus Tests of Model Coefficients yielded a Chi-Square statistic of 311.130 with 25 degrees of freedom and is significantly different from zero at the 1% level. Moreover, the model's -2 Log likelihood value of 372.200 suggests that the model including the explanatory variables is a significantly better fit than the null model. These indicate that the explanatory variables employed in the models significantly improve the baseline model that only include the constant. In other words, the 25 explanatory variables used in the model can significantly improve the model's ability to explain the variation of the outcome (i.e. SMEs' exporting or non-

⁴³ Factor scores can be calculated with non-refined methods (Sum Scores or Summated Scales) and refined methods (e.g. Regression Scores, Bartlett Scores, Anderson-Rubin Scores) (DiStefano, Zhu, & Mindrila, 2009). We used the Regression Score method to calculate the factor scores for the eleven variables that represent export barriers. However, we also simulated the factor score calculation with two other refined methods (Bartlett Scores and Anderson-Rubin Scores) and obtained very similar results.

exporting status). In particular, the Cox and Snell Pseudo R-square of 0.466 and the Nagelkerke Pseudo R-square of 0.623 indicate that the model can explain a considerable share of the variation in SMEs' export status (McFadden, 1977).⁴⁴ The Hosmer and Lemeshow Test yielded a Chi-square value of 5.305 and $p = 0.725 (>.05)$, which suggests the model is a good fit to the data. More precisely, the model (with 25 explanatory variables) has an 82.3% success in classifying/predicting SMEs' engagement in exporting activities (see Table 6.1 for the prediction success of the exporter-non-exporter binary logistic model).

Table 6-1: Classification Table for Exporter-Non-Exporter Binary Logit Estimates

Observed		Predicted		
		Export Status		Percentage Correct
		Non-exporter	Exporter	
Export Status	Non-exporter	175	50	77.8
	Exporter	38	233	86.0
Overall Percentage				82.3

Source: Author's calculation based on the survey data

Table 6.2 exhibits the direction and the magnitude of the effect of each explanatory variable on the dependent variable. Fourteen explanatory variables have statistically significant estimated coefficients with expected signs except for *ProvinceXNational*. However, the value of the estimated coefficients from the logistic regression have no direct economic interpretation because they are obtained with maximum likelihood estimation techniques (Greene, 2008). To address this limitation, Table 6.2 also gives the calculated average marginal effects⁴⁵ and odds ratio⁴⁶. Marginal effects are more insightful to interpret the estimated coefficients of continuous explanatory variables, while the odds ratios are more meaningful to interpret the estimated coefficients of the dichotomous explanatory variables.

⁴⁴ McFadden (1977) argued that for the estimation using the maximum likelihood estimation, the value of ρ^2 (Pseudo R-square) between 0.2 and 0.4 represents an excellent fit of the model. In this case, the full model (with all the explanatory variables) significantly improves the initial model with only the intercept as predictor.

⁴⁵ We use average marginal effect instead of marginal effect at the mean value of other explanatory variables because our model has a number of dichotomous (categorical) explanatory variables. For example, it is less intuitive to analyse the marginal effect of an explanatory variable on the dependent variable at the mean value of SME owners' gender because the gender variable takes binary values of either 1 (male) or 0 (female).

⁴⁶ The odds ratio is obtained by the exponentiation of the estimated coefficients. In our model, it can be interpreted as the ratio of odds to become exporters given a one-unit change in the explanatory variable.

Table 6-2: Binary Logistic Estimates (Exporter-Non-Exporter Model)

Independent Variables	Estimated Coefficients	Standard Error	Wald Statistics	Odds Ratio	Marginal Effects
Enhancing Factors					
<i>OwnerStudyAbroad</i>	-.587	.679	.746	.556	-0.070
<i>OwnerTrainAbroad</i>	.848	.876	.937	2.336	0.101
<i>OwnerWorkAbroad</i>	1.632*	.869	3.527	5.114	0.195
<i>OwnerWorkMNC</i>	.510	.501	1.035	1.665	0.061
<i>ProductXNational</i>	4.224**	2.129	3.934	68.291	0.504
<i>ProvinceXNational</i>	-.319***	.087	13.589	.727	-0.038
<i>GovCentral_Assist</i>	1.148***	.309	13.831	3.151	0.137
<i>GovtLocal_Assist</i>	-.105	.306	.118	.900	-0.013
<i>NonGovt_Assist</i>	2.504***	.357	49.248	12.236	0.299
Inhibiting Factors					
<i>Barrier_Tariff</i>	-.479***	.142	11.474	.619	-0.057
<i>Barrier_Human</i>	-.624***	.140	19.726	.536	-0.074
<i>Barrier_Distribution</i>	-.326**	.145	5.028	.722	-0.039
<i>Barrier_ForeignEnviro</i>	-.250*	.148	2.877	.779	-0.030
<i>Barrier_Product</i>	.073	.150	.237	1.076	0.009
<i>Barrier_Financial</i>	-.087	.150	.336	.917	-0.010
<i>Barrier_ForeignGovt</i>	-.211	.137	2.394	.809	-0.025
<i>Barrier_Procedur</i>	-.345**	.155	4.926	.708	-0.041
<i>Barrier_Price</i>	-.227	.139	2.679	.797	-0.027
<i>Barrier_HomGovt</i>	.134	.142	.888	1.143	0.016
<i>Barrier_Customer</i>	-.307**	.140	4.826	.735	-0.037
SMEs' Characteristics					
<i>FirmAge</i>	.036***	.014	6.761	1.036	0.004
<i>TotalEmployee</i>	.017***	.005	9.095	1.017	0.002
<i>OwnerGender</i>	.136	.315	.185	1.145	0.016
<i>OwnerAge</i>	.011	.014	.585	1.011	0.001
<i>OwnerEducation</i>	.016	.122	.016	1.016	0.002
Constant	-2.558***	.858	8.878		
Total observations			496		
Degree of freedom			25		
-2 Log likelihood			384.632		
LR Chi-square			298.698***		
Pseudo R-squared (Cox & Snell)			.452		

Note: Dependent variable: Binary values, where 1= exporting SMEs and 0 = non-exporting SMEs
 (*), (**) and (***) represent 10%, 5% and 1% significance levels, respectively

Marginal effects are calculated as overall average marginal effects

Source: Author's calculation based on the survey data

With respect to SME owners' international exposure, only overseas work experience has a significant effect while overseas study experience, overseas training experience and MNC/exporting firms' work experience have no significant effects on SMEs' involvement in exporting activities. Owners' overseas work experience positively affects SMEs' probability of exporting at the 10% significance level. SMEs whose owners have previously worked abroad on average have the odds to become exporters 5.114 times greater than SMEs whose owners are without such experience, other things being equal. Further investigation is necessary to identify the skillset gained and accumulated with overseas work experience that may enhance SME owner's international business orientation. Previous authors suggested that SME owners with international work experience possess better tacit knowledge of foreign markets (e.g. in foreign language, culture, business practices and regulation) and business contacts in foreign markets (Morosini, Shane, & Singh, 1998; Ruzzier, Antoncic, Hisrich, & Konecnik, 2007).

The estimated coefficient of *ProductXNational* is positive and significant at the 5% level. SMEs whose type of product corresponds to Indonesia's main export commodities are more likely to engage in exporting activities, and *vice versa*. The huge differences in export contribution of the commodities to Indonesia total export, with handicraft as the smallest contributor (0.045%) and food and beverages as the largest contributor (14.19%), might cause the large estimated odds ratio of *ProductXNational* (68.291). However, as *ProductXNational* is a continuous variable, the marginal effect estimation provides more meaningful interpretation than the odds ratio. The estimated marginal effect indicates that on average, a one percentage point higher share of SMEs' types of product in Indonesia total exports increases the probability of exporting by 0.5%. In other words, SMEs have higher probability to become exporter if they produce the types of merchandise that are already sold in foreign markets or already attract foreign buyers (indicated by the merchandise's large share in Indonesia total exports). One possible explanation for the positive effect of *ProductXNational* is the presence of "buyer effect" and of "copying/imitation effect" (Wengel & Rodriguez, 2006) in which SMEs tend to copy or imitate the types of products that already have *niche* in foreign markets.

In contrast, the coefficient of *ProvinceXNational* exhibits a negative sign (significant at the 1% level). SMEs that operate in the provinces that have large shares in Indonesia's total exports exhibit lower probability to export, and *vice versa*. This is possible if the exports in those provinces are dominated by large firms, and trading companies and agents. Further research involving the trade network actors and stakeholders at provincial level is necessary to investigate the causes for the reluctance of

SMEs' in those provinces to perform direct export. Previous authors argued that SMEs are increasingly engaged in global value chain or indirect exporting through trading companies, to which SMEs prefer to sell their products rather than exporting directly themselves (see for example Gereffi, 1994; Hessels & Terjesen, 2010). By involving in a global value chain with other local companies, SMEs may avoid the risks of exporting while also increase their business sustainability.

The estimated coefficient of *GovCentral_Assist* is positive at the 1% significance level. SMEs have a higher probability to export if they receive at least one of the following assistances from any central government agencies: promotional assistance (including trade expos, trade fairs, trade shows and SME catalogues), assistance in business management (e.g. managerial training), assistance in finance and assistance in production (e.g. production techniques or equipment). More specifically, SMEs that are recipients of central government agencies' assistance on average have the odds to become exporters 3.151 times greater than non-recipient SMEs, all else being equal. However, the assistance provided by local government agencies does not have a similar effect on export engagement. The estimated coefficient of *GovtLocal_Assist* is negative and insignificant. Technical training, managerial training, grants of equipment, grants of capital and trade fairs organized by provincial, municipal or regency governments do not significantly increase SMEs' probability to engage in exporting activities. The contradictory effect of central and local government agencies' assistance in SME internationalisation is possible since the central government agencies may have better vision on global market opportunities for SMEs, whereas the local government agencies may have stronger local or domestic market orientation in their assistance (Uchikawa & Keola, 2008).

The estimated coefficient of *NonGovt_Assist* is positive and significant at the 1% level, which implies that the assistance provided by non-governmental actors and network sources has a positive influence on SMEs' probability to become exporters. SMEs are more likely to be involved in exporting activities if they receive financial, technical, managerial and promotional assistance from various informal sources (family, relatives, business associates and Indonesian overseas emigrant communities) or formal non-governmental sources (including business chambers/associations, SOEs and universities/research institutes). More precisely, SMEs who are recipients of assistance provided by non-governmental network sources on average have the odds to engage in exporting 12.236 times greater than non-recipient SMEs, all other things being equal. This finding reaffirms the importance of network relationships in SME internationalisation reported by previous studies, such as Battaglia et al. (2006), Freeman et al. (2006), Coviello and Munro (1997), Ojala (2009) and Senik et al. (2011).

Of the eleven variables that represent export-inhibiting factors, six variables have significant effects on SMEs' probability to export, including *Barrier_Tariff*, *Barrier_Human*, *Barrier_Distribution*, *Barrier_Procedur*, *Barrier_ForeignEnviro* and *Barrier_Customer*. However, the estimated coefficients, marginal effects and odds ratio of those variables are not too insightful for interpretation because they are composite variables obtained from PCA's factor extraction and each barrier is measured by perceived difficulties with the Likert-scale method. Hence, we focus the analysis on the estimated signs of the coefficients that indicate the direction of the effect of perceived export barriers on SMEs' export involvement. As expected, the estimated coefficients of those six variables are negative, which imply that the more difficult the SMEs perceive those barriers, the lower the probability that they will become exporters. In other words, SMEs are less likely to export if they perceive high difficulties in tariff and non-tariff barriers, informational and human resource barriers, distribution, logistics and promotional barriers, business environment and competition barriers in host countries, procedural barriers, and foreign customer and competitor barriers. However, the estimated coefficients of *Barrier_Product*, *Barrier_Financial*, *Barrier_ForeignGovt*, *Barrier_Price* and *Barrier_HomGovt* are not statistically significant. Hence, the perceived difficulties of product and transaction barriers, financial barriers, foreign government barriers, price barriers and home government barriers do not affect SMEs' probability to export. These findings assert that export barriers are crucial in SME internationalisation but the levels of difficulties/severities vary across types of barriers (OECD, 2008, 2009).

Two variables that represent firm characteristics have the expected signs and significant estimated coefficients. The estimated coefficients of *FirmAge* and *TotalEmployee* are both positive and significant at the 1% level. More experienced SMEs have a higher probability to engage in exporting activities. In particular, one additional year of firm age on average increases the probability to export by 0.004, all else being equal. Established SMEs are more likely to have capital available or borrowed, an established administrative structure and decision making process, and how to expand or grow (Brush, 2012). Firm size also positively influences the probability of exporting. One additional employee on average increases SMEs' probability to export by 0.002, all else being equal. SMEs with larger numbers of employees may have better ability to upgrade the product quality and to meet foreign buyers' requirements (Ottaviano & Martincus, 2011). SME owners' characteristics, however, have no significant effect on SMEs' probability to export. The estimated coefficients of *OwnerAge*, *OwnersEducation* and *OwnerGender* have the expected positive signs but none of them is statistically significant.

6.1.2 Exporter-Aspiring-exporter Binary Model Estimation

We exclude non-intender SMEs (non-exporting SMEs with no intention to export) from the export engagement analysis and focus on the aspiring-exporters (non-exporting SMEs with intention and plan to export in the future). Appendix F.2 provides the SPSS outputs and the specification test results of the exporters-aspiring-exporters' binary logistic model estimation. The Omnibus Tests of Model Coefficients yielded a Chi-Square statistic of 155.797 with 25 degrees of freedom and are significantly different from zero at the 1% level. Furthermore, the model's -2 Log likelihood value of 311.999 implies that the model with the explanatory variables is a significantly better fit than the null model. These results indicate that the explanatory variables employed in the models significantly improve the baseline model that only includes the constant. In other words, the 25 explanatory variables used in the model can significantly improve the model's ability to explain the variation of the outcome (the exporting or aspiring-exporter status of the SMEs). In particular, the Cox and Snell Pseudo R-square of 0.333 and the Nagelkerke Pseudo R-square of 0.473 indicate that the model can explain a considerable share of the variation in the outcome. The Hosmer and Lemeshow Test yielded a Chi-square value of 14.244 and $p = 0.076$ (>0.05), which suggests the model is a good fit of the data. More precisely, the model (with its 25 explanatory variables) has 82.1% success in classifying/predicting SME's probability to engage in exporting. Table 6.3 presents the classification table of the exporter and aspiring-exporter binary logistic model.

Table 6-3: Classification Table for Exporter-Aspiring-Exporter Binary Logit Estimates

Observed		Predicted		
		Export Status		Percentage Correct
		Aspiring-exporter	Exporter	
Export Status	Aspiring-exporter	69	45	60.5
	Exporter	24	247	91.1
Overall Percentage				82.1

Source: Author's calculation based on the survey data

Overall, those specification test results indicate that both the exporter-non-exporter and exporter-aspiring-exporter models have good explanatory power and fit the survey data. However, the exporter-aspiring exporter model has lower Chi-square statistics value of the Omnibus Test, lower -2 Log likelihood value, lower pseudo-R square values and slightly lower percentage success in predicting the outcome than the exporter-non-exporter model. These results suggest that the exporter-aspiring-exporter model has slightly less explanatory power than the exporter-non-

exporter model. In addition, the Hosmer and Lemeshow Test value shows that the exporter-aspiring-exporter model fits the data less than exporter-non-exporter model. This is possible since exporting SMEs have more characteristics' contrast to overall non-exporting SMEs than to aspiring-exporters in particular. In addition, the exporter-non-exporter model (N = 497) has larger sample size than the exporter-aspiring-exporter model (N = 385).

The exporter-aspiring-exporter model use the same set of 25 explanatory variables as the exporter-non-exporter model (see Table 6.4). The estimations of the two models give exactly the same signs of the estimated coefficients of all explanatory variables despite different marginal effects and odds ratio. However, the two models differ in the set of explanatory variables that are statistically significant. In the exporter-aspiring exporter estimation results, the estimated coefficient of *OwnerWorkMNC* is now significant (insignificant in the exporter-non-exporter model) and the estimated coefficient of *Barrier_Customer* is now insignificant (significant in the exporter-non-exporter model). We therefore focus the analysis on the estimated coefficients of these two variables.

In terms of SME owners' international exposure, in addition to *OwnerWorkAbroad*, *OwnerWorkMNC* is positive and significant at the 10% level. Hence, in addition to the positive effect of SME owners' overseas work experience, owners' MNC/exporting firm work experience also increases SMEs' probability to engage in exporting activities. In particular, SMEs whose owners have previously worked for MNC or exporting firms on average have the odds to become exporters 2.762 times greater than SMEs whose owners have no such experience, other things being equal. This is possible since an SME owner with MNC or exporting firms work experience is likely to have better international business skills, information and contacts in foreign markets and knowledge of international trade policies and exchange rate risks (Carpenter, Sanders, & Gregersen, 2000; Ruzzier et al., 2007).

With respect to the inhibiting factors, the estimated coefficient of *Barrier_Customer* is now insignificant despite being previously significant in the exporter-non-exporter model. For non-exporting SMEs in general, foreign customers and competitor barriers are significant impediments in exporting, but for aspiring-exporters these types of barriers do not seriously hamper their attempt to engage in exporting activities.

Table 6-4: Binary Logistic Estimates (Exporter-Aspiring-Exporter Model)

Independent Variables	Estimated Coefficients	Standard Error	Wald Statistics	Odds Ratio	Marginal Effects
Enhancing Factors					
<i>OwnerStudyAbroad</i>	-.657	.693	.898	.518	-0.086
<i>OwnerTrainAbroad</i>	.654	.934	.491	1.924	0.086
<i>OwnerWorkAbroad</i>	1.644*	.935	3.095	5.178	0.216
<i>OwnerWorkMNC</i>	1.016*	.589	2.980	2.762	0.133
<i>ProductXNational</i>	6.132**	2.474	6.141	460.198	0.804
<i>ProvinceXNational</i>	-.297***	.092	10.305	.743	-0.039
<i>GovCentral_Assist</i>	.701**	.331	4.486	2.017	0.092
<i>GovtLocal_Assist</i>	-.132	.335	.156	.876	-0.017
<i>NonGovt_Assist</i>	.900**	.420	4.588	2.460	0.118
Inhibiting Factors					
<i>Barrier_Tariff</i>	-.531***	.163	10.617	.588	-0.070
<i>Barrier_Human</i>	-.822***	.163	25.370	.440	-0.108
<i>Barrier_Distribution</i>	-.286*	.154	3.471	.751	-0.038
<i>Barrier_ForeignEnviro</i>	-.319*	.164	3.757	.727	-0.042
<i>Barrier_Product</i>	.118	.170	.477	1.125	0.015
<i>Barrier_Financial</i>	-.119	.170	.491	.887	-0.016
<i>Barrier_ForeignGovt</i>	-.236	.152	2.405	.790	-0.031
<i>Barrier_Procedur</i>	-.412**	.172	5.762	.662	-0.054
<i>Barrier_Price</i>	-.208	.149	1.942	.813	-0.027
<i>Barrier_HomGovt</i>	.197	.156	1.594	1.218	0.026
<i>Barrier_Customer</i>	-.220	.153	2.080	.802	-0.029
SMEs' Characteristics					
<i>FirmAge</i>	.061***	.019	10.481	1.063	0.008
<i>TotalEmployee</i>	.018***	.006	7.651	1.018	0.002
<i>OwnerGender</i>	.001	.344	.000	1.001	0.000
<i>OwnerAge</i>	.017	.015	1.141	1.017	0.002
<i>OwnerEducation</i>	.031	.139	.050	1.032	0.004
Constant	-1.591*	.939	2.872		
Total observations			385		
Degree of freedom			25		
-2 Log likelihood			311.999		
LR Chi-square			155.797***		
Pseudo R-squared (Cox & Snell)			.333		

Note: Dependent variable: Binary values, where 1 = exporting SMEs and 0 = aspiring-exporters (*), (**) and (***) represent 10%, 5% and 1% significance levels, respectively
Marginal effects are calculated as overall average marginal effects

Source: Author's calculation based on the survey data

6.2 Factors Influencing SMEs' Export Performance

Section 5.7 previously discussed how exporting SMEs vary in their export performance. This section further investigates the factors that influence SMEs' export performance. Export performance is represented by export intensity (share of export revenue in total revenue). Hence, the dependent variable is the contribution (share) of export revenue to SMEs' total revenue (export revenue divided by total revenue). Accordingly, the dependent variable can take the minimum value of 0 for SMEs that do not engage in any direct exporting activities (the entire products are sold in the domestic market) and the maximum value of 1 for SMEs that do not sell the products in the domestic market (the entire products are exported).

The export intensity model uses three groups of explanatory variables including the export-enhancing factors (export stimuli), export-inhibiting factors (export barriers) and SMEs' characteristics (see Section 4.2.7 for the definition of each variable). We therefore incorporate previous studies' arguments that export stimuli and export barriers influence SMEs at both the pre-exporting stage and the exporting stage (to sustain and expand the exports) (see Section 3.8 for the discussion on the determinants of export performance).

For the export-inhibiting factors, we use eleven export barrier factors obtained previously from the PCA in Section 5.3.5, similar to those used previously in the SMEs' export engagement model in Section 6.1. Hence, the export-inhibiting factors are represented by the following eleven variables: *Barrier_Tariff*, *Barrier_Human*, *Barrier_Distribution*, *Barrier_ForeignEnviro*, *Barrier_Product*, *Barrier_Financial*, *Barrier_ForeignGovt*, *Barrier_Procedur*, *Barrier_Price*, *Barrier_HomGovt*, *Barrier_Customer*. Those variables represent tariff and non-tariff export barriers in host countries, informational and human resources barriers, distribution, logistics and promotional barriers, business environment barriers in host countries, product and transaction barriers, financial barriers, foreign government barriers, procedural barriers, price barriers, home government barriers, and foreign customer and competitor barriers, respectively.

For the export-enhancing factors, we use the set of variables previously used in the export engagement model in Section 6.1. Thus, the variables that represent export-enhancing factors include SME owners' international exposure (overseas study experience, overseas training experience, overseas work experience and MNC/exporting firms work experience), assistance received from central and local government agencies, network relationships (assistance received from non-government sources), product type's contribution to Indonesia's total exports

(*ProductXNational*) and a province's contribution to Indonesia's exports (*ProvinceXNational*). In addition, we included two additional variables: *ExportASEAN* and *YearsExporting*. *ExportASEAN* is a dichotomous variable that takes the numerical value of 1 if SMEs export to one of the ASEAN countries (regardless of whether they only export to ASEAN markets or they also export to other markets) and 0 if SMEs do not export to ASEAN markets. The *ExportASEAN* variable is added to capture the effect of the export destination market on export intensity. SMEs that export to ASEAN markets are expected to exhibit higher export intensity than SMEs exporting to other markets due to lower trade barriers among ASEAN countries. *YearsExporting* represents export experience, or the number of years SMEs had been exporting at the time of the survey. It is expected that export experience positively correlates with export intensity.

We estimate SMEs' export intensity with two regression models: Generalized Linear Model (GLM)-fractional logit regression and least square regression (OLS). The OLS regression method is applicable because the dependent variable (export intensity) is a continuous variable. However, since the export intensity is double-bounded (has a minimum value of 0 and a maximum value of 1), the OLS regression method may not give the best estimators. Papke and Wooldridge (1993) proposed the fractional logit regression model – a GLM estimation procedure to model proportion/fractional outcome.⁴⁷ However, the fractional logit model performs better and has more meaningful interpretations if there are observations with extreme values of the dependent variable –i.e. the export intensity of 0 (no export) and 1 (100% of the products are exported) (Baum, 2008). Hence, we included the non-exporting SMEs' observations (with zero export intensity) in our estimation.⁴⁸

Table 6.5 gives the estimation results of the fractional logit regression. The heteroscedasticity-consistent (robust) standard errors are used to ensure asymptotically valid inferences. The Log pseudo likelihood value of -139.5515767 suggests that the model including the explanatory variables is a significantly better fit than the null model. In other words, the 27 explanatory variables employed in the models significantly improve the baseline model that only includes the constant. Table 6.6 gives the estimation results of the OLS regression. The R-square and the Adjusted R-square values indicate that more than 50% of the variance in export intensity can be predicted by the explanatory variables in the model. The F-value indicates that the model is significant, i.e. the 27

⁴⁷ For further discussion on fractional regression, see Baum (2008), Papke and Wooldridge (1993) and Papke and Wooldridge (2008).

⁴⁸ Wengel and Rodriguez (2006) argue that it is reasonable to treat non-exporting SMEs as SMEs that intend to export zero percent of their product.

explanatory variables together can reliably predict the export intensity. No multicollinearity problem is detected as indicated by VIF values that are close to one for each explanatory variable.

In short, both fractional logit and OLS regression models are appropriate to estimate the export intensity of the surveyed SMEs in our study. In addition, there are high degrees of consistency/similarity in the estimated coefficients of the explanatory variables from fractional logit and OLS regressions. Thirteen explanatory variables are statistically significant in both estimations: *OwnerWorkAbroad*, *OwnerWorkMNC*, *NonGovt_Assist*, *ExportExperience*, *ProvinceXNational*, *Barrier_Human*, *Barrier_Distribution*, *Barrier_Financial*, *Barrier_ForeignGovt*, *Barrier_Procedur*, *Barrier_Price*, *FirmAge* and *TotalEmployee*. Furthermore, those thirteen variables have the same signs in both estimations despite different values of estimated coefficients. The estimation results of the two models only differ in two variables that are significant only in fractional logit estimation (*GovCentral_Assist* and *ExportASEAN*) and one variable that is significant only in OLS estimation (*OwnerAge*).

However, Wagner (2001) claimed that the fractional logit regression can better explain export intensity than other regression models such as OLS and double-bounded Tobit models. Hence, we use the fractional logit estimation results as our main reference for further analysis. Table 6.5 gives the marginal effect of each explanatory variable from fractional logit estimations.

With respect to SME owners' international exposure, *OwnerStudyAbroad* and *OwnerTrainAbroad* are not statistically significant while *OwnerWorkAbroad* and *OwnerWorkMNC* are significant. Owners' overseas work experience positively influences SMEs' export intensity at the 10% significance level. SMEs whose owners have worked abroad on average have a 5.2% higher export intensity than SMEs whose owners have no such experience, all else being equal. Owners' MNC/exporting firm work experience also positively influences export intensity (significant at the 5% level). SMEs whose owners have previous work experience in MNC/exporting firms on average have 5% higher export intensity than SMEs whose owners have no such experience, other things held constant. Work experience in international environments allows SME owners to build cross-border professional networks and acquire international business skills, which in turn may positively correlate with export expansion (Ruzzier et al., 2007).

Table 6-5: Fractional Logit Estimates for SMEs' Export Intensity Model

Independent Variables	Estimated Coefficients	Robust Std. Err.	Average Marginal Effects
Enhancing Factors			
<i>OwnerStudyAbroad</i>	0.038	0.282	0.004
<i>OwnerTrainAbroad</i>	-0.470	0.346	-0.054
<i>OwnerWorkAbroad</i>	0.457*	0.277	0.052
<i>OwnerWorkMNC</i>	0.439**	0.212	0.050
<i>GovCentral_Assist</i>	0.346*	0.192	0.039
<i>GovtLocal_Assist</i>	-0.161	0.181	-0.018
<i>NonGovt_Assist</i>	0.822***	0.294	0.094
<i>ExportASEAN</i>	0.403**	0.196	0.046
<i>YearsExporting</i>	0.101***	0.017	0.011
<i>ProductXNational</i>	0.242	1.171	0.028
<i>ProvinceXNational</i>	-0.208***	0.047	-0.024
Inhibiting Factors			
<i>Barrier_Tariff</i>	-0.100	0.082	-0.011
<i>Barrier_Human</i>	-0.378***	0.092	-0.043
<i>Barrier_Distribution</i>	-0.258***	0.092	-0.029
<i>Barrier_ForeignEnviro</i>	-0.131	0.087	-0.015
<i>Barrier_Product</i>	-0.073	0.096	-0.008
<i>Barrier_Financial</i>	-0.144*	0.081	-0.016
<i>Barrier_ForeignGovt</i>	-0.135*	0.076	-0.015
<i>Barrier_Procedur</i>	-0.260***	0.094	-0.030
<i>Barrier_Price</i>	-0.237***	0.080	-0.027
<i>Barrier_HomGovt</i>	0.073	0.081	0.008
<i>Barrier_Customer</i>	-0.031	0.088	-0.004
SMEs' Characteristics			
<i>FirmAge</i>	-0.069***	0.016	-0.008
<i>TotalEmployee</i>	0.010***	0.004	0.001
<i>OwnerGende</i>	0.057	0.198	0.006
<i>OwnerAge</i>	0.015	0.010	0.002
<i>OwnerEducation</i>	0.067	0.085	0.008
Constant	-2.650***	0.606	
Log pseudo likelihood		-139.5515767	
Akaike Information Criterion (AIC)		.6756112	
Bayesian Information Criterion (BIC)		-2779.461	
Deviance		125.2163353	
Pearson		141.8420984	
Residual d.f.		468	
Total observations		496	

Note: (*), (**) and (***) represent 10%, 5% and 1% significance levels, respectively

Marginal effects are calculated as overall average marginal effects

Source: Author's calculation based on the survey data

Table 6-6: OLS Estimations for SMEs' Export Intensity Model

Independent Variables	Estimated Coefficients	Standard Error	VIF
Enhancing Factors			
<i>OwnerStudyAbroad</i>	.021	.044	1.697
<i>OwnerTrainAbroad</i>	-.072	.047	1.315
<i>OwnerWorkAbroad</i>	.113**	.045	1.531
<i>OwnerWorkMNC</i>	.078**	.034	1.255
<i>GovCentral_Assist</i>	.033	.022	1.339
<i>GovtLocal_Assist</i>	-.023	.022	1.284
<i>NonGovt_Assist</i>	.049*	.027	1.684
<i>ExportASEAN</i>	.037	.025	1.602
<i>YearsExporting</i>	.011***	.002	2.421
<i>ProductXNational</i>	-.053	.151	1.116
<i>ProvinceXNational</i>	-.038***	.006	1.523
Inhibiting Factors			
<i>Barrier_Tariff</i>	-.013	.010	1.110
<i>Barrier_Human</i>	-.048***	.011	1.197
<i>Barrier_Distribution</i>	-.042***	.010	1.153
<i>Barrier_ForeignEnvi</i>	-.015	.010	1.122
<i>Barrier_Product</i>	-.009	.010	1.167
<i>Barrier_Financial</i>	-.023**	.010	1.133
<i>Barrier_ForeignGovt</i>	-.018*	.010	1.096
<i>Barrier_Procedur</i>	-.035***	.011	1.370
<i>Barrier_Price</i>	-.028***	.010	1.051
<i>Barrier_HomGovt</i>	.008	.010	1.125
<i>Barrier_Customer</i>	.003	.010	1.145
SMEs' Characteristics			
<i>FirmAge</i>	-.005***	.001	1.717
<i>TotalEmployee</i>	.001**	.000	1.340
<i>OwnerGender</i>	.015	.023	1.121
<i>OwnerAge</i>	.002*	.001	1.223
<i>OwnerEducation</i>	.003	.009	1.432
(Constant)	.222***	.062	
F-value	21.529***		
df	27		
R Square	.554		
Adjusted R Square	.528		

Note: (*), (**) and (***) represent 10%, 5% and 1% significance levels, respectively

Source: Author's calculation based on the survey data

The estimated coefficient of *ProvinceXNational* is negative and significant at the 1% level despite the small magnitude of the marginal effect. SMEs that operate in the provinces that have large shares in Indonesia's national exports tend to have low export intensity, and *vice versa*. This finding is in line with the negative impact of the province's contribution to national exports on SMEs' probability to export model discussed in Section 6.1. SMEs that are located in the province where there are already large numbers of exporters, trading companies or agents may consider selling their products to local exporters to avoid the risk of exporting (Gereffi, 1994; Hessels & Terjesen, 2010).

The estimated coefficient of *ProductXNational* is insignificant. SMEs' type of product has no significant effect on export intensity. Although SMEs that produce the types of merchandise that correspond to Indonesia's main export commodities have high probability to become exporters through "buyer effect" and "copying/imitation effect" (Wengel & Rodriguez, 2006), those two effects do not give SMEs the advantage for export expansion.

Central government assistance positively affects SMEs' export intensity. *GovCentral_Assist* is positive and significant at the 10% level. SMEs that receive promotional assistance (including trade expos, trade fairs, trade shows and SME catalogues), assistance in business management (e.g. managerial training), assistance in finance or assistance in production (e.g. production techniques or equipment) from any central government agencies on average have a 3.9% higher export intensity than those who were not recipients. However, *GovtLocal_Assist* is not statistically significant. Technical training, managerial training, grants of equipment, grants of capital and trade fairs provided by provincial, municipal or regency governments have no significant effect on SMEs' export intensity. Local government assistance is possibly export assistance in name, but actually general business assistance with which SMEs can be more competitive in domestic markets, as opposed to central government agencies' assistance that has strong international market orientation (Uchikawa & Keola, 2008).

The estimated coefficient of *NonGovt_Assist* is positive and significant at the 1% level, which implies that the assistance provision by non-government sources has a positive influence on SMEs' export intensity. SMEs that receive financial, technical, managerial and promotional assistance from various non-governmental networking sources including informal sources (family, relatives, business associates and overseas Indonesian emigrant communities) and formal non-governmental sources (including business chambers/associations, SOEs and universities/research institutes) on average have a 9.4% higher export intensity than non-recipient SMEs. Hence, network relationships with

non-government sources not only help SMEs to become exporters but also to expand their international business activities (Zhou et al., 2007).

Export intensity is also determined by SMEs' export destination. *ExportASEAN* positively affects export intensity at the 5% significance level. On average, SMEs whose destination markets include any ASEAN country have a 4.6% higher export intensity than SMEs that do not export to ASEAN markets. This is probably due to the ASEAN free trade area that took effect in 1992 that allows SMEs to expand the exports within the ASEAN market.⁴⁹

The estimated coefficient of *YearsExporting* is statistically significant at the 1% level. The longer the SMEs have been exporting, the higher the export intensity. On average, one additional year of exporting correlates with a 1.1% higher export intensity, all else being equal. As SMEs accumulate export experience, they also accumulate foreign market knowledge that is crucial to expand their exports (Ling-Yee, 2004).

Of the eleven variables that represent export-inhibiting factors, six variables have significant effects on SMEs' export intensity: *Barrier_Human*, *Barrier_Distribution*, *Barrier_Financial*, *Barrier_ForeignGovt*, *Barrier_Procedur* and *Barrier_Price*. However, those variables are composite variables obtained from PCA's factor extraction and the data series for each barrier is measured by perceived difficulties with the Likert-scale method. Hence, the estimated coefficients, marginal effects and odds ratio of those variables are not too insightful for interpretation. Rather, we focus on the estimated signs of the coefficients that indicate the direction of the effect of perceived export barriers on SMEs' export intensity. As expected, the estimated coefficients of those six variables are negative, which implies that the more difficult SMEs perceive those barriers, the lower the export intensity. SMEs are constrained in expanding their exports if they perceive high difficulties in informational and human resource barriers, distribution, logistics and promotional barriers, financial barriers, foreign government barriers, procedural barriers and price barriers. In contrast, the estimated coefficients of *Barrier_Tariff*, *Barrier_ForeignEnviro*, *Barrier_Product*, *Barrier_HomGovt* and *Barrier_Customer* are not statistically significant. Hence, SMEs that perceived tariff and non-tariff export barriers in host countries, business environment barriers in host countries, product and transaction barriers, home government barriers and foreign customer and competitor barriers as difficult barriers do not exhibit different export intensity from SMEs that perceive them as less

⁴⁹ The survey was conducted in 2014. Therefore, the results may reflect the ASEAN free trade area implemented in 1992 but may not capture the effect of the ASEAN Economic Community that began to implement from 31 December 2015.

serious barriers. These findings are consistent with studies by the OECD (2008) and the OECD (2009) that argued that export barriers are crucial not only in SMEs' pre-exporting stage, but also at the exporting stage in which SMEs attempt to expand their exports (increase their export intensities), and that the level of difficulties/severities vary across types of barriers.

Two variables that represent firm characteristics (*FirmAge* and *TotalEmployee*) have statistically significant estimated coefficients. Total employees positively affects export intensity at the 1% significance level. On average, one additional employee correlates with 0.1% higher export intensity. The number of employees represents firm size and economies of scale that are required for product and export expansion (Majocchi et al., 2005). Interestingly, *FirmAge* has negative and significant estimated coefficient. On average, one additional year of firm age correlates with 0.8% lower export intensity. One possible explanation is that the export sales grow at a slower pace than the domestic sales. Consequently, the share of export revenue in total revenue decreases over time despite not necessarily being lower in absolute value of export sales. On the one hand, this reaffirms that at the exporting stage SMEs face serious challenges to expand their exports. On the other hand, this may indicate that the exporting SMEs may also have established business in domestic markets and therefore have more solid domestic revenue growth.

6.3 Impact of Exporting on Firm Performance

Exporting is expected to improve SMEs' overall performance (Chelliah, Sulaiman, & Yusoff, 2010; Ganotakis & Love, 2012; Lu & Beamish, 2001). In the survey, the exporting SME respondents were asked whether they observed any improvement in the following seven firm performance indicators since they began exporting: total sales, total profit, cost efficiency, labour productivity, product quality, production techniques and technology, and marketing techniques and networking. The improvement level was measured on a three-point Likert-scale (1 = no improvement, 2 = improved and 3 = significantly improved).⁵⁰

We investigate the factors that influence the impact of exporting on SMEs' performance with regression analysis. The dependent variable is the average scale of performance improvement obtained by averaging the Likert-score for the seven indicators of firm performances. The explanatory variables include firm characteristics (*FirmSize* and *FirmAge*), owners' characteristics (*OwnerGender*, *OwnerEducation* and *OwnerAge*), SMEs' international activities (*XIntensity*, *XIntensitySq*, *YearsExporting* and *ForeignInvestor*) and external assistance (*GovCentral_Assist*, *GovtLocal_Assist*, and *NonGovt_Assist*). The squared term of export intensity is added to capture the possibility of non-linear relationships between firm performance improvement and the degree of internationalisation (represented by export intensity). We also add *ForeignInvestor* (whether the SMEs are fully owned by Indonesians or partially/fully owned by foreign investors) as an explanatory variable. The presence of foreign Investors is expected to have a positive effect on SMEs' performance improvement (Lu & Beamish, 2001; Pangarkar, 2008; Ruigrok et al., 2007).

We estimate the export impact model with two regression techniques: OLS regression and GLM-fractional logit regressions. OLS regression is applicable because the dependent variable (average performance improvement scale) is a continuous variable. However, since the performance improvement scale is double-bounded (has a minimum value of 0 and a maximum value of 3), the OLS regression method may not give the best estimators. Papke and Wooldridge (1993) proposed the fractional logit regression model – a Generalized Linear Model (GLM) estimation procedure to model fractional outcome.⁵¹ Hence, we transform the dependent variable into a performance

⁵⁰ For the advantages and disadvantages of three-point Likert-scale without neutral scale/mid-point, see Section 4.2.1.

⁵¹ For further discussion on fractional regression, see Baum (2008), Papke and Wooldridge (1993) and Papke and Wooldridge (2008).

improvement index which values range from 0 to 1 (see Section 4.2.8 for the calculation of performance improvement index).⁵²

Table 6.7 gives the estimation results of the two regression models. For the OLS regression results, the R-square and the Adjusted R-square values indicate that the model can explain approximately 17% variation of SMEs performance. The F-value (significant at the 1% level) indicates that the model with 12 explanatory variables together can reliably predict the SMEs' performance improvement due to exporting. For the GLM regression results, the heteroscedasticity-consistent (robust) standard errors are used to ensure asymptotically valid inferences. The Log pseudo likelihood value of -127.2820172 suggests that the model with the 12 explanatory variables is a significantly better fit than the null model.

In short, both GLM and OLS regression models are appropriate to estimate the performance improvement of the surveyed SMEs. There are also high degrees of consistency/similarity of OLS and GLM estimation results of export impact. Seven explanatory variables are statistically significant in both estimations: *FirmSize*, *OwnerEducation*, *ExportIntensity*, *ExportIntensitySq*, *YearsExporting*, *ForeignInvestor* and *GovCentral_Assist*. Furthermore, those seven significant variables have the same signs of the estimated coefficients in both OLS and GLM estimation despite different estimated coefficient values. However, we use the GLM regression results as the main reference for further analysis due to GLM's superiority over OLS in modelling bounded dependent variables (Baum, 2008; Wagner, 2001).

Firm size has a positive effect on SMEs' performance improvement (significant at the 1% level). This implies that exporting leads to higher performance improvement for medium-sized enterprises than for small-sized enterprises. On average, medium-sized enterprises exhibit a 6.3% higher performance index than small-sized enterprises, holding other factors constant. However, the estimated coefficients of firm age is not significant. The more experienced firms do not exhibit larger performance improvement after exporting than less experienced firms.

With respect to owners' characteristics, *OwnerEducation* has a positive and significant effect. On average, SMEs whose owners are college graduates or have higher education exhibit a 4.6% higher performance improvement index than SMEs owners who are high school graduates or lower.

⁵² See Section 4.2.8 for the transformation of the performance improvement scale into the performance improvement index.

However, *OwnerGender* and *OwnerAge* are not statistically significant. SMEs performance improvement due to exporting does not vary across gender and owners' age.

Table 6-7: OLS and GLM Estimates for Export Impact

Independent Variables	OLS Estimation		GLM Estimation		
	Estimated Coefficients	Standard Error	Estimated Coefficients	Robust Std. Error	Average Marginal Effect
(Constant)	1.702***	.155	-0.612	0.365	
<i>FirmSize</i>	.125**	.051	0.261***	0.095	0.063
<i>FirmAge</i>	-.001	.003	-0.002	0.006	-0.001
<i>OwnerGender</i>	-.053	.056	-0.107	0.118	-0.026
<i>OwnerEducation</i>	.094*	.052	0.192*	0.112	0.046
<i>OwnerAge</i>	.001	.002	0.002	0.004	0.001
<i>Exportintensity</i>	1.224***	.269	2.528***	0.552	0.608
<i>ExportIntensitySq</i>	-1.090***	.270	-2.254***	0.580	-0.542
<i>YearsExporting</i>	-.008*	.004	-0.016*	0.009	-0.004
<i>ForeignInvestor</i>	.214**	.097	0.462**	0.180	0.111
<i>GovCentral_Assist</i>	.120**	.050	0.248**	0.098	0.060
<i>GovtLocal_Assist</i>	-.003	.050	-0.006	0.092	-0.001
<i>NonGovt_Assist</i>	-.068	.086	-0.141	0.204	-0.034
F		5.466***			
R Square		.204			
Adjusted R Square		.167			
Log pseudo likelihood			-127.2820172		
Akaike Information Criterion (AIC)			1.042989		
Bayesian Information Criterion (BIC)			-1390.002		
Deviance			42.24372478		
Pearson			37.40246306		
Residual d.f.			256		

Note: 1) The dependent variable is the average firm performance improvement scale (for OLS estimation) and firm improvement index (for GLM estimation)

2) (*), (**) and (***) represent 10%, 5% and 1% significance levels, respectively

3) Marginal effects are calculated as overall average marginal effects

Source: Author's calculation based on survey data

SMEs' performance improvement after exporting is also influenced by the presence of foreign investors. The estimated coefficient of *ForeignInvestor* is positive and significant at the 5% level. SMEs whose share are partially or totally owned by foreign investors on average experience a 11.1% higher improvement index than SMEs with no foreign ownership. Our study did not specifically investigate in what respect the foreign investors positively affect exporting SMEs' performances. However, Filatotchev et al. (2008) argued that the presence of foreign investors allow SMEs to absorb innovations and entrepreneurship skills and acquire specific resources and capabilities from their investors or parent companies, all of which positively affect the firm's performances and competitiveness.

Interestingly, the estimated coefficient of *YearsExporting* is negative and significant at the 10% level. The impact of exporting on SMEs' performance is negatively affected by the length of the exporting period, albeit the effect is small in magnitude. The shorter period the SMEs have been exporting, the more positive performance improvement they perceive, and *vice versa*. On average, one year less in exporting accounts for a 0.4% higher performance improvement index, *ceteris paribus*. Many of the newly exporting SMEs are young firms that belong to "born global enterprises", characterised by strong international orientation since their establishment (Freeman et al., 2006). These young exporting SMEs are probably better prepared and equipped in capitalizing the benefit of export activities to improve their overall performances. Moreover, the established exporters may have been constrained in expanding their exports and thereby perceive lower firm performance improvement.

Firm performance improvement is also affected by the export intensity. The estimated coefficients of export intensity and its squared term are statistically significant at the 1% level. Interestingly, the export intensity is positive while its squared term is negative. This finding lends support to previous studies that reported a non-linear relationship between firm performance and the degree of internationalisation (see for example Hitt et al., 1997; Lu & Beamish, 2004; Ruigrok & Wagner, 2003). More specifically, we found that performance improvement exhibits an inverted U-shaped (or a \cap -shaped) curve relationship with export intensity. SMEs at lower export intensity perceive little improvement in firm performance. As the export intensity increases slightly, SMEs perceive higher performance improvement. However, as the export intensity further increases, the perceived performance improvement eventually decreases.

The export assistance provision by the government agencies also influences the impact of exporting on SMEs performance. The estimated coefficient of *GovCentral_Assist* is positive and significant at

the 5% level. Assistance provision by central government agencies positively affects SMEs' performances improvement. On average, exporting SMEs that have received any type of assistance from any central government agencies have a 6% performance improvement index higher than non-recipient SMEs. However, the *GovtLocal_Assist* (including assistance by provincial, municipal and regency government agencies) has no significant effect on the firm performance improvement. While local government may have a better understanding of the SMEs in their region, they may not have adequate resources to assist SMEs with export activities. It is also common for local government to deliberately direct local SMEs to compete in domestic markets (Uchikawa & Keola, 2008). Likewise, *NonGovt_Assist* is not statistically significant. Non-government assistance has no significant effect on the firm's performance improvement due to exporting. The non-governmental actors may have limited resources and capabilities to help SMEs utilize export activities to leverage their overall performances.

Chapter 7

Summary and Conclusions

This chapter summarises the research. Section 7.1 presents a summary of the research background, objectives, data, methodology and major findings. The implications of the research findings for academics, policy makers and SME owners/managers are discussed in Section 7.2. Section 7.3 discusses the research limitations while Section 7.4 provides recommendations for future research.

7.1 Summary and Major Findings

7.1.1 Research Background and Design

Indonesia faces rapid changes in its international trade policies and environment due to its engagement in various bilateral, regional and multilateral free trade agreements. On the one hand, free trade escalates business competition for SMEs in the domestic market through cheap imported products and the increasing operation of foreign enterprises. On the other hand, free trade also offers enormous opportunities for SMEs to export and to venture abroad.

However, SMEs are less able to take advantage of foreign market opportunities than larger enterprises, as indicated by the marginal contribution to Indonesia's exports. SMEs only account for a small share of Indonesia's non-oil and gas exports and the share tends to decline over time. This contradicts SMEs' increasingly important role in the Indonesian economy, particularly as they have been Indonesia's major source of business establishment, employment provision and value added creation.

This study investigates the internationalisation of Indonesian SMEs, particularly their direct-exporting activities. In particular, this study identifies the main factors that stimulate SMEs to export and the main export barriers. This study further explores the processes and strategies undertaken by SMEs to export. This study also identifies the role of network relationships and government assistance in facilitating SMEs to export. Finally, this study investigates the factors influencing SMEs' export engagement, the determinants of SMEs' export performance and the factors influencing SMEs' performance improvement due to exporting. The policy measures to foster SMEs' exports are formulated based on the research results.

This study was conducted in seven provinces in Java, Madura and Bali islands, where approximately 57.5% of the Indonesian population reside, 58% of the country's GDP is generated and, more importantly, more than 60% of SMEs in the country operate (BPS-Statistics Indonesia, 2014c). This study used both primary and secondary data. The primary data was gathered with survey questionnaires administered to SMEs owners/managers and central government agencies whose policy areas are related to SMEs' export activities. The survey had a response rate of 53.76% with 497 useable responses, including 271 exporting SMEs, 114 aspiring-exporters and 112 SMEs with no intention to export. The secondary data obtained from various government institutions was used to highlight the research context and to form an SMEs database from which the study sample was drawn.

The data was analysed with descriptive statistics, principal component analysis (PCA) and regression analysis. The descriptive statistics included frequency analysis, mean comparison test (independent t-test and one-way ANOVA) and test of independence (Chi-square test). The PCA was used to reduce the dimensions of export stimuli and export barrier items used in the questionnaire. The least square, binary logistic and fractional logit regressions were used to investigate the factors influencing SMEs' export engagement, export performance and performance improvement due to exporting.

7.1.2 Summary of Major Findings

Descriptive Statistics and Principal Component Analysis Results

Export stimuli is crucial in SME internationalisation. We found that exporting SMEs are generally driven by stronger motivation to export than aspiring-exporters, as indicated by higher average Likert response scores in most of the 22 types of export stimuli. The results of the study also show that the aspiring-exporters (pre-exporting stage) are driven by types of main export stimuli that differ from exporting SMEs (exporting stage). Aspiring-exporters are stimulated to export mainly by their aspirations to find new markets, whereas exporting SMEs are motivated mainly by the presence of foreign buyers. These may indicate SMEs' risk aversion in export activities, probably due to their smallness and limited resources (Hessels & Terjesen, 2010; Wilkinson & Brouthers, 2006). SMEs are motivated to initiate export activities because they aspire to expand beyond the domestic market, but in many cases the exports are preceded by the presence of unsolicited orders from foreign buyers. The presence of foreign buyers minimises the risk of customer complaints/rejections and uncollectible payments.

The study found that types of export stimuli can be reduced to six broad dimensions including: 1) owner/manager's international exposure and firm's maturity; (2) home government support; (3) attractiveness of the target markets; (4) domestic market demand and competition; (5) actual order and product competitiveness; and (6) network relationships. These six dimensions of export stimuli exhibit high degrees of similarity, despite being more specific than the internal-external typology (Simpson Jr & Kujawa, 1974; Wiedersheim-Paul et al., 1978), proactive-reactive typology (Leonidou, 1988; Piercy, 1981) or the four export stimuli typologies proposed by OECD (2009). This may indicate the specific nature of stimuli that motivate Indonesian SMEs' exports, that differ from the export stimuli of SMEs in more developed countries.

Accurate identification of export barriers is imperative in SME internationalisation. We found that non-exporters have more negative attitudes towards export barriers than exporters, as indicated by higher perceived difficulties in 50 types of export barriers, 49 of which are statistically significant. This indicates that the perceived export barriers can hinder non-exporting SMEs from becoming exporters. We also found that exporting SMEs encounter types of main export barriers that differ from non-exporters. For example, despite both SME groups identifying a high risk of foreign currency as the most difficult export barrier, the second main barrier for non-exporters is the lack of export insurance, while for exporters it is the economic uncertainty in destination markets. This implies that SMEs in different exporting stages face different main export barriers and therefore may need different types of assistance.

Export barriers can be classified by their general or specific nature. Universal export barriers are those encountered by most SMEs, regardless of their difficulty level. Specific export barriers are those severely impeding SMEs' exporting in specific regions or of specific types of commodities but are much less inhibiting for SMEs in other regions or sectors. We found that high risk of foreign exchange, granting credit facilities or payment delays to foreign customers and economic fluctuations in target markets are universally encountered by most SMEs and are also very problematic for SMEs in various regions and product types.

Types of export barriers can also be reduced to several broader dimensions. The PCA performed on the 50 types of export barriers generated an eleven-factor solution. Five extracted factors represent internal dimensions of export barriers including: 1) financial barriers; 2) price barriers; 3) informational and human resources barriers; 4) distribution, logistics and promotional barriers; and 5) product and transaction barriers. The remaining six extracted factors represent external dimensions of export barriers, including: 1) tariff & non-tariff export barriers in host countries; 2)

business environment barriers in host countries; 3) foreign government barriers; 4) procedural barriers; 5) home government barriers; and 6) foreign customer and competitor barriers. These eleven dimensions of export barriers are largely similar to the group of export barriers reported by the OECD (2012), OECD-APEC (2006) and Lloyd-Reason and Mughan (2008). This indicates that SMEs in developing countries encounter similar types of export barriers to those in developed countries.

Network relationships play an important role in facilitating the internationalisation of SMEs.

Exporters have twice the total frequency of interactions of non-exporters with external actors in the network including central and local government agencies, business associations/chambers, universities/research institutes, private companies/SOEs, business partners/associates, family/relatives and Indonesian emigrant communities overseas. Exporters and non-exporters also differ in the types of network sources that they mainly access. Exporting SMEs exhibit balanced interaction intensity with central and local government agencies, whereas non-exporting SMEs tend to interact much more closely with local government agencies than central government agencies. Moreover, exporting and non-exporting SMEs differ in the way they interact and maintain relationships with external actors. Exporting SMEs use various types of interactions including regular and irregular, as well as formal and informal interactions, with various actors in the network. On the contrary, non-exporting SMEs tend to rely heavily on personal relations with key persons in various governmental and private institutions.

External actors in SMEs' networks provide export assistance mostly related to the supply of information regarding foreign market business opportunities, and marketing and promotional activities. Little assistance is provided for unequal treatment in foreign markets, export guarantees and insurance, and contracts and dispute settlement with foreign customers. However, SMEs perceived that the most beneficial assistance received is working capital. Conversely, for SMEs the least helpful assistance received is mostly for business environment functions including unequal treatment in foreign countries. The type of networking sources that most actively provide export assistance to SMEs are business partners/associates, central government agencies and business associations/chambers. The networking sources that provide the least export assistance to SMEs are universities/research institutes and Indonesian emigrant communities overseas. However, the frequency of assistance provision does not necessarily reflect the helpfulness of the assistance. The assistance provided by private companies and state-owned enterprises and from family/relatives are perceived by SMEs as the most beneficial.

Government agencies play an important role in facilitating SME internationalisation. Exporting SMEs receive more assistance than non-exporting SMEs from the central government in all types of assistance including international trade fairs, publication of *SME Catalogues*, managerial training, technical training, and export financing, insurance and guarantees. However, the empirical results indicate that the effectiveness of government assistance is probably crippled by government's misperceptions of the severity/difficulties of some types of export barriers faced by SMEs. For example, government agencies perceive that granting credit facilities or payment delay to foreign customers (B10), obtaining reliable foreign representation (B18), and stiff competition in target markets (B35) are not as difficult as SMEs perceive (see Section 5.5.1). Hence, the government's current levels of assistance provision to remove those barriers are probably lower than the level that SMEs actually need. In contrast, government agencies perceive high tariff costs in target markets (B44), quotas and/or embargoes imposed by target markets (B48), and developing new products for foreign markets (B11) as more difficult than SMEs perceive. Hence, the government's current level of assistance provision to tackle those barriers is possibly higher than the level SMEs actually need.

SMEs undertake certain strategies and processes to internationalise. We explored how SMEs address six elements of internationalisation: firm and owner characteristics (*who*), export motivating factors (*why*), product selection (*what*), target market selection (*where*), entry modes (*how*) and point of entrance (*when*).

- (*Who*): Firm and owner characteristics are relevant factors in SMEs' internationalisation process. Exporting SMEs are characterised by longer operational experience and larger size than non-exporters. Exporting SMEs' owners have higher formal education, longer business experience and more international exposure than non-exporting SMEs' owners. However, within the non-exporting SME group the younger firms with less experienced owners have stronger export aspirations, probably indicating young entrepreneurs' exposure to the information and communication technologies and the international environment (Lopez-Nicolas & Soto-Acosta, 2010). In the future, many young entrepreneurs are more likely to venture overseas as age and experience will be less important factors for internationalisation.
- (*Why*): The aspiring-exporters are motivated to initiate exporting mainly to find new markets and the presence of potential buyers. Exporters are motivated to sustain and develop exports by the presence of foreign buyers and the confidence in their products. The main motivating factors at the exporting stage are different from those at the pre-exporting stage. The foreign buyer factor appears in both stages because it can minimize risks borne by international operations

such as payment collection and customer complaints (Hessels & Terjesen, 2010; Wilkinson & Brouthers, 2006).

- (*How*): SMEs use various sources to obtain reliable information regarding export opportunities. Business partners/associates and potential buyers are the two most important sources of information for both exporters and aspiring exporters. However, exporting SMEs appeared to have better network relationships with business associations and central government agencies than aspiring-exporters.
- (*Where*): When SMEs select target markets for their initial export plan, they mainly consider the close cultural or physical distance factors as predicted by *the Stage Theory* (Johanson & Vahlne, 1977, 1990). However, in many cases SMEs' initial exports are shipped to Europe and East Asia. The actual markets reported by the exporters indicate that market size and purchasing power are more critical factors in determining the success of initial export than close distance and socio-economic similarities. Following the success of the initial export, SMEs are more likely to expand their exports mainly to other countries in the same region/sub-continent as the initial export market.
- (*What and When*): The time taken for SMEs to become exporters varies across commodities and provinces. SMEs that produce furniture or multi-products can become exporters earlier, but none of the product group gives indication of born global firms (internationalised within three years from the outset). The initial evidence of born global SMEs was found in Bali, a main tourist destination province, probably affected by local entrepreneurs' strong international orientation since firm inception, due to the exposure and interaction with foreigners (Poullis & Yamin, 2009).

The challenges in SME internationalisation are not only encountered in the export initiation process, but are also of similar difficulty at the exporting stage, particularly how SMEs maintain and improve their export performance. The empirical result shows that the exporting SMEs are less than satisfied with their export financial performances in the last three years, including the profits from exporting, export sales, growth in export sales and growth in export profit. SMEs' export development may have stagnated or even slightly regressed owing to stiff competition in international markets and high costs of exporting (Crick, 2002; Uner et al., 2013). We also found that SMEs differ in their export intensity (share of export revenue in total revenue). The average export intensity of surveyed exporting SMEs is 0.41 (41% of total sales is received from export sales) but the export intensity differs across firm category, province, and SME owners' gender and education level.

Exporting may lead to the improvement in firm performance, but the impact varies across performance indicators. Exporting brings considerable improvement in product quality, probably because SMEs adapt to overseas customers and market demand that usually require higher product quality level and standards than domestic markets (Padmadinata, 2007; Seifert & Ford, 1989). Exporting SMEs also perceive slight improvements in marketing and networking techniques, total sales, total profit, production technique/technology and worker productivity. However, exporting SMEs did not perceive improvement in domestic sales and production cost efficiency. The unit cost of production is difficult to be driven down possibly because SMEs must maintain a high quality of the exported products, which requires a high cost of raw materials and labour inputs. Moreover, exporting does not improve SMEs' domestic sales, possibly because SMEs exhaust most of their limited resources for export production at the expense of domestic market oriented products.

Estimation Results

We estimated the determinants of SMEs' engagement in exporting activities. Table 7.1 provides the summary of the results.

- Owners' overseas work experience and MNC/exporting firm work experiences positively affect SMEs' probability to export. However, SME owners' overseas study and short courses/training experiences have no significant impact on the SMEs' export involvement.
- SMEs have better chances to export if they produce merchandise that has a large share in Indonesia's national exports. It is easier for SMEs to export if they produce merchandise that already attracts foreign buyers (buyer effect) or if they imitate the products that are already sold in foreign markets (copying/imitation effect) (Wengel & Rodriguez, 2006).
- SMEs are less likely to engage in exporting if they operate in the provinces that have a high contribution to Indonesia's total exports. SMEs may prefer to sell their products to local large firms, trading companies or agents rather than directly exporting themselves (Gereffi, 1994; Hessels & Terjesen, 2010). By selling to local exporters, SMEs sell the products at possibly lower than international price but they can avoid the risks of exporting.
- SMEs have a higher probability to export if they receive at least one of the following forms of assistance from any central government agencies: promotional assistance (including trade expos, trade fairs, trade shows and *SME catalogues*), business management assistance (e.g. managerial training), assistance in finance, and assistance in production (e.g. production techniques or equipment).

- Local government assistance, including technical training, managerial training, grants of equipment, grants of capital and international trade fairs, have no significant effect on SMEs' probability to export.
- SMEs that receive financial, technical, managerial and promotional assistance from various non-governmental sources including informal sources (family, relatives, business associates and emigrant communities overseas) and formal non-governmental sources (business chambers/associations, state-owned enterprises (SOEs) and universities/research institutes) are more likely to export than non-recipient SMEs.
- SMEs are less likely to export if they perceive difficulties in tariff and non-tariff barriers, informational and human resource barriers, distribution, logistics and promotional barriers, business environment barriers in host countries, procedural barriers, and foreign customer and competitor barriers. However, the perceptions of product and transaction barriers, financial barriers, foreign government barriers, price barriers and home government barriers do not significantly affect SMEs' likelihood to export.
- Firm characteristics affect SMEs' export engagement probability. SMEs' probability to become exporters increases with their operational experience and firm size (number of employees).
- SMEs' probability to export is not affected by owners' characteristics (age, gender and educational attainment).

We estimated the factors that determine SMEs' export intensity (as a proxy for export performance). Table 7.1 summarises the results as follows.

- Owners' overseas work experience and MNC/exporting firm work experience positively affect SMEs' export intensity. However, SME owners' overseas study and short courses/training experiences have no significant impact on SMEs' export intensity.
- SMEs tend to have lower export intensity if they operate in the provinces that have a high contribution to Indonesia's national exports. SMEs in those provinces may consider selling their products to local large firms or trading companies to avoid the risks of exporting (Gereffi, 1994; Hessels & Terjesen, 2010).
- Central government agencies' assistance has positive and significant impacts on SMEs' export intensity. SMEs tend to have higher export intensity if they receive at least one of the following forms of assistance from the central government agencies: promotional assistance (including trade expos, trade fairs, trade shows and SME catalogues), assistance in business management (e.g. managerial training), assistance in finance and assistance in production (e.g. production techniques or equipment).

Table 7-1: Factors Influencing SMEs' Export Engagement, Export Intensity and Export Impact on Firm Performance

Variables	Models		
	Export Engagement	Export Intensity	Performance Impact
Enhancing Factors			
<i>OwnerStudyAbroad</i>	(0)	(0)	NI
<i>OwnerTrainAbroad</i>	(0)	(0)	NI
<i>OwnerWorkAbroad</i>	(+)	(+)	NI
<i>OwnerWorkMNC</i>	(+)	(+)	NI
<i>GovCentral_Assist</i>	(+)	(+)	(+)
<i>GovtLocal_Assist</i>	(0)	(0)	(0)
<i>NonGovt_Assist</i>	(+)	(+)	(0)
<i>ExportASEAN</i>	NI	(+)	NI
<i>YearsExporting</i>	NI	(+)	(-)
<i>ProductXNational</i>	(+)	(0)	NI
<i>ProvinceXNational</i>	(-)	(-)	NI
<i>ForeignInvestor</i>	NI	NI	(+)
<i>ExportIntensity</i>	NI	NI	(+)
<i>ExportIntensity(Squared)</i>	NI	NI	(-)
Inhibiting Factors			
<i>Barrier_Tariff</i>	(-)	(0)	NI
<i>Barrier_Human</i>	(-)	(-)	NI
<i>Barrier_Distribution</i>	(-)	(-)	NI
<i>Barrier_ForeignEnvi</i>	(-)	(0)	NI
<i>Barrier_Product</i>	(0)	(0)	NI
<i>Barrier_Financial</i>	(0)	(-)	NI
<i>Barrier_ForeignGovt</i>	(0)	(-)	NI
<i>Barrier_Procedur</i>	(-)	(-)	NI
<i>Barrier_Price</i>	(0)	(-)	NI
<i>Barrier_HomGovt</i>	(0)	(0)	NI
<i>Barrier_Customer</i>	(-)	(0)	NI
SMEs Characteristics			
<i>FirmAge</i>	(+)	(-)	(0)
<i>TotalEmployee</i>	(+)	(+)	(+)
<i>OwnerGender</i>	(0)	(0)	(0)
<i>OwnerAge</i>	(0)	(0)	(0)
<i>OwnerEducation</i>	(0)	(0)	(+)

Note: (+), (-), and (0) represent positive, negative and no significant effects, respectively
 NI indicates that the variable is not included in the model

- Assistance provided by local government agencies has no significant effect on SMEs' export intensity.
- Network relationships with non-government actors significantly improve SMEs' export intensity. SMEs that receive financial, technical, managerial and promotional assistance from various non-governmental network sources including informal sources (family, relatives, business associates and emigrant communities overseas) and formal non-governmental sources (including business chambers/associations, SOEs and universities/research institutes) have higher average export intensity than non-recipient SMEs.
- Export market destinations affect SMEs' export intensity. SMEs whose destination markets include ASEAN countries have average higher export intensity than SMEs that do not export to any ASEAN country.
- Years of exporting positively affects export intensity. The longer (years) SMEs export, the higher the export intensity.
- Export barriers significantly hamper SMEs' export intensity. SMEs that perceive informational and human resources barriers, distribution, logistics and promotional barriers, financial barriers, foreign government barriers, procedural barriers and price barriers as difficult barriers in their export activities tend to have lower export intensity than SMEs who perceive those barriers as less severe. However, SMEs that perceive tariff and non-tariff export barriers in host countries, business environment barriers in host countries, product and transaction barriers, home government barriers and foreign customer and competitor barriers as severe barriers exhibit no export intensity difference with SMEs that perceive those barriers as less difficult.
- Two firm characteristics (firm age and total employees) have positive effects on SMEs' export intensity. They represent the importance of firm experience and firm size in SME internationalisation, respectively.
- Owner characteristics (gender, age and education) have no significant effect on SMEs' export intensity.

We also estimated the factors that determine SMEs' performance improvement due to export activities. The last column in Table 7.1 summarises the results as follows.

- Export activities bring greater performance improvement to medium-sized enterprises than to small-sized enterprises.
- In terms of owner characteristics, owners' education level has a positive effect on exporting SMEs' performance improvement. Exporting SMEs whose owners are college graduates or have

higher education exhibit higher firm performance improvement than SMEs whose owners are high school graduates or lower.

- The presence of foreign investors positively affects exporting SMEs' performance improvement. Exporting SMEs whose shares are partially or totally owned by foreign investors experience higher performance improvement than SMEs with no foreign ownership.
- The impact of exporting on SMEs' performance is negatively affected by the number of years exporting. The shorter the duration (number of years) SMEs have been exporting the more positive the performance improvement they perceive, and *vice versa*.
- Firm performance improvement is affected by export intensity. Export intensity has a positive while its squared term has a negative estimated sign. These indicate that SMEs' performance improvement exhibits an \cap -shaped curve relationship with export intensity. SMEs at lower export intensity perceive little improvement in their performance. SMEs at medium export intensity perceive high improvement in their performance. However, as the export intensity increases even higher, the perceived performance begins to decrease again.
- Export assistance provision by central government agencies influences the exporting SMEs' performance improvement. Exporting SMEs that have received international trade fairs, publication of *SME Catalogues*, managerial training, technical training, and export financing, insurance and guarantees from central government agencies reported higher performance improvement than exporting SMEs that were not recipients of such assistance.

7.2 Implications of the Research Findings

7.2.1 Academic Implications

The findings of our study have some implications for the discourse of SME internationalisation theories, namely *the Uppsala Model/the Stage Theory*, *the Network Model*, *the Resource-Based View (RBV) Model* and *the International New Venture (INV)/Born Global Firms theory*.

Our study found weak evidence to support *the Uppsala Model*. The aspiring-exporters target geographically and culturally close foreign markets (neighbouring ASEAN countries) in their initial export plans but the exporters reported that their first exports were actually shipped to high-income or large markets. Hence, our findings contradict Johanson and Vahlne (1977, 1990) who postulated the importance of physical and psychical distances in the internationalisation process. In our case, physical and psychical distances are important considerations at the pre-exporting stage, but a less

important factor in the realization of initial exporting. ASEAN markets become an important factor when SMEs increase their export intensity at a more advanced stage of exporting. SMEs whose market destinations include ASEAN countries exhibit higher export intensity than SMEs that export to other regions.

We also found that SMEs' average timing to become exporters diverge across provinces, ranging from less than two years (in Bali Province) to more than ten years (in Jawa Timur Province). The wide range in the timing to become exporters implies disparate pathways of internationalisation, as opposed to *the Uppsala Model's* premise that SMEs' acquired domestic market experience prior to venturing abroad. Our research, however, did not examine whether SMEs gradually escalate their export mode from sporadic export, regular export, exporting via foreign sales subsidiary and wholly owned foreign subsidiary. Hence, we cannot assert whether SMEs intensify their international market activities along with their foreign market knowledge accumulation.

The findings of our study lend support to *the Network Model* of internationalisation. In line with Johanson and Mattsson (1988), we found that network relationships are crucial for SME internationalisation. Exporting SMEs build more intensive interactions and close relationships with various government agencies and non-government actors than non-exporting SMEs. SMEs obtain reliable export opportunity information and foreign market knowledge from external actors in the networks, most notably business associates/partners, foreign buyers and business associations/chambers. Accordingly, we found that SMEs require financial, managerial, technical and promotional assistance from central government agencies and non-government sources to become exporters and to sustain and expand their export activities.

Our research results provide mixed evidences for *the RBV theory*. On the one hand, SME owners' overseas work experience and MNC/exporting firm work experience may give SMEs valuable foreign market knowledge that can be of competitive advantage for export initiation and export expansion (Barney, 1991; Chatterjee & Wernerfelt, 1991). Likewise, foreign investors may endow SMEs with production equipment and techniques that can meet foreign markets' standards or that are rarely possessed by their local competitors. On the other hand, as opposed to Barney (1991), we found that SMEs tend not to build competitive advantage on the uniqueness of their products. Instead, they tend to imitate the products which other local firms successfully export. Unique products can be SMEs' valuable and rare assets and source of competitive advantage, but they may have used it to compete in domestic market and it thereby does not necessarily lead SMEs to the export market.

Finally, the findings of our study give an early indication of *the INV theory*. SMEs in small non-industrialized provinces with high interaction with foreigners can become exporters earlier than those in large and highly industrialized provinces. High exposure to foreigners may influence SMEs' international orientation since firms' inceptions (Poulis & Yamin, 2009). Moreover, SMEs are more likely to engage in direct exporting if the local population is small and the large industries in the province are less developed. There is also an indication of born global firms in Bali, a small and less industrialized province and the main international tourist destination in Indonesia. Balinese SMEs, mostly produce unique and high quality handicraft and artistic products, on average took less than two years after establishments to conduct the first export.

To sum up, we found evidence to support various SME internationalisation theories and we therefore abstain from concluding which internationalisation theory is superior to explain SME internationalisation. Rather, we argue that SME internationalisation is determined by several factors including, but not limited to, firms' internal resources, network relationships, government assistance, export barriers, the economic conditions in the target markets, and the interplay among those factors. Hence, we argue that the general conceptual framework of internationalisation proposed by Shih and Wickramasekera (2011) is more appropriate for the case of Indonesian SMEs in general. In this general conceptual framework, internationalisation is determined by enhancing factors, inhibiting factors and firm (and owner) characteristics. The more specific theoretical frameworks proposed by *the Uppsala Model*, *the Network Model*, *the RBV* and *the INV theory* could be more appropriate to investigate SME internationalisation in a specific industry/commodity or in a specific province/region.

The findings of our research also have implications for the academic discourse on export stimuli and export barriers. We found that the dimensions of export stimuli and export barriers obtained with the PCA method exhibit similar general themes to those reported by previous studies (see for example Leonidou, 1995a; Lloyd-Reason & Mughan, 2008; Morgan, 1997; OECD-APEC, 2006; OECD, 2009; OECD, 2012). However, we found that the main export stimuli and export barriers differ across export stages (pre-exporting stage and exporting stage) and across commodities. Hence, we suggest the academic discourse on these areas depart from the debate over export stimuli and export barriers typology towards the identification of specific export stimuli and export barriers that SMEs encounter in various exporting stages and industries.

7.2.2 Policy Implications

The government should design export assistance based on accurate and updated information on export impediments encountered by SMEs. Accordingly, the government should have a good understanding of the types and the severity of export barriers faced by SMEs, with which effective policy measures to remove the export barriers can be formulated. The results in Section 5.5.1 revealed that misperceptions about the types and the difficulty level of export barriers may lead to under or over provision of export assistance in certain policy areas. This misperceptions of export barriers between policy makers and SMEs are not uncommon, even in developed countries (Lloyd-Reason & Mughan, 2008; OECD-APEC, 2006). To obtain accurate information on export barriers, government agencies should proactively gather input from SMEs and various actors in the internationalisation networks. For example, government agencies can regularly perform SME surveys in cooperation with universities and research institutes.

The government can identify SMEs with export potential in terms of their owner characteristics, firm characteristics and business activities. SMEs have greater potential to become exporters if they have considerable domestic market experience or produce types of merchandise that have a large contribution to Indonesia's total non-oil and gas exports. Medium-sized enterprises have larger potential than small-sized enterprises to become exporters and to have higher export intensity. SMEs have greater potential to become exporters and to have higher export intensity if they have owners or managers with overseas work experience or MNC/exporting firms work experience, they actively seek to participate in government export assistance or have good network relationships with non-government actors.

However, the identification of potential exporters does not by itself assert the selection of SMEs to participate in government's export assistance programmes. The government assistance programmes with regard to SMEs should in general aim to enhance the competitiveness of SMEs in all provinces and industries, and to help SMEs to perform better both in domestic and international markets. However, for some government agencies with specific task to foster export (or particularly SMEs' export), the identification of potential exporters would be beneficial to increase the cost efficiency or effectiveness of their export assistance. For example, the Directorate General for National Export Development, Ministry of Trade and the Deputy for Marketing, Ministry of Cooperatives and SMEs, are tasked specifically to foster SMEs export given limited resources. The ability to identify SMEs with export potential will help those agencies in achieving their goals.

The government should not focus solely on the effort to assist non-exporting SMEs to become exporters. Rather, it should also address the obstacles encountered by exporting SMEs to sustain and expand their exports bases. Our study revealed that at the exporting stage SMEs still face severe barriers such as foreign currency risks, shortage of export insurance and granting facilities or payment delay to foreign customers. Accordingly, the government should provide relevant assistance to remove those barriers and closely monitor SMEs' export performance beyond initial export success.

The government's effort to foster SMEs' exports should not completely disregard non-intenders (non-exporting SMEs with neither intention nor plan to export). We found that non-intender SMEs hold negative presumptions and attitudes towards various export barriers. They also have tendency to be passive or negligent of export assistance programmes provided by the government or private agencies. However, we also found that a large number of SMEs become exporters only after they receive fortuitous orders from potential foreign buyers. As such, the government may provide non-intender SMEs with types of assistance that increase their chances of exposure (contact or interaction) to foreign buyers. For example, the outreach of two existing types of promotional assistance, including *SME Catalogues* publication or online promotion on the website of the Ministry of Cooperatives and SMEs, can be expanded to include as many SMEs as possible, including non-intender SMEs.

The government should be knowledgeable of the functions and role of non-government actors in the internationalisation network such as business associations/chambers, research institute/universities, finance/microfinance institutions and other non-government organizations. Government intervention should take into account the network relationships between SMEs and other actors that are already in operation. Thus, the government can define the appropriate level of intervention for each policy area. Direct intervention (export assistance provision) might be suitable for the export tasks that have not been adequately assisted by non-government actors in the network. For example, the government may intensify the efforts to address the business environment barriers in foreign markets such as SMEs' insufficient knowledge of target markets' regulations, procedures and business practices, and the negative image of Indonesia or Indonesian products. Those types of barriers are beyond non-government actors' capability to deal with and therefore the government should take direct measures.

On the contrary, indirect intervention may be preferred over direct intervention for the export tasks which non-government actors already provide helpful assistance. For example, it is not imperative

for the government to establish new form of financial institutions and schemes to support SMEs export. Rather, the government may strengthen the operation of the Indonesia Eximbank to increase its service outreach and to raise SMEs' awareness of the bank's services. The government can also assign one public body to facilitate, connect, coordinate and monitor the myriads of private and public agencies that have the same area of interest or assistance (Senik et al., 2011). For example, the government may assign the Directorate General for National Export Development, Ministry of Trade, to pool all information regarding export opportunity from various institutions/sources. The tandem work of various agencies is expected to increase the effectiveness of the export assistance.

The policy coordination for SMEs' internationalisation requires the central government to formulate a policy support focus. The extant literature suggests that there is a plethora of export barrier types encountered by SMEs, which may lead to various types of export assistance provision by different public and private agencies with different interests and emphases (Senik et al., 2011). This may lead to scattered, small scale and ineffective export assistance provision by each agency. However, the results in Section 5.3.5 reveal that the export barriers can always be grouped into some more general themes/dimensions. Accordingly, the export assistance provision can also be grouped into some general themes that can form the base for policy focus. We argue that four policy focuses proposed by the OECD (1997, 2012) including financial focus, market access focus, business environment focus and capabilities focus, are still appropriate for the case of Indonesian SMEs. These policy focuses can serve as a guidance or main reference for assistance provision by various agencies that share the same objectives to foster SMEs exports.

The central government must disseminate these policy focuses to provincial, municipal and regency governments and coordinate its policy implementation. Since Indonesia's government decentralization in 1999, the local governments have played increasingly important roles in the policymaking (Brodjonegoro & Asanuma, 2000; Resosudarmo, 2004). However, our estimation results in Sections 6.1 and 6.2 show that local government assistance has no significant effect in helping SMEs to become exporters or to sustain and expand their exporting. This might be due to local government's domestic market orientation in their assistance to local SMEs (Uchikawa & Keola, 2008).

7.2.3 Managerial Implications

The findings of this study have several important implications for aspiring-exporters, current exporters and SMEs with no intention to export (non-intenders). Aspiring-exporters should not be

overly concerned about particular pathways to internationalise. SMEs may attempt to initiate export to geographically and culturally close markets (i.e. ASEAN neighbouring countries) but should not overlook export opportunities in large and high-income markets, regardless of their physical and psychical distances. Our results show that a large number of SMEs initiate exporting to distant markets. The implementation of the ASEAN Economic Community in 2015, as a continuation of ASEAN-FTA (AFTA) in 1992, may further reduce the trade barriers among ASEAN countries and therefore magnify the intra-ASEAN trade opportunities. However, the enlargements of AFTA into ASEAN-China (2010), ASEAN-Japan (2008), ASEAN-Korea (2007), ASEAN-India (2010) and ASEAN-Australia-New Zealand (2010) FTAs indicate that the future export markets are not limited within the ASEAN region.

Aspiring-exporters should proactively seek export assistance from central government agencies. SMEs may prioritise the types of assistance that increase the SMEs' likelihood to make contact with potential foreign buyers. For example, SMEs may look to participate in international trade fairs (international shows, exhibitions or expos). However, SMEs may be reluctant to bear the cost to participate in international trade fairs, especially when the travelling costs are not entirely or partially covered by the government. The cheaper alternatives to international trade fairs are *SME Catalogue* publications or online promotion at the website of the Ministry of Cooperatives and SMEs, as both increase SMEs' likelihood of exposure to foreign buyers without incurring high costs for SMEs.

Aspiring-exporters should not immediately surrender the order/contract offer from foreign buyers that implies the needs for capital investment or working capital beyond SMEs' internal financial capacity. Rather, SMEs should first seek financial support from the Indonesia Eximbank, a special financial institution established by the government to provide export financing services. The Indonesia Eximbank's services include export financing (buyer's credit/export investment loan/export working capital loan), export insurance (for the risk of export failure and the risk of payment failure) and export guarantees (credit guarantees and import letter of credit guarantee for exporters who require imported raw materials/spare parts).

Aspiring-exporters should develop and maintain close relationships with non-government actors in the networks. Some network actors that can help SMEs to internationalise include, but are not limited to, business associations/chambers, business partners/associates, private companies/state-owned enterprises, universities/research institutes, suppliers, distributors and Indonesian emigrant communities worldwide. The estimation results in Section 6.1 show that network relationships with

non-government actors in the network can be as important as the formal relationships with government agencies in facilitating SMEs to export.

For the current exporters, the owner and the managerial team should keep actively seeking to participate in various government export assistance programmes. The estimation results in Section 6.2 show that the exporters face severe barriers such as human resources, financial and procedural barriers, to sustain and expand their exporting. The types of assistance that might be beneficial to remove those barriers include managerial training (e.g. business planning, marketing, cultural differences awareness, language skills and knowledge of export procedures) and financial support (including export financing, export insurance and export guarantees).

Exporting SMEs should maintain and strengthen their relationships with non-government actors in the networks. For example, exporting SMEs may seek advice or information regarding export expansion opportunities from business associations/chambers and business partners/associates. In addition, the current exporters should build networking with Indonesian emigrant communities to access multiple foreign markets. The role of the Indonesian diaspora is still very limited and ineffective in facilitating SME internationalisation as compared to other communities such as *guanxi* (China), *kankei* (Japan) and *immak* (Korea) (Zhou et al., 2007).

Despite the impediments at the exporting stage, current exporters should always consider expanding their exports. The export expansion may begin from the initial export market of neighbouring countries. For example, SMEs that initially export to a Western European country may consider expanding their exporting to other West European countries. The same is also true for SMEs that initially export to other regions such as North America, Middle East and East Asia. It is likely that countries in the same region share many similarities in terms of culture, consumer preferences and business environment, all of which enhance the chance of a successful export expansion.

7.3 Research Limitations

This research has a number of limitations regarding the scope of the study, the sample selection, the data and the estimation techniques. With respect to the scope of the study, this research is confined to SMEs' outward internationalisation. Thus, this research incorporates neither SMEs' inward internationalisation activities (such as importing, inward investment and adoption of foreign technology) nor cooperative international activities (such as licensing). Further, this study restricts the analysis to SMEs' direct exporting activities, which is one specific form of outward internationalisation. Thus, this study does not incorporate other forms of outward internationalisation including indirect export through large exporting firms, involvement in global supply chains and foreign investment to set up shops or inventory facilities overseas. Direct exporting is an increasingly viable outward internationalisation strategy for SMEs due to decreasing trade barriers and transportation costs, although indirect export and involvement in global supply chains remain as realistic options for SMEs owing to their risk aversion and lack of internal resources (Hessels & Terjesen, 2010).

This research focuses on the internationalisation of small-sized and medium-sized enterprises and therefore excludes the case of micro-sized enterprises. The micro enterprises' database in Indonesia is unavailable as they mostly take the form of individual businesses or home industries. In addition, micro enterprises are less likely to engage in direct exporting activities due to their smallness and limited resources (Pendergast et al., 2008), despite the decrease in trade barriers and the advancement of information and communication technology.

This research covers seven provinces in Indonesia including all provinces in Java, Madura and Bali Islands. Of the thirty-four total provinces in Indonesia, the seven studied provinces contribute approximately 58% of total GDP and 53% of total non-oil and gas exports, and are the centres of economic activities and growth in Indonesia (BPS-Statistics Indonesia, 2014d). The seven provinces are also inhabited by approximately 57.5% of the total population and 60% of total SMEs in Indonesia. Therefore, the selection of the study area allows to some extent the generalisation of the study's results at country level (Indonesia). However, the results of the study are not reflective of the characteristics of provinces which differ greatly from the studied provinces. In particular, the results may not reflect the least industrialized and least developed provinces where the lack of transportation, communication and logistics infrastructure may pose greater barriers for exporting activities.

This study does not specifically compare the SME internationalisation process and determinants across provinces and products despite employing two variables that represent province and SMEs' product group. We briefly discuss in Section 5.6.5 how the timing to become exporters varies across provinces and commodities and we use categorical variables to control for the province and SMEs' type of products in our estimations in Sections 6.1 and 6.2. The results show initial indications suggesting that SMEs' internationalisation processes and determinants vary across province and product groups. However, our study does not specifically perform province-by-province and product-by-product analysis of SME internationalisation processes and determinants.

This study limits itself to the supply-side analysis of SME internationalisation and is therefore short of explanation with regard to the demand-side factors of internationalisation. In this study, the foreign market barriers (foreign customers, government and distributors) and the export market destinations are discussed from SMEs' perspectives and thereby could be insufficient to represent overall demand-side factors of internationalisation.

The data collection of this study was conducted in April-August 2014. Hence, the results of this study do not capture the impact of the ASEAN Economic Community (AEC) that took effect from 1 January 2015. The implementation of AEC may decrease the trade barriers among member economies (Chia, 2013; Itakura, 2013) and may therefore bring about more positive attitudes towards export barriers in general. The implementation of AEC may also alter the SME internationalisation pathways and market orientation where Indonesian SMEs can be more inclined to initiate exporting or expand it to ASEAN countries.

The study uses SMEs' point of view in discussing the role of local governments (provincial and municipal governments) in export assistance provisions but did not conduct interviews/surveys with local government agencies. Hence, the results do not capture local governments' perspective on SMEs' development. Local governments have increasingly important roles in policymaking in Indonesia since the rapid government decentralization began in 1999 (Brodjonegoro & Asanuma, 2000; Resosudarmo, 2004). It is possible that local governments have varying policies regarding local SMEs' market orientation. For example, some local governments may endorse local SMEs to focus on domestic markets or to sell their products to large exporters domestically as opposed to committing to direct exporting (Uchikawa & Keola, 2008). In contrast, some other local governments may endorse the local SMEs to initiate exporting for various reasons such as the province's closeness to neighbouring countries.

Finally, this study uses a cross-sectional approach to analyse the impact of exporting using perceptual firm performance improvement data measured with Likert-scale questions. Hence, the study did not conduct a comparison of firm performance before and after exporting with actual financial performance data, with which more advanced data analysis methods such as difference-in-differences and panel data analysis can be employed.

7.4 Recommendations for Future Research

To increase the generalisation of the research results, the scope of the study can be expanded to include other regions or provinces in Indonesia. In particular, future study can attempt to include less developed/less industrialized provinces and provinces that are located close to the Indonesian borders with neighbouring ASEAN countries. To capture the variation in SME internationalisation processes across provinces, a number of variables at provincial level can be added. For example, provinces may differ in port/shipping infrastructure and in the ICT development and utilisation levels, all of which may affect the internationalisation of local SMEs (Hagsten & Kotnik, 2017; Puthusserry, Child, & Rodrigues, 2014). Provinces can also differ in their local governments' policies towards local SMEs. Accordingly, cross-province comparison of SME internationalisation requires a larger sample size. The sample size should be calculated and randomized for each province to ensure sample sufficiency to perform statistical inferences at provincial level.

Alternatively, future research can be more specific on SME internationalisation in a particular province/region or product group/industry. For example, case studies of SME internationalisation in tourist destination provinces such as Bali and Yogyakarta can be considered. Case studies can also be drawn upon internationalisation of SMEs in specific industries such as handicrafts, food and beverages, and garment and fashion accessories. Specific case studies will allow more specific policy measures recommendation to foster SME internationalisation.

Future research can consider incorporating various forms of outward internationalisation including direct exporting, indirect-exporting and involvement in global supply chains (selling the products to local-based exporters). The comparison of SMEs performance across various forms of internationalisation can reveal whether the decision of some SMEs not to engage in direct exporting activities is a rational economic decision or a decision influenced by subjective negative presumptions on export barriers. The incorporation of indirect-exporting and global supply chain

involvement in the analysis of internationalisation also allows the inclusion of micro-sized enterprises that are less likely to perform direct exporting activities.

SMEs' internationalisation process involves other private actors in internationalisation networks, including distributors, suppliers, business associations/chambers, financial institutions and other private agencies (Coviello & Munro, 1997; Coviello & Munro, 1995; Zain & Ng, 2006). Future studies can consider capturing the perspective of those actors with regard to SMEs' export activities to have a better understanding on how the network relationships can help foster SMEs to internationalise.

Future studies can also consider a more complex definition of SMEs. The SME definition by number of employees used in our study is practical for survey purposes but has its own drawbacks. The number of employees may not always represent the size of the enterprise's business activities. For example, a labour intensive fashion accessory or household utensils production may involve a large number of employees despite low product monetary value. By contrast, a small-scale jewellery craft producer has large product monetary value despite employing only a small number of artisans. Hence, future research on SME internationalisation can consider SME definitions that incorporate other dimensions of size including, for example, assets and turnover values (Ayyagari et al., 2005; "Undang-undang No. 20 Tahun 2008 tentang Usaha Mikro Kecil dan Menengah [Law on Micro, Small and Medium-Sized Enterprise Number 20 of 2008].", 2008).

Future studies can attempt to increase the accuracy and depth of the research data. To improve the accuracy of the research data, some perceptual data can be replaced with factual (quantitative) data. For example, the actual tariff rate, number of export documents, cost of exporting and time taken to export can be used to replace the perceptual barriers related to procedure and logistics barriers. Quantitative measures of firms' financial performances such as sales, profit and return on sales can be used in place of perceptual satisfaction with firms' financial performance. To increase the depth of the survey data, "other" category option (open question) can be added to the 22 export stimuli items and to the 50 export barrier items. This "other" category can capture the possibility of export stimuli and export barrier types that are unique or specific to the study case or area.

Finally, the use of panel data or pool cross-sectional methods will significantly improve the estimation results of SMEs' export performance and export impact in future studies. A panel data method will be able to capture the dynamics of firm performance before and after exporting more accurately. The panel data method is also capable of estimating the dynamics in export performance

prior and after an event/ policy implementation, such as the changes in SME's export performance after the implementation of an FTA.

References

- Abdi, H., & Williams, L. J. (2010). Principal component analysis. *Wiley Interdisciplinary Reviews: Computational Statistics*, 2(4), 433-459. doi:10.1002/wics.101
- Abdullah, N. A. H. N., & Zain, S. N. M. (2011a). *The internationalisation of Malaysian SMEs*. Paper presented at the meeting of the International Conference on Sociality and Economics Development, Singapore.
- Abdullah, N. A. H. N., & Zain, S. N. M. (2011b). The internationalization theory and Malaysian small medium enterprises (SMEs). *International Journal of Trade, Economics and Finance*, 2(4), 318-322. doi:<http://dx.doi.org/10.7763/IJTEF.2011.V2.124>
- Acedo, F. J., & Galán, J. L. (2011). Export stimuli revisited: The influence of the characteristics of managerial decision makers on international behaviour. *International Small Business Journal*, 29(6), 648-670. doi:10.1177/0266242610375771
- Adlung, R., & Soprana, M. (2013). SMEs in services trade—A GATS perspective. *Intereconomics*, 48(1), 41-50.
- Andersen, O. (1993). On the internationalization process of firms: A critical analysis. *Journal of International Business Studies*, 24(2), 209-231.
- Andersen, P. H. (2006). Listening to the global grapevine: SME export managers' personal contacts as a vehicle for export information generation. *Journal of World business*, 41(1), 81-96.
- Anderson, D. R., Sweeney, D. J., & Williams, T. A. (2010). *Statistics for Business and Economics* (11th ed.): South Western Educational Publishing.
- Awuah, G. B., & Amal, M. (2011). Impact of globalization: the ability of less developed countries' (LDCs') firms to cope with opportunities and challenges. *European Business Review*, 23(1), 120-132. doi:10.1108/09555341111098026
- Ayyagari, M., Beck, T., & Demirguc-Kunt, A. (2005). *Small and medium enterprises across the globe: The World Bank*. Retrieved from http://siteresources.worldbank.org/DEC/Resources/84797-1114437274304/SME_globe.pdf
- Balassa, B. (1965). Trade liberalisation and "revealed" comparative advantage. *The Manchester School*, 33(2), 99-123.
- Balassa, B. (1977). 'Revealed' comparative advantage revisited: An analysis of relative export shares of the industrial countries, 1953-1971. *The Manchester School*, 45(4), 327-344.
- Bandi, K. K., & Bhatt, K. (2008). *The process of Internationalization in Small and Medium Enterprises (SMEs): "Challenges encountered in the process of Internationalization from product adaptation and standardization perspective"*. Halmstad University.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of management*, 17(1), 99-120.
- Battaglia, L., Corsaro, D., & Tzannis, A. (2006). *The role of networks in the internationalisation of a SME: the case of an Italian company*. Paper presented at the meeting of the Industrial Marketing and Purchasing Group Conference, Milano. Retrieved from <http://impgroup.org/uploads/papers/5624.pdf>

- Baum, C. F. (2008). Stata tip 63: Modeling proportions. *Stata Journal*, 8(2), 299-303.
- Bernard, A. B., & Jensen, J. B. (2004). Why some firms export. *Review of Economics and Statistics*, 86(2), 561-569.
- Bianchi, C., & Wickramasekera, R. (2016). Antecedents of SME export intensity in a Latin American Market. *Journal of Business Research*, 69(10), 4368-4376.
- Bilkey, W. J., & Tesar, G. (1977). The export behavior of smaller-sized Wisconsin manufacturing firms. *Journal of international business studies*, 8(1), 93-98.
- Boston Consulting Group. (2004). *Export Development and Promotion: Lessons From Four Benchmark Countries*.
- Bourguignon, F. (2004). *The poverty-growth-inequality triangle*. Paper presented at the meeting of the Poverty, Inequality and Growth, AFD-EUDN Conference, 2003, Paris.
- Bouzas, R., & Avogadro, E. (2002). Trade-Policy Making and the Private Sector: A Memorandum on Argentina. In *The Trade Policy-Making Process Level One of the Two Level Game: Country Studies in the Western Hemisphere*. Washington DC: IADB.
- BPS-Statistics Indonesia. (2013a). Distribusi Persentase Penduduk dan Kepadatan Penduduk Menurut Provinsi, 2000 dan 2010.
- BPS-Statistics Indonesia. (2013b). *Perkembangan Ekspor dan Impor Indonesia Agustus 2013*.
- BPS-Statistics Indonesia. (2014a). *Industri Statistics*. Retrieved 18 November 2014, from <http://www.bps.go.id/>.
- BPS-Statistics Indonesia. (2014b) *Perkembangan Ekspor dan Impor Indonesia Mei 2014*.
- BPS-Statistics Indonesia. (2014c). *Statistical Yearbook of Indonesia 2014*. Jakarta: BPS-Statistics Indonesia. Retrieved from https://www.bps.go.id/website/pdf_publicasi/
- BPS-Statistics Indonesia. (2014d). Value of Exports by Major Ports (FOB value: million US\$), 2000-2013. Retrieved 5/10/2016 <https://www.bps.go.id/linkTabelStatis/view/id/1008>
- BPS-Statistics Indonesia. (2015). Quarterly Gross Domestic Bruto at 2000 Constant Market Price by Industrial Origin (Billion Rupiahs), 2000-2014. Retrieved 13 October 2016 <https://www.bps.go.id/linkTabelStatis/view/id/1206>
- BPS-Statistics Indonesia. (2016). Gini Ratio by Province 1996, 1999, 2002, 2005, 2007-2015. Retrieved 6/10/2016 <http://www.bps.go.id/linkTableDinamis/view/id/1116>
- Breinlich, H., & Criscuolo, C. (2011). International trade in services: A portrait of importers and exporters. *Journal of International Economics*, 84(2), 188-206.
doi:<http://dx.doi.org/10.1016/j.jinteco.2011.03.006>
- Brodjonegoro, B., & Asanuma, S. (2000). Regional autonomy and fiscal decentralization in democratic Indonesia. *Hitotsubashi Journal of Economics*, 41(2), 111-122.
- Brush, C. (2012). *International entrepreneurship: The effect of firm age on motives for internationalization* (Vol. 5): Routledge.
- Buckley, P. J. (2011). The theory of international business pre-Hymer. *Journal of World Business*, 46(1), 61-73.

- Buckley, P. J., & Casson, M. C. (2009). The Internalisation theory of the multinational enterprise: A review of the progress of a research agenda after 30 years. *Journal of International Business Studies*, 40(9), 1563-1580. doi:10.2307/27752467
- Calabrò, A., & Mussolino, D. (2013). How do boards of directors contribute to family SME export intensity? The role of formal and informal governance mechanisms. *Journal of Management & Governance*, 17(2), 363-403.
- Calof, J. L., & Beamish, P. W. (1995). Adapting to foreign markets: Explaining internationalization. *International Business Review*, 4(2), 115-131. doi:10.1016/0969-5931(95)00001-G
- Carpenter, M. A., Sanders, W. G., & Gregersen, H. B. (2000). International assignment experience at the top can make a bottom-line difference. *Human Resource Management*, 39(2, 3), 277.
- Caves, R. E. (1971). International corporations: The industrial economics of foreign investment. *Economica*, 38(149), 1-27.
- Caves, R. E. (1996). *Multinational enterprise and economic analysis*: Cambridge University Press.
- Cavusgil, S. T. (1980). On the internationalization process of firms. *European Research*, 8(6), 273-281.
- Cavusgil, S. T., & Knight, G. (2009). *Born global firms: A new international enterprise*. New York: Business Expert Press.
- Cavusgil, S. T., & Naor, J. (1987). Firm and management characteristics as discriminators of export marketing activity. *Journal of Business Research*, 15(3), 221-235.
- Cavusgil, S. T., & Zou, S. (1994). Marketing strategy-performance relationship: an investigation of the empirical link in export market ventures. *The Journal of Marketing*, 58(1), 1-21.
- Chatterjee, S., & Wernerfelt, B. (1991). The link between resources and type of diversification: Theory and evidence. *Strategic Management Journal*, 12(1), 33-48.
- Chelliah, S., Sulaiman, M., & Yusoff, Y. M. (2010). Internationalization and performance: small and medium enterprises (SMEs) in Malaysia. *International Journal of Business and Management*, 5(6), 27-37.
- Chetty, S., & Campbell-Hunt, C. (2004). A strategic approach to internationalization: A traditional versus a "born-global" approach. *Journal of International Marketing*, 12(1), 57-81. doi:10.1509/jimk.12.1.57.25651
- Chia, S. (2013) The ASEAN economic community: Progress, challenges, and prospects. *ADB Working Paper No. 440*.
- Chiao, Y.-C., Yang, K.-P., & Yu, C.-M. J. (2006). Performance, internationalization, and firm-specific advantages of SMEs in a newly-industrialized economy. *Small Business Economics*, 26(5), 475-492.
- Ciszewska-Mlinaric, M. (2016). Foreign market knowledge and SME's international performance: Moderating effects of strategic intent and time-to-internationalization. *Entrepreneurial Business and Economics Review*, 4(4), 51.
- COMCEC. (2013). *Promoting the SMEs Exports in the OIC Member Countries*. Ankara.
- Conner, K. R., & Prahalad, C. K. (1996). A resource-based theory of the firm: Knowledge versus opportunism. *Organization science*, 7(5), 477-501.

- Coordinating Ministry for Economic Affairs. (2011). *Masterplan: Acceleration and Expansion of Indonesia Economic Development 2011-2025*: Coordinating Ministry for Economic Affairs, Republic of Indonesia.
- Coviello, N., & Munro, H. (1997). Network relationships and the internationalisation process of small software firms. *International Business Review*, 6(4), 361-386. doi:10.1016/s0969-5931(97)00010-3
- Coviello, N. E., & Munro, H. J. (1995). Growing the entrepreneurial firm: networking for international market development. *European Journal of Marketing*, 29(7), 49-61.
- Crick, D. (2002). The decision to discontinue exporting: SMEs in two UK trade sectors. *Journal of Small Business Management*, 40(1), 66.
- Crossley, M. L. (2008). *The desk reference of statistical quality methods*: ASQ Quality Press.
- Czinkota, M. R. (1982). *Export development strategies: US promotion policy*: Praeger.
- Dalli, D. (1995). The organization of exporting activities: Relationships between internal and external arrangements. *Journal of Business Research*, 34(2), 107-115. doi:[http://dx.doi.org/10.1016/0148-2963\(94\)00059-N](http://dx.doi.org/10.1016/0148-2963(94)00059-N)
- Demick, D. H., & O'Reilly, A. J. (2000). Supporting SME internationalisation: a collaborative project for accelerated export development. *Irish Marketing Review*, 13(1), 34.
- Dhanaraj, C., & Beamish, P. W. (2003). A resource-based approach to the study of export performance. *Journal of Small Business Management*, 41(3), 242-261. doi:10.1111/1540-627X.00080
- DiStefano, C., Zhu, M., & Mindrila, D. (2009). Understanding and using factor scores: Considerations for the applied researcher. *Practical Assessment, Research & Evaluation*, 14(20), 1-11.
- Dunning, J. (2006). *American investment in British manufacturing industry*: Routledge.
- Dunning, J. H. (2001). The eclectic (OLI) paradigm of international production: past, present and future. *International journal of the economics of business*, 8(2), 173-190.
- Easton, G., & Axelsson, B. (1992). *Industrial networks: a new view of reality*: Routledge.
- EFIC. (2010). *Global Readiness Index: National Summary Report 2010*.
- European Commission. (2007). *Supporting the internationalisation of SMEs*. Brussels. Retrieved from http://ec.europa.eu/enterprise/policies/sme/files/support_measures/internationalisation/report_internat_en.pdf
- European Commission. (2010a). *Barriers to internationalisation and growth of EU's innovative companies*. Vienna.
- European Commission. (2010b). *Internationalisation of European SMEs*.
- European Commission. (2011). *Opportunities for the internationalisation of European SMEs*. Brussels.
- Fakih, A., & L. Ghazalian, P. (2014). Which firms export? An empirical analysis for the manufacturing sector in the MENA region. *Journal of Economic Studies*, 41(5), 672-695.
- Filatotchev, I., Stephan, J., & Jindra, B. (2008). Ownership structure, strategic controls and export intensity of foreign-invested firms in transition economies. *Journal of International Business Studies*, 39(7), 1133-1148.

- Fontagné, L. (1999). *Foreign direct investment and international trade: complements or substitutes?*: OECD Publishing.
- Francis, J., & Collins-Dodd, C. (2004). Impact of export promotion programs on firm competencies, strategies and performance: The case of Canadian high-technology SMEs. *International Marketing Review*, 21(4/5), 474-495.
- Freeman, J., Styles, C., & Lawley, M. (2012). Does firm location make a difference to the export performance of SMEs? *International Marketing Review*, 29(1), 88-113.
- Freeman, S., Edwards, R., & Schroder, B. (2006). How smaller born-global firms use networks and alliances to overcome constraints to rapid internationalization. *Journal of International Marketing*, 14(3), 33-63. doi:10.2307/25049054
- Gankema, H. G., Snuif, H. R., & Zwart, P. S. (2000). The internationalization process of small and medium-sized enterprises: an evaluation of stage theory. *Journal of Small Business Management*, 38(4), 15.
- Ganotakis, P., & Love, J. H. (2012). Export propensity, export intensity and firm performance: The role of the entrepreneurial founding team. *Journal of International Business Studies*, 43(8), 693-718. doi:10.1007/s10997-010-9166-x.
- Garland, R. (1991). The mid-point on a rating scale: Is it desirable. *Marketing Bulletin*, 2(1), 66-70.
- Geng, M., & Geng, X. (2012). Two-factor export factoring: Optimal option for export-oriented SMEs financing. *Contemporary Logistics*(06), 86-90.
- Gereffi, G. (1994). The Organization of Buyer-Driven Global Commodity Chains: How US Retailers Shape Overseas Production Networks. In G. Gereffi & M. Korzeniewicz (Eds.), *Commodity chains and global capitalism*. London: Praeger.
- Government of Indonesia. (2013). *Trade Policy Review (13-1139)*: World Trade Organization.
- Greene, W. H. (2008). *Econometric analysis* (6th ed.): Pearson.
- Hagsten, E., & Kotnik, P. (2017). ICT as facilitator of internationalisation in small-and medium-sized firms. *Small Business Economics*, 48(2), 431-446.
- Hammer, A., & Stamps, J. (2010). *The Role of Small & Medium Sized Enterprises In U.S. and EU Exports*. Paris: OECD.
- Hart, S., & Tzokas, N. (1999). The impact of marketing research activity on SME export performance: evidence from the UK. *Journal of Small Business Management*, 37(2), 63-75.
- Hashim, F. (2012). Challenges for the internationalization of SMEs and the role of government: The case of Malaysia. *Journal of International Business and Economy*, 13(1), 97-122.
- Hashim, M. K., & Ahmad, S. (2008). *Internationalization of Malaysian SME's Influencing Factors, Sources of Information and Options*. Paper presented at the meeting of the International Council for Small Business World Conference, Halifax, Nova Scotia, Canada.
- Helisek, M. (2013). Export potential of SMEs and Euro adoption in the Czech Republic. *European Research Studies*, 16(4), 71.
- Helpman, E., Melitz, M. J., & Yeaple, S. R. (2003). *Export versus FDI*: National Bureau of Economic Research.

- Hessels, J., & Terjesen, S. (2010). Resource dependency and institutional theory perspectives on direct and indirect export choices [journal article]. *Small Business Economics*, 34(2), 203-220. doi:10.1007/s11187-008-9156-4
- Hidayat, D. N. (2002). Don't worry, Clinton is Megawati's brother': The mass media, rumours, economic structural transformation and delegitimization of Suharto's new order. *International Communication Gazette*, 64(2), 157-181.
- Hill, C. W., Cronk, T., & Wickramasekera, R. (2007). *Global Business Today: An Asia-Pacific Perspective*: McGraw-Hill Higher Education.
- Hill, R. C., Griffiths, W. E., & Lim, G. C. (2011). *Principles of econometrics* (Fourth ed.): John Wiley & Sons, Inc.
- Hitt, M. A., Hoskisson, R. E., & Kim, H. (1997). International diversification: Effects on innovation and firm performance in product-diversified firms. *The Academy of Management Journal*, 40(4), 767-798.
- Hobday, M. (1994). Export-led technology development in the four dragons: the case of electronics. *Development and Change*, 25(2), 333-361.
- Hollenstein, H. (2005). Determinants of international activities: are SMEs different? *Small Business Economics*, 24(5), 431-450.
- Hubbard, R., & Allen, S. J. (1987). An empirical comparison of alternative methods for principal component extraction. *Journal of Business Research*, 15(2), 173-190.
- Hymer, S. H. (1976). *The international operations of national firms: A study of direct foreign investment*. Cambridge, MA: MIT Press
- IMF. (2016). Exchange Rate Archives. Retrieved 11 October 2016
<https://www.imf.org/external/np/fin/ert/GUI/Pages/CountryDataBase.aspx>
- Indahnesia.com. (2014). *Discover Indonesia Online*. Retrieved 10 November 2014, from
<http://indahnesia.com/index.php>.
- Itakura, K. (2013) Impact of liberalization and improved connectivity and facilitation in ASEAN for the ASEAN Economic Community. *ERIA Discussion Paper No. 1-2013*.
- ITC. (2016a). Trade Map: Export by Products. Retrieved 16 August 2016, from The International Trade Centre <http://www.trademap.org/Index.aspx>.
- ITC. (2016b). Trade Map: Export by Services. Retrieved 7 September 2016, from The International Trade Centre <http://www.trademap.org/Index.aspx>.
- ITC. (2017). Trade Map: Export by Products. Retrieved 1 September 2017, from The International Trade Centre <http://www.trademap.org/Index.aspx>.
- Jacoby, J., & Matell, M. S. (1971). Three-point Likert scales are good enough. *Journal of Marketing Research*, 8(4), 495-500.
- Jane, O. (2013). Proses internasionalisasi perusahaan: Desain strategis & organisasi (studi kasus UKM di kota Bandung). *Research Report-Social Science*, 1.
- Jerome, A. (2005, January 28-29). *Institutional Framework and the Process of Trade Policy Making in African: The Case of Nigeria*. Paper presented at the meeting of the African Economic Research Institutions and Policy Development: Opportunities and Challenges, Dakar.

- Johanson, J., & Mattsson, L.-G. (1988). Internationalization in Industrial Systems - A Network Approach. In N. Hood & J.-E. Vahlne (Eds.), *Strategies in Global Competition* (pp. 287-314). New York: Routledge.
- Johanson, J., & Vahlne, J.-E. (1977). The internationalization process of the firm--A model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies (pre-1986)*, 8(000001), 23-32.
- Johanson, J., & Vahlne, J.-E. (1990). The mechanism of internationalisation. *International Marketing Review*, 7(4), 11-24.
- Johanson, J., & Wiedersheim-Paul, F. (1975). The internationalization of the firm—four swedish cases 1. *Journal of management studies*, 12(3), 305-323.
- Johns, R. (2010). Likert items and scales. *Survey Question Bank: Methods Fact Sheet*, 1, 1-11.
- Johnsen, R. E. (2007). The role of focal suppliers in strategic networks for internationalisation: Perspectives from small and medium-sized Italian and Thai silk suppliers. *Journal of Fashion Marketing and Management*, 11(1), 135-147. doi:10.1108/13612020710734454
- Kim, W. C., Hwang, P., & Burgers, W. P. (1993). Multinationals' diversification and the risk-return trade-off. *Strategic Management Journal*, 14(4), 275-286.
- Knight, G. (2000). Entrepreneurship and marketing strategy: The SME under globalization. *Journal of International Marketing*, 8(2), 12-32.
- Köcker, G. M., & Buhl, C. M. (2007). *Internationalization of Networks - Barriers and Enablers: Empirical analysis of selected European networks*. Berlin: Kompetenznetze Deutschland, Federal Ministry of Economics and Technology Germany.
- Kogut, B. (1985). Designing global strategies: Comparative and competitive value-added chains. *Sloan Management Review*, 26(4), 15-28.
- Kogut, B., & Chang, S. J. (1996). Platform Investments and Volatile Exchange Rates: Direct Investment in the U.S. by Japanese Electronic Companies. *The Review of Economics and Statistics*, 78(2), 221-231. doi:10.2307/2109924
- Kontinen, T., & Ojala, A. (2012). Social capital in the international operations of family SMEs. *Journal of Small Business and Enterprise Development*, 19(1), 39-55. doi:10.1108/14626001211196398
- Korhonen, H., Luostarinen, R., & Welch, L. (1996). Internationalization of SMEs: Inward--outward patterns and government policy. *Management International Review*, 36(4), 315-329.
- Korhonen, P. (1994). The theory of the flying geese pattern of development and its interpretations. *Journal of Peace Research*, 31(1), 93-108.
- Kuncoro, M. (2009). *Pemberdayaan UKM: Antara Mitos dan Realitas* Retrieved 02/10/2014, from <http://ekonomikerakyatan.ugm.ac.id/My%20Web/mudrajad.htm>.
- Lages, F. L., & Montgomery, D. B. (2004). Export performance as an antecedent of export commitment and marketing strategy adaptation: Evidence from small and medium-sized exporters. *European Journal of Marketing*, 38(9/10), 1186-1214.
- Lages, L. F., Silva, G., & Styles, C. (2009). Relationship capabilities, quality, and innovation as determinants of export performance. *Journal of International Marketing*, 17(4), 47-70.

- Laghzaoui, S. (2007, October). *Internationalization of SME: A reading in terms of resources and competencies*. Paper presented at the meeting of the 3rd Iberian International Business Conference, Aveiro, Portugal.
- Lee, C. F., Lee, J. C., & Lee, A. C. (1999). *Statistics for business and financial economics* (Second ed.). Singapore: World Scientific.
- Leonidou, L. C. (1988). Export initiation by indigenous manufacturers in a small developing economy. *Spoudai*, 38(1-2), 63-78.
- Leonidou, L. C. (1995a). Empirical research on export barriers: Review, assessment, and synthesis. *Journal of International Marketing*, 3(1), 29-43.
- Leonidou, L. C. (1995b). Export stimulation: a non-exporter's perspective. *European Journal of Marketing*, 29(8), 17-36.
- Leonidou, L. C. (2004). An analysis of the barriers hindering small business export development. *Journal of Small Business Management*, 42(3), 279-302. doi:10.1111/j.1540-627X.2004.00112.x
- Leonidou, L. C. (2011). Factors stimulating export business: an empirical investigation. *Journal of Applied Business Research (JABR)*, 14(2), 43-68.
- Leonidou, L. C., & Katsikeas, C. S. (1996). The export development process: an integrative review of empirical models. *Journal of international business studies*, 27(3), 517-551.
- Leonidou, L. C., Katsikeas, C. S., Palihawadana, D., & Spyropoulou, S. (2007). An analytical review of the factors stimulating smaller firms to export: Implications for policy-makers. *International Marketing Review*, 24(6), 735-770. doi:doi:10.1108/02651330710832685
- Levy, B., Berry, A., & Nugent, J. B. (1999). Supporting the export activities of small and medium enterprise (SME). In B. Levy, A. Berry & J. B. Nugent (Eds.), *Fulfilling the export potential of small and medium firms* (pp. 1-30): Springer Science & Business Media.
- Liargovas, P. G., & Skandalis, K. S. (2008). Motivations and barriers of export performance: Greek exports to the Balkans. *Journal of Southern Europe and the Balkans Online*, 10(3), 377-392. doi:10.1080/14613190802493840
- Lim, H., & Kimura, F. (2010) The Internationalization of Small and Medium Enterprises in Regional and Global Value Chains. *ADB Working Paper No. 231*.
- Lim, S., & Feng, G. (2005). Dynamic comparative advantage: Implications for China. *Review of Applied Economics*, 1(2), 207-222.
- Lin, J. Y. (2012). From flying geese to leading dragons: New opportunities and strategies for structural transformation in developing countries. *Global Policy*, 3(4), 397-409.
- Ling-Yee, L. (2004). An examination of the foreign market knowledge of exporting firms based in the People's Republic of China: Its determinants and effect on export intensity. *Industrial Marketing Management*, 33(7), 561-572.
- Lloyd-Reason, L., & Mughan, T. (2008). *Removing Barriers to SME Access to International Markets: OECD-APEC Global Study*. Paper presented at the meeting of the USASB 2008 Conference, San Antonio, Texas.
- Lloyd-Reason, L., & Sear, L. (Eds.). (2007). *Trading Places - SMEs in the Global Economy: A Critical Research Handbook*. Cheltenham, UK: Edward Elgar Publishing Ltd.

- Lopez-Nicolas, C., & Soto-Acosta, P. (2010). Analyzing ICT adoption and use effects on knowledge creation: An empirical investigation in SMEs. *International Journal of Information Management*, 30(6), 521-528.
- Lu, J. W., & Beamish, P. W. (2001). The internationalization and performance of SMEs. *Strategic Management Journal*, 22(6-7), 565-586. doi:10.1002/smj.184
- Lu, J. W., & Beamish, P. W. (2004). International diversification and firm performance: The S-curve hypothesis. *The Academy of Management Journal*, 47(4), 598-609.
- Lu, J. W., & Beamish, P. W. (2006). SME internationalization and performance: Growth vs. profitability. *Journal of International Entrepreneurship*, 4(1), 27-48.
- Maddala, G. S. (2001). *Introduction to econometrics* (Third ed.): John Wiley & Sons Ltd.
- Majocchi, A., Bacchiocchi, E., & Mayrhofer, U. (2005). Firm size, business experience and export intensity in SMEs: A longitudinal approach to complex relationships. *International Business Review*, 14(6), 719-738.
- Makadok, R. (2001). Toward a synthesis of the resource-based and dynamic-capability views of rent creation. *Strategic Management Journal*, 22(5), 387-401.
- Masurel, E. (2001). Export behaviour of service sector SMEs. *International Small Business Journal*, 19(2), 80-84.
- Matell, M. S., & Jacoby, J. (1971). Is there an optimal number of alternatives for Likert scale items? Study I: Reliability and validity. *Educational and Psychological Measurement*, 31(3), 657-674.
- Matlay, H., & Fletcher, D. (2000). Globalization and strategic change: some lessons from the UK small business sector. *Strategic Change*, 9(7), 437.
- McFadden, D. (1977). Quantitative methods for analyzing travel behavior of individuals: some recent developments. In D. A. Hensher & D. A. Stopher (Eds.), *Behavioral Travel Modelling* (pp. 279-318). London: Groom Helm.
- Melén, S. (2009). *New insights on the internationalisation process of SMEs: A study of foreign market knowledge development*. Stockholm School of Economics, Stockholm.
- Ministry of Cooperatives and SMEs Republic of Indonesia, &. (2009a). *Direktori KUKM Ekspor* Jakarta.
- Ministry of Cooperatives and SMEs Republic of Indonesia. (2009b). *Perkembangan Data Usaha Mikro, Kecil, Menengah (UMKM) dan Usaha Besar (UB) Tahun 2005-2009. [The Development of Micro, Small, Medium and Large-Sized Business, 2005-2009]*. Retrieved June 15, 2013, from http://www.depkop.go.id/index.php?option=com_phocadownload&view=file&id=318:data-usaha-mikro-kecil-menengah-umkm-dan-usaha-besar-ub-tahun-2010-2011&Itemid=93.
- Ministry of Cooperatives and SMEs Republic of Indonesia. (2010a). *Perkembangan Data Usaha Mikro, Kecil, Menengah (UMKM) dan Usaha Besar (UB) Tahun 2006-2010. [The Development of Micro, Small, Medium and Large-Sized Business, 2006-2010]*. Retrieved September 7, 2016, from http://www.depkop.go.id/index.php?option=com_phocadownload&view=file&id=318:data-usaha-mikro-kecil-menengah-umkm-dan-usaha-besar-ub-tahun-2010-2011&Itemid=93.
- Ministry of Cooperatives and SMEs Republic of Indonesia. (2010b). *Perkembangan Data Usaha Mikro, Kecil, Menengah (UMKM) dan Usaha Besar (UB) Tahun 2009-2010. [The Development*

- of Micro, Small, Medium and Large-Sized Business, 2009-2010]. Retrieved September 7, 2016, from http://www.depkop.go.id/index.php?option=com_phocadownload&view=file&id=318:data-usaha-mikro-kecil-menengah-umkm-dan-usaha-besar-ub-tahun-2010-2011&Itemid=93.
- Ministry of Cooperatives and SMEs Republic of Indonesia. (2010c). *Strategic Plan 2010-2014*.
- Ministry of Cooperatives and SMEs Republic of Indonesia, &. (2011). *SME and Cooperative Indonesia Catalogue* Jakarta.
- Ministry of Cooperatives and SMEs Republic of Indonesia, &. (2012). *SME and Cooperative Indonesia Catalogue* Jakarta.
- Ministry of Cooperatives and SMEs Republic of Indonesia. (2013a). *Perkembangan Data Usaha Mikro, Kecil, Menengah (UMKM) dan Usaha Besar (UB) Tahun 2010-2011*. [The Development of Micro, Small, Medium and Large-Sized Business, 2010-2011]. Retrieved June 15, 2013, from http://www.depkop.go.id/index.php?option=com_phocadownload&view=file&id=318:data-usaha-mikro-kecil-menengah-umkm-dan-usaha-besar-ub-tahun-2010-2011&Itemid=93.
- Ministry of Cooperatives and SMEs Republic of Indonesia. (2013b). *Statistik Usaha Mikro, Kecil dan Menengah (UMKM) Tahun 2010-2011*
- Ministry of Cooperatives and SMEs Republic of Indonesia. (2014a). *Perkembangan Data Usaha Mikro, Kecil, Menengah (UMKM) dan Usaha Besar (UB) Tahun 2011-2012*. [The Development of Micro, Small, Medium and Large-Sized Business, 2010-2012]. Retrieved August 25, 2014,
- Ministry of Cooperatives and SMEs Republic of Indonesia. (2014b). *Statistik Usaha Mikro, Kecil dan Menengah (UMKM) Tahun 2011-2012*
- Ministry of Cooperatives and SMEs Republic of Indonesia. (2015a). *Micro, Small and Medium-sized Enterprises Data*. Retrieved 15 October 2016, from <http://www.depkop.go.id/berita-informasi/data-informasi/data-umkm/>.
- Ministry of Cooperatives and SMEs Republic of Indonesia. (2015b). *Perkembangan Data Usaha Mikro, Kecil, Menengah (UMKM) dan Usaha Besar (UB) Tahun 2012-2013*. [The Development of Micro, Small, Medium and Large-Sized Business, 2012-2013]. Retrieved September 10, 2016,
- Perubahan atas Peraturan Menteri Keuangan Nomor 68/Pmk.03/2010 Tentang Batasan Pengusaha Kecil Pajak Pertambahan Nilai, 197/PMK.03/2013 C.F.R. (2013).
- Ministry of Trade, Republic of Indonesia, Directorate of Export and Import Facilitation. (2010). *General Policy on Export and Import*. [PowerPoint]. Retrieved from <https://jakarta.trade.gov.pl/pl/download/file/f,8435>.
- Moisé, E., & Sorescu, S. (2013). *Trade Facilitation Indicators: The Potential Impact of Trade Facilitation on Developing Countries' Trade*: OECD Publishing.
- Morgan, R. E. (1997). Export stimuli and export barriers: evidence from empirical research studies. *European Business Review*, 97(2), 68-79.
- Morgan, R. E., & Katsikeas, C. S. (1997). Export stimuli: Export intention compared with export activity. *International Business Review*, 6(5), 477-499. doi:[http://dx.doi.org/10.1016/S0969-5931\(97\)00017-6](http://dx.doi.org/10.1016/S0969-5931(97)00017-6)

- Morosini, P., Shane, S., & Singh, H. (1998). National cultural distance and cross-border acquisition performance. *Journal of International Business Studies*, 29(1), 137-158.
- Nachum, L. (2004). Geographic and industrial diversification of developing country firms. *Journal of Management Studies*, 41(2), 273-294. doi:10.1111/j.1467-6486.2004.00432.x
- Naidu, G. M., Cavusgil, S. T., Murthy, B. K., & Sarkar, M. (1997). An export promotion model for India: Implications for public policy. *International Business Review*, 6(2), 113-125. doi:[http://dx.doi.org/10.1016/S0969-5931\(96\)00041-8](http://dx.doi.org/10.1016/S0969-5931(96)00041-8)
- Nazar, M. S., & Saleem, H. M. N. (2011). Firm-level determinants of export performance. *International Business & Economics Research Journal (IBER)*, 8(2), 105-112.
- Negrusa, A. L. (2009). The Romanian SME's difficulties in their internationalization process. *Studia Universitatis Babeş Bolyai-Negotia*(3), 59-70.
- Nguyen, T. V., Le, N. T. B., & Bryant, S. E. (2013). Sub-national institutions, firm strategies, and firm performance: A multilevel study of private manufacturing firms in Vietnam. *Journal of World Business*, 48(1), 68-76. doi:10.1016/j.jwb.2012.06.008
- Obben, J., & Magagula, P. (2003). Firm and managerial determinants of the export propensity of small and medium-sized enterprises in Swaziland. *International Small Business Journal*, 21(1), 73-91.
- OECD-APEC. (2006). *Removing Barriers to SME Access to International Markets*. Paper presented at the meeting of the OECD-APEC Global Conference, Athens.
- OECD. (1997). *Globalisation and Small and Medium Enterprises (SMEs)*. Paris: OECD.
- OECD. (2008). *Removing Barriers to SME Access to International Markets*: Secretary-General of the OECD.
- OECD. (2009). *Top Barriers and Drivers to SME Internationalisation*: The OECD Working Party on SMEs and Entrepreneurship, OECD.
- OECD. (2012). *Fostering SMEs' Participation in Global Markets*: OECD.
- Ojala, A. (2009). Internationalization of knowledge-intensive SMEs: The role of network relationships in the entry to a psychically distant market. *International Business Review*, 18(1), 50-59. doi:10.1016/j.ibusrev.2008.10.002
- Ojala, A., & Tyrväinen, P. (2007). Market entry and priority of small and medium-sized enterprises in the software industry: An empirical analysis of cultural distance, geographic distance, and market size. *Journal of International Marketing*, 15(3), 123-149.
- Olmos, F. M., & Díez-Vial, I. (2015). Internationalization pathways and the performance of SMEs. *European Journal of Marketing*, 49(3/4), 420-443. doi:10.1108/EJM-06-2012-0365
- Onkelinx, J., & Sleuwaegen, L. (2008). *Internationalisation of SMEs: Flanders District of Creativity*.
- Orser, B., Spence, M., Riding, A., & Carrington, C. A. (2010). Gender and export propensity. *Entrepreneurship Theory and Practice*, 34(5), 933-957.
- Ottaviano, G., & Martincus, C. V. (2011). SMEs in Argentina: who are the exporters? *Small Business Economics*, 37(3), 341-361.
- Oviatt, B. M., & McDougall, P. P. (1994). Toward a theory of international new ventures. *Journal of international business studies*, 25(1), 45-64.

- Padmadinata, F. Z. S. (2007). *Quality management system and product certification process and practices for SME in Indonesia*. Paper presented at the meeting of the National Workshop on Subnational Innovation Systems and Technology Capacity Building Policies to Enhance Competitiveness of SMEs, UN-ESCAP and Indonesian Institute of Sciences (LIPI), Jakarta. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.532.69&rep=rep1&type=pdf>
- Pangarkar, N. (2008). Internationalization and performance of small- and medium-sized enterprises. *Journal of World Business*, 43(4), 475-485. doi:10.1016/j.jwb.2007.11.009
- Papke, L. E., & Wooldridge, J. (1993) Econometric methods for fractional response variables with an application to 401 (k) plan participation rates. *NBER Technical Working Paper No. 147*. Cambridge, Mass., USA: National Bureau of Economic Research
- Papke, L. E., & Wooldridge, J. M. (2008). Panel data methods for fractional response variables with an application to test pass rates. *Journal of Econometrics*, 145(1), 121-133.
- Pendergast, W. R., Sunje, A., & Pasic, M. (2008). The internationalization of SMEs in Bosnia and Herzegovina. In L.-P. Dana, I. M. Wellpe, M. Han & V. Ratten (Eds.), *Handbook of Research on European Entrepreneurship: Towards a Theory of Internationalization* (pp. 94-113). London: Edward Elgar.
- Peng, M. W. (2001). The resource-based view and international business. *Journal of Management*, 27(6), 803-829.
- Peraturan Presiden Republik Indonesia Nomor 5 Tahun 2010 tentang Rencana Pembangunan Jangka Menengah Nasional (RPJMN) Tahun 2010-2014 (2010).
- Peraturan Presiden Republik Indonesia Nomor 28 Tahun 2008 Tentang Kebijakan Industri Nasional (2008).
- Pfaffermayr, M. (1996). Foreign outward direct investment and exports in Austrian manufacturing: substitutes or complements? *Weltwirtschaftliches Archiv*, 132(3), 501-522.
- Piercy, N. (1981). Company internationalisation: active and reactive exporting. *European Journal of Marketing*, 15(3), 26-40.
- Portugal-Perez, A., & Wilson, J. S. (2012). Export performance and trade facilitation reform: hard and soft infrastructure. *World Development*, 40(7), 1295-1307.
- Poulis, K., & Yamin, M. (2009). Tourism as a leverage of internationalization for consumer goods firms: a case study approach. *Advances in International Marketing*, 20, 69-85.
- PSU. (2017). *STAT 505 Applied Multivariate Statistical Analysis*. Retrieved 28 February 2017, from <https://onlinecourses.science.psu.edu/stat505/node/1>.
- Puthusserry, P. N., Child, J., & Rodrigues, S. B. (2014). Psychic distance, its business impact and modes of coping: a study of British and Indian partner SMEs. *Management International Review*, 54(1), 1-29.
- Rahardhan, P., Kusumaningrum, A., & Rahman, F. A. (2008). *Pengaruh Asean Trade Facilitation Terhadap Volume Perdagangan Produk Unggulan Jawa Timur*. Retrieved from <http://www.bi.go.id/id/publikasi>
- Reid, S. D. (1981). The decision-maker and export entry and expansion. *Journal of International Business Studies*, 12(2), 101-112.

- Rencher, A. C. (2012). *Methods of multivariate analysis* (3rd ed.): John Wiley & Sons.
- Rennie, M. W. (1993). Born global. *The McKinsey Quarterly*, 4(Autumn 1993), 45.
- Resosudarmo, I. A. P. (2004). Closer to people and trees: will decentralisation work for the people and the forests of Indonesia? *The European Journal of Development Research*, 16(1), 110-132.
- Reuber, A. R., & Fischer, E. (1997). The influence of the management team's international experience on the internationalization behaviors of SMEs. *Journal of International Business Studies*, 28(4), 807-825.
- Roberts, M. J., & Tybout, J. R. (1997). The decision to export in Colombia: An empirical model of entry with sunk costs. *The American Economic Review*, 87(4), 545-564. doi:10.2307/2951363
- Robertson, C., & Chetty, S. K. (2000). A contingency-based approach to understanding export performance. *International Business Review*, 9(2), 211-235.
- Rodrigues, S. B., & Child, J. (2012). Building social capital for internationalization. *Revista de Administração Contemporânea*, 16(1), 23-38. doi:10.1590/s1415-65552012000100003
- Roida, H. Y., & Sunarjanto, N. A. (2012). Family ownership type and the international involvement of SMEs: Empirical study of agency theory in East Java Indonesia. *Chinese Business Review*, 11(2), 224-232.
- Ruigrok, W., Amann, W., & Wagner, H. (2007). The internationalization-performance relationship at Swiss firms: A test of the S-shape and extreme degrees of internationalization. *Management International Review*, 47(3), 349-368. doi:10.1007/s11575-007-0020-6
- Ruigrok, W., & Wagner, H. (2003). Internationalization and performance: An organizational learning perspective. *Management International Review*, 43(1), 63-83.
- Ruzzier, M., Antoncic, B., Hisrich, R. D., & Konecnik, M. (2007). Human capital and SME internationalization: A structural equation modeling study. *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, 24(1), 15-29.
- Ruzzier, M., Hisrich, R. D., & Antoncic, B. (2006). SME internationalization research: past, present, and future. *Journal of Small Business and Enterprise Development*, 13(4), 476-497.
- Samiee, S., Walters, P. G., & DuBois, F. L. (1993). Exporting as an innovative behaviour: An empirical investigation. *International Marketing Review*, 10(3), 5-25.
- Sari, D. (2011). Internationalisation of Manufacturing SMEs: The Case of Indonesia. *International Council for Small business (ICSB)*. Symposium conducted at the meeting of the International Council for Small Business (ICSB) World Conference Washington.
- Sari, D., Alam, Q., & Beaumont, N. (2008). *Internationalisation of SMEs in Indonesia: Entrepreneur human and social capital* Working Papers in Business, Management and Finance No. 200801. Padjadjaran University. Bandung.
- Seifert, B., & Ford, J. (1989). Are exporting firms modifying their product, pricing and promotion policies? *International Marketing Review*, 6(6), 53-68.
- Senik, Z. C., Scott-Ladd, B., Entrekin, L., & Adham, K. A. (2011). Networking and internationalization of SMEs in emerging economies. *Journal of International Entrepreneurship*, 9(4), 259-281. doi:10.1007/s10843-011-0078-x

- Setyari, N. P. W., Widodo, T., & Purnawan, M. E. (2015). Industrial capital intensity and comparative advantages dynamism of Indonesian export products. *Jurnal Ekonomi Pembangunan: Kajian Masalah Ekonomi dan Pembangunan*, 16(2), 107-120.
- Shamsuddoha, A. K., Ali, M. Y., & Ndubisi, N. O. (2009). Impact of government export assistance on internationalization of SMEs from developing nations. *Journal of Enterprise Information Management*, 22(4), 408-422. doi:10.1108/17410390910975022
- Shih, T.-Y., & Wickramasekera, R. (2011). Export decisions within Taiwanese electrical and electronic SMEs: The role of management characteristics and attitudes. *Asia Pacific Journal of Management*, 28(2), 353-377. doi:10.1007/s10490-010-9213-9
- Shirotori, M., Tumurchudur, B., & Cadot, O. (2010). *Revealed factor intensity indices at the product level*. New York and Geneva: UNCTAD.
- Siddharthan, N. S., & Lall, S. (1982). The Recent growth of the largest US Multinationals. *Oxford Bulletin of Economics and Statistics*, 44(1), 1-13. doi:10.1111/j.1468-0084.1982.mp44001001.x
- Silvente, F. R., & Giménez, J. C. (2007). Information spillovers and the choice of export destination: a multinomial logit analysis of Spanish young SMEs. *Small Business Economics*, 28(1), 69-86.
- Simpson Jr, C. L., & Kujawa, D. (1974). The export decision process: An empirical inquiry. *Journal of International Business Studies*, 5(1), 107-117.
- Singla, C., & George, R. (2013). Internationalization and performance: A contextual analysis of Indian firms. *Journal of Business Research*, 66(12), 2500-2506. doi:<http://dx.doi.org/10.1016/j.jbusres.2013.05.041>
- Sjahrir. (1990). The Indonesian economy facing the 1990s: Structural transformation and economic deregulation. *Southeast Asian Affairs*, 117-131.
- Sousa, C. M., Martínez-López, F. J., & Coelho, F. (2008). The determinants of export performance: A review of the research in the literature between 1998 and 2005. *International Journal of Management Reviews*, 10(4), 343-374.
- Spring Singapore. (2011). *Study on SME Internationalisation Best Practices Across Selected APEC Economies: Asia Pacific Economic Cooperation (APEC)*.
- State Ministry of National Development Planning. (2014). *Rancangan Awal Rencana Pembangunan Jangka Menengah Nasional 2015-2019*.
- Stoian, M.-C., Rialp, A., & Rialp, J. (2011). Export performance under the microscope: A glance through Spanish lenses. *International Business Review*, 20(2), 117-135. doi:<http://dx.doi.org/10.1016/j.ibusrev.2010.07.002>
- Svensson, C., & Barfod, A. (2002). Limits and opportunities in mass customization for "build to order" SMEs. *Computers in Industry*, 49(1), 77-89.
- Tallman, S., & Li, J. (1996). Effects of international diversity and product diversity on the performance of multinational firms. *Academy of Management Journal*, 39(1), 179-196.
- Tambunan, T. (2009a). Export-oriented small and medium industry clusters in Indonesia. *Journal of Enterprising Communities: People and Places in the Global Economy*, 3(1), 25-25. doi:10.1108/17506200910943661

- Tambunan, T. (2009b). *Facilitating small and medium enterprises in international trade (export): The case of Indonesia*. Paper presented at the meeting of the Asia-Pacific Trade Economists' Conference: Trade-Led Growth in Times of Crisis, Bangkok, Thailand.
- Tambunan, T. (2012). *Main Constraints Facing Export-Oriented Micro, Small and Medium Enterprises in Indonesia: Secondary Data Analysis and Literature Survey*: Center for Industry, SME and Business Competition Studies, USAKTI.
- Teece, D. J. (1986). Transactions cost economics and the multinational enterprise An Assessment. *Journal of Economic Behavior & Organization*, 7(1), 21-45.
- Thai, M. T. T. (2008). *The internationalization of Vietnamese small and medium-sized enterprises*. University of St. Gallen, Schaan, Gutenberg AG.
- Tufféry, S. (2011). *Data mining and statistics for decision making*: John Wiley & Sons.
- Uchikawa, S., & Keola, S. (2008). Small and medium enterprises in Cambodia, Laos, and Vietnam. *ERIA Research Project Report 2008(5)*, 237-273.
- UN Statistics Division. (2016). GDP by Type of Expenditure. Retrieved 13 October 2016, from UN <http://data.un.org/Data.aspx?d=SNAAMA&f=grID%3A101%3BcurrID%3AUDS%3BpcFlag%3A0>
- UN Trade Statistics (Writer/Producer/Director). (2016). *UN Comtrade Database*. Retrieved from <http://comtrade.un.org/data/>
- UNCTAD. (2005). *Improving the Competitiveness of SMEs through Enhancing Productive Capacity*: United Nations.
- UNCTAD. (2010) Creative Economy Report. *Creative Economy: A Feasible Development Option*. Geneva: United Nations.
- UNCTAD. (2014). *World Investment Report 2014: Investing in the SDGs: An Action Plan*. New York and Geneva: United Nations.
- UNCTAD. (2015). *World Investment Report 2015: Reforming International Investment Governance*. New York and Geneva: United Nations.
- Undang-undang No. 20 Tahun 2008 tentang Usaha Mikro Kecil dan Menengah [Law on Micro, Small and Medium-Sized Enterprise Number 20 of 2008]. (2008).
- Undang-Undang Republik Indonesia Nomor 17 Tahun 2007 Tentang Rencana Pembangunan Jangka Panjang Nasional Tahun 2005 – 2025 (2007).
- Undang-Undang Republik Indonesia Nomor 45 Tahun 2009 tentang Perubahan atas Undang-Undang Nomor 31 Tahun 2004 tentang Perikanan (2009).
- UNDP. (2015). Human Development Reports. Retrieved 10 October 2016, from UNDP <http://hdr.undp.org/en/data>
- Uner, M. M., Kocak, A., Cavusgil, E., & Cavusgil, S. T. (2013). Do barriers to export vary for born globals and across stages of internationalization? An empirical inquiry in the emerging market of Turkey. *International Business Review*, 22(5), 800-813.
- Vieira, S. (2012) Inequality on the rise? An assessment of current available data on income inequality, at global, international and national levels. *Background document for the World Economic and Social Survey 2013: The Department of Economic and Social Affairs, the United Nations Secretariat*.

- von Weltzien Høivik, H., & Shankar, D. (2011). How can SMEs in a cluster respond to global demands for corporate responsibility? *Journal of Business Ethics*, 101(2), 175-195.
- Wagner, J. (2001). A note on the firm size–export relationship. *Small Business Economics*, 17(4), 229-237.
- Welch, C. L., Welch, D. E., & Hewardine, L. (2008). Gender and export behaviour: Evidence from women-owned enterprises. *Journal of Business Ethics*, 83(1), 113-126.
- Welch, L. S., & Luostarinen, R. (1999). Internationalization - Evolution of a Concept. In P. J. Buckley & P. N. Ghauri (Eds.), *The Internationalization of the Firm* (pp. 83-98). Oxford: Thomson Learning.
- Wengel, J. t., & Rodriguez, E. (2006). SME export performance in Indonesia after the crisis. *Small Business Economics*, 26(1), 25-37. doi:10.1007/s11187-004-6491-y
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171-180.
- Wiedersheim-Paul, F., Olson, H. C., & Welch, L. S. (1978). Pre-export activity: The first step in internationalization. *Journal of International Business Studies*, 9(1), 47-58.
- Wignaraja, G. (2012) Engaging Small and Medium Enterprises in Production Networks: Firm-level Analysis of Five ASEAN Economies. *ADB Working Paper Series No. 361*: ADBI.
- Wilkinson, T., & Brouthers, L. E. (2006). Trade promotion and SME export performance. *International Business Review*, 15(3), 233-252. doi:<http://dx.doi.org/10.1016/j.ibusrev.2006.03.001>
- Williams, J. E., & Chaston, I. (2004). Links between the linguistic ability and international experience of export managers and their export marketing intelligence behaviour. *International Small Business Journal*, 22(5), 463-486.
- Wiratno, U., & Dhewanto, W. (Undated). *Analisis Usaha Mikro, Kecil dan Menengah (UMKM): UMKM Sebagai Pasar Potensial Perbankan*. Retrieved from [http://xa.yimg.com/kq/groups/20509929/1749183264/name/ANALISIS+USAHA+MIKRO+KECIL+DAN+MENENGAH++\(MBA+ITB+Business+Review\).doc](http://xa.yimg.com/kq/groups/20509929/1749183264/name/ANALISIS+USAHA+MIKRO+KECIL+DAN+MENENGAH++(MBA+ITB+Business+Review).doc)
- World Bank. (2014). Doing Business: Trading Across Borders. Retrieved 19/10/2014 <http://www.doingbusiness.org/data/exploretopics/trading-across-borders>
- World Bank. (2016a). Logistics Performance Index. Retrieved 11/10/2016 <http://lpi.worldbank.org/international/scorecard>
- World Bank. (2016b). World Development Indicators. Retrieved 4 October 2016 <http://databank.worldbank.org/data/>
- WTO Secretariat. (2013). *Trade Policy Review, Report by The Secretariat: Indonesia, Revision*: Trade Policy Review Body, WTO.
- Yamin, M., & Ghauri, P. N. (2004). Rethinking MNE-emerging market relationships: Some insights from East Asia. In S. B. Prasad & P. N. Ghauri (Eds.), *Global Firms and Emerging Markets in an Age of Anxiety* (pp. 251-266). London: Praeger.
- Yang, Y. S., Leone, R. P., & Alden, D. L. (1992). A market expansion ability approach to identify potential exporters. *The Journal of Marketing*, 56(1), 84-96.

- Yeoh, P.-L., & Jeong, I. (1995). Contingency relationships between entrepreneurship, export channel structure and environment: a proposed conceptual model of export performance. *European Journal of Marketing*, 29(8), 95-115.
- Yi, J., & Wang, C. (2012). The decision to export: Firm heterogeneity, sunk costs, and spatial concentration. *International Business Review*, 21(5), 766-781.
doi:<http://dx.doi.org/10.1016/j.ibusrev.2011.09.001>
- Yorgason, D. R. (2004). *Firm export decisions: Motives and effects*. ProQuest, UMI Dissertations Publishing.
- Zain, M., & Ng, S. I. (2006). The impacts of network relationships on SMEs' internationalization process. *Thunderbird International Business Review*, 48(2), 183-205.
- Zhou, L., Wu, W.-p., & Luo, X. (2007). Internationalization and the performance of born-global SMEs: the mediating role of social networks. *Journal of International Business Studies*, 38(4), 673-690. doi:10.1057/palgrave.jibs.8400282
- Zou, S., & Stan, S. (1998). The determinants of export performance: a review of the empirical literature between 1987 and 1997. *International Marketing Review*, 15(5), 333-356.
- Zubadi, H., & Nugroho, W. S. (2012). Pertumbuhan usaha pada UKM di Kota Magelang. *Jurnal Bisnis dan Ekonomi*, 10(2), 126-139.

Appendices

Appendix A: Export Stimuli Analysis

Appendix A1: Export Stimuli Items used in the Questionnaire

Table A1: Export Stimuli Codes, Items and Descriptions

Export Stimuli Codes and Items	Description
(S1) Find new markets	Exploit or exercise new markets
(S2) Find large & high income markets	Sell to markets with large size and high purchasing power
(S3) Find stable markets	Sell to markets with economic and political stability
(S4) First mover advantage	Gain “first mover advantage” over other firms in entering new markets
(S5) Follow peer firms’ action	Follow peer firms/competitors that already entered foreign markets
(S6) Manager’s international exposure	Utilise owner/manager’s international experience & exposure
(S7) Manager’s global awareness	Owner/manager’s awareness of global opportunity
(S8) Firm’s maturity	Use firm’s experience, performance and growth to attempt export
(S9) Product innovation	Introduce or test new/developed products to foreign markets
(S10) Product’s quality & uniqueness	Confidence in the uniqueness and/or quality of the products
(S11) Revenue in foreign currencies	Earn revenue in foreign currencies (expected weak Rupiah’s exchange rate)
(S12) International business networks	Business networks’ availability and accessibility (e.g. distribution channels)
(S13) Social networks	Advice, referral and trust from social networks (relatives and associates)
(S14) Emigrant communities	Utilise Indonesian emigrant communities in destination markets
(S15) Foreign buyers	Enquiries, demand or offer from foreign (potential) customers
(S16) Limited domestic market	Limited domestic market/consumers for firm’s products
(S17) Stiff domestic competition	Stiff business competition in domestic market
(S18) Government support	Home government’s assistance, incentives and encouragement to export
(S19) Home country’s good image	Take advantage of home country’s good image in destination markets
(S20) Close distance to target market	Close distance of destination markets to firm’s location
(S21) Low transportation cost	Decreasing international transportation, shipping and communication costs
(S22) Simplified export procedures	Simplification of domestic regulations and procedures regarding export

Appendix A2: SPSS Output of the PCA on Export Stimuli Items

Table A2: KMO and Bartlett's Test Results

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.731
Bartlett's Test of Sphericity	Approx. Chi-Square	1149.388
	df	120
	Sig.	.000

Table A3: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.644	22.776	22.776	3.644	22.776	22.776	2.061	12.881	12.881
2	1.520	9.502	32.277	1.520	9.502	32.277	1.835	11.471	24.352
3	1.420	8.877	41.155	1.420	8.877	41.155	1.665	10.405	34.757
4	1.201	7.505	48.660	1.201	7.505	48.660	1.526	9.539	44.296
5	1.068	6.678	55.338	1.068	6.678	55.338	1.472	9.200	53.496
6	1.012	6.326	61.664	1.012	6.326	61.664	1.307	8.168	61.664
7	.981	6.130	67.794						
8	.845	5.284	73.078						
9	.720	4.498	77.576						
10	.655	4.093	81.669						
11	.621	3.881	85.550						
12	.554	3.463	89.013						
13	.532	3.324	92.337						
14	.484	3.026	95.363						
15	.448	2.801	98.163						
16	.294	1.837	100.000						

Extraction Method: Principal Component Analysis.

Appendix B: Export Barriers Analysis

Appendix B1: Export Barrier Items Used in the Questionnaire

Table B1: Export Barrier Items, Codes and Descriptions

Export Barriers Codes and Items	Descriptions
B1 Obtaining information about potential markets	Seek information to locate/analyse potential destination markets
B2 Obtaining reliable data on target markets' economy	After deciding the destination market, seek for the accurate, update and affordable data on the target market's economy and market
B3 Identifying business opportunities in target markets	Deciding types of business activities in target market, such as choosing between selling to local partners or to cooperate with them, or even to open your own outlet abroad
B4 Contacting potential customers in target markets	Seek and contact potential overseas customers in destination country
B5 Devoting managerial time to deal with internationalization	Commit and provide managerial team's time to deal with internationalisation, such as for seeking information and designing export strategy
B6 Inadequate quantity and capability of personnel	Preparing personnel & workers who are able to handle day to day export activities including export documents and communication with foreign partners & customers
B7 Shortage of working capital	Provide extra funds to finance working capital for internationalisation (such as for raw materials, wages, research & travelling)
B8 Shortage of investment fund	Provide extra funds to finance investment needed for Internationalisation (such as building additional production facilities)
B9 Shortage of export insurance	Obtaining insurance for internationalisation (including export products and assets abroad)
B10 Granting credit facilities or payment delay to foreign customers	Granting credit facilities or payment delay to foreign customers
B11 Developing new products for foreign markets	Developing new products that are more suitable for foreign markets
B12 Adapting product design/style demanded by foreign customers	Adapting product design/style demanded by foreign markets
B13 Meeting foreign product quality/standards/specifications	Meeting foreign product quality/standards/ specifications
B14 Offering satisfactory prices to foreign customers	Offering satisfactory prices to foreign customers
B15 Matching competitors' prices in target markets	Matching competitors' prices in foreign markets
B16 Lack of excess production capacity for exports	Provide extra production capacity to develop and make exported products
B17 Establishing/using distribution channels in target markets	Establishing/using distribution, marketing and retailer channels in target markets
B18 Obtaining reliable foreign representation	Obtaining foreign representations that are reliable (communicative, good reputation, solid operation facilities and marketing channels)
B19 Supplying inventory abroad	Difficulty in supplying inventory abroad (shipping products on time, providing warehouse/inventories abroad)
B20 Excessive export transportation/insurance costs	Cover excessive export transportation & communication costs
B21 Offering technical/after-sales service in target markets	Offering technical/after-sales service abroad (such as providing reparation service or spare parts)
B22 Adjusting promotional activities to the target markets	Difficulties in adjusting promotional activities to the target markets

Export Barriers Codes and Items	Descriptions
B23 Unfamiliar exporting procedures/paperwork	Understanding export procedures/paperwork such as customs and shipping
B24 Communicating with overseas customers	Difficulties in communicating with overseas customers
B25 Slow collection of payments from abroad	Collect and speed up payments from abroad
B26 Enforcing contracts/resolving disputes in target markets	Difficulties in enforcing contracts/resolving disputes in foreign countries
B27 Lack of home government export assistance/incentives	Seek Indonesian government export assistance/incentives
B28 Unfavourable home country's export rules and regulations	Understanding and meeting Indonesian rules and regulations related to exports (e.g. no diplomatic relations, export restriction, etc.)
B29 Restriction of asset ownership in target markets	Overcoming foreign governments' restriction on foreign asset ownership (land, building and vehicles) and the movement of people/business persons (e.g. for visas and duration of stay)
B30 Unequal treatment in tax/eligibility to affiliate in target markets	Overcoming foreign governments' unequal treatment compared to domestic firms in taxation and eligibility to affiliate
B31 Restriction for the movement of people in target markets	Obtaining visas for business trips as well for bringing workers from Indonesia to support operation abroad if needed
B32 Unequal treatment in business competition law in target markets	Overcoming foreign governments' unequal treatment compared to domestic firms in business competition regulation, such as in merger & affiliation, trust or procurement
B33 Sophisticated target markets' laws/regulations	Understanding laws and regulations that are sophisticated or not transparent in foreign countries
B34 Different foreign customer habits/attitudes	Adapting to different foreign customer habits/attitudes
B35 Stiff competition in target markets	Overcoming stiff competition in destination markets
B36 Economic fluctuations in target markets	Anticipating poor/deteriorating economic conditions abroad that may affect inflation, unemployment and purchasing power in destination country
B37 High risks of foreign currency	Anticipating high risks of foreign currency
B38 Unfamiliar business practices in target markets	Understanding unfamiliar formal and informal foreign business practices
B39 Different socio-cultural traits	Understanding and overcoming different socio-cultural traits including values & religion
B40 Verbal/nonverbal language differences	Overcoming verbal/nonverbal language differences
B41 Lack of e-commerce infrastructure in target markets	Using/utilizing e-commerce infrastructure in destination country
B42 Political instability in target markets	Anticipating and responding to change in political stability in foreign markets
B43 Negative image of Indonesia or Indonesian products	Overcoming negative image of Indonesia or Indonesian products abroad
B44 High tariff costs in target markets	Dealing with high tariff cost in host countries
B45 (Intellectual) property rights protection in target markets	Ensure property rights protection (e.g. intellectual property) in host countries
B46 Health, safety & technical standards in target markets	Meeting restrictive health, safety and technical standards in host countries (e.g. sanitary requirements)
B47 Tariff classification & reclassification in target markets	Ensure appropriate and non-arbitrary tariff classification and reclassification in host countries
B48 Quotas and/or embargoes imposed by target markets	Deal with unfavourable quotas and/or embargoes imposed by host countries
B49 Customs administration cost in target markets	Deal with high costs of customs administration in host countries, including the cost rate, processing time, complicated procedure and bribery
B50 Preferential tariff for exporters from other countries	Deal with stiff competition with exporters from other countries with preferential tariff from regional trade agreement with host countries

Appendix B2: Export Barrier Descriptive Statistics

Table B2: Export Barrier Ranks based on Likert Score Results (Overall Sample)

	Export Barriers	N	Mean	Std. Dev.
B37	High risks of foreign currency	496	2.35	.672
B9	Shortage of export insurance	496	2.33	.689
B10	Granting credit facilities or payment delay to foreign customers	497	2.30	.688
B36	Economic fluctuations in target markets	496	2.30	.628
B32	Unequal treatment in business competition law in target markets	496	2.29	.620
B26	Enforcing contracts/resolving disputes in target markets	495	2.22	.639
B21	Offering technical/after-sales service in target markets	493	2.20	.675
B29	Restriction of asset ownership in target markets	496	2.20	.617
B33	Sophisticated target markets' laws/ regulations	494	2.20	.624
B45	(Intellectual) property rights protection in target markets	495	2.19	.650
B18	Obtaining reliable foreign representation	497	2.16	.701
B30	Unequal treatment in tax/eligibility to affiliate in target markets	495	2.14	.652
B35	Stiff competition in target markets	494	2.14	.628
B44	High tariff costs in target markets	496	2.14	.648
B50	Preferential tariff for exporters from other countries	495	2.14	.582
B42	Political instability in target markets	496	2.12	.577
B8	Shortage of investment capital	497	2.11	.703
B27	Lack of home government export assistance/incentives	496	2.10	.674
B49	Customs administration cost in target markets	495	2.09	.600
B19	Supplying inventory abroad	497	2.07	.661
B25	Slow collection of payments from abroad	497	2.07	.704
B47	Tariff classification & reclassification in target markets	494	2.07	.610
B3	Identifying business opportunities in target markets	496	2.06	.692
B48	Quotas and/or embargoes imposed by target markets	496	2.06	.657
B5	Devoting managerial time to deal with internationalization	492	2.04	.673
B15	Matching competitors' prices in target markets	496	2.04	.626
B17	Establishing/using distribution channels in target markets	496	2.04	.679
B6	Inadequate quantity and capability of personnel	497	2.03	.673
B46	Health, safety & technical standards in target markets	496	2.02	.678
B23	Unfamiliar exporting procedures/paperwork	496	2.00	.702
B7	Shortage of working capital	497	1.99	.661
B20	Excessive export transportation/insurance costs	497	1.99	.687
B28	Unfavourable home country's export rules and regulations	495	1.99	.694
B16	Lack of excess production capacity for exports	497	1.98	.646
B31	Restriction for the movement of people in target markets	495	1.97	.671
B22	Adjusting promotional activities to the target markets	495	1.94	.637
B38	Unfamiliar business practices in target markets	492	1.94	.646
B43	Negative image of Indonesia or Indonesian products	496	1.94	.642
B13	Meeting foreign product quality/standards/specifications	497	1.93	.744
B14	Offering satisfactory prices to foreign customers	497	1.93	.639
B34	Different foreign customer habits/attitudes	495	1.82	.697
B41	Lack of e-commerce infrastructure in target markets	487	1.82	.674
B2	Obtaining reliable data on target markets' economy	496	1.75	.675
B39	Different socio-cultural traits	496	1.75	.732
B4	Contacting potential customers in target markets	497	1.72	.704
B11	Developing new products for foreign markets	497	1.72	.640
B12	Adapting product design/style demanded by foreign customers	496	1.67	.720
B40	Verbal/nonverbal language differences	497	1.67	.669
B24	Communicating with overseas customers	497	1.63	.663
B1	Obtaining information about potential markets	497	1.62	.631

Source: Author's calculation based on survey data

Table B3: Export Barrier Ranks based on the Top-of-Mind Question Method Score (Overall Sample)

	Export Barriers	Total Score
B7	Shortage of working capital	374
B23	Unfamiliar exporting procedures/paperwork	371
B37	High risks of foreign currency	316
B10	Granting credit facilities or payment delay to foreign customers	308
B36	Economic fluctuations in target markets	287
B6	Inadequate quantity and capability of personnel	260
B5	Devoting managerial time to deal with internationalization	254
B32	Unequal treatment in business competition law in target markets	239
B35	Stiff competition in target markets	235
B28	Unfavourable home country's export rules and regulations	234
B13	Meeting foreign product quality/standards/specifications	201
B27	Lack of home government export assistance/incentives	198
B8	Shortage of investment capital	191
B15	Matching competitors' prices in target markets	190
B4	Contacting potential customers in target markets	167
B33	Sophisticated target markets' laws/ regulations	161
B26	Enforcing contracts/resolving disputes in target markets	159
B9	Shortage of export insurance	156
B16	Lack of excess production capacity for exports	149
B20	Excessive export transportation/insurance costs	147
B19	Supplying inventory abroad	140
B44	High tariff costs in target markets	138
B18	Obtaining reliable foreign representation	137
B25	Slow collection of payments from abroad	126
B3	Identifying business opportunities in target markets	122
B17	Establishing/using distribution channels in target markets	122
B29	Restriction of asset ownership in target markets	106
B46	Health, safety & technical standards in target markets	102
B12	Adapting product design/style demanded by foreign customers	99
B49	Customs administration cost in target markets	97
B48	Quotas and/or embargoes imposed by target markets	94
B50	Preferential tariff for exporters from other countries	86
B22	Adjusting promotional activities to the target markets	85
B30	Unequal treatment in tax/eligibility to affiliate in target markets	84
B21	Offering technical/after-sales service in target markets	82
B14	Offering satisfactory prices to foreign customers	81
B47	Tariff classification & reclassification in target markets	80
B11	Developing new products for foreign markets	79
B42	Political instability in target markets	74
B1	Obtaining information about potential markets	68
B45	(Intellectual) property rights protection in target markets	67
B34	Different foreign customer habits/attitudes	65
B39	Different socio-cultural traits	65
B43	Negative image of Indonesia or Indonesian products	59
B40	Verbal/nonverbal language differences	51
B31	Restriction for the movement of people in target markets	43
B2	Obtaining reliable data on target markets' economy	36
B24	Communicating with overseas customers	28
B41	Lack of e-commerce infrastructure in target markets	22
B38	Unfamiliar business practices in target markets	21

Note: The respondents were asked to identify five types of export barriers that were at the top of their minds. The five top export barriers identified by the respondents were given weighted scores as follows. The score of five is given to the 1st barrier, four for the 2nd barrier, three for the 3rd barrier, two for the 4th barrier and one for the 5th barrier

Source: Author's calculation based on survey data

Appendix B3: SPSS Output for the PCA on Export Barrier Items

Table B4: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.906
Bartlett's Test of Sphericity	Approx. Chi-Square	8360.870
	df	990
	Sig.	.000

Table B5: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.720	26.045	26.045	11.720	26.045	26.045	3.167	7.037	7.037
2	2.486	5.525	31.570	2.486	5.525	31.570	3.113	6.918	13.954
3	2.065	4.590	36.160	2.065	4.590	36.160	3.051	6.780	20.734
4	1.768	3.929	40.089	1.768	3.929	40.089	2.544	5.653	26.388
5	1.639	3.642	43.731	1.639	3.642	43.731	2.473	5.496	31.884
6	1.440	3.200	46.931	1.440	3.200	46.931	2.459	5.465	37.349
7	1.262	2.803	49.735	1.262	2.803	49.735	2.349	5.221	42.569
8	1.226	2.725	52.460	1.226	2.725	52.460	2.298	5.106	47.675
9	1.143	2.539	54.999	1.143	2.539	54.999	1.904	4.231	51.906
10	1.106	2.457	57.456	1.106	2.457	57.456	1.766	3.925	55.831
11	1.011	2.247	59.703	1.011	2.247	59.703	1.742	3.871	59.703
12	.965	2.144	61.847						
13	.941	2.090	63.937						
14	.917	2.037	65.974						
15	.869	1.931	67.905						
16	.777	1.727	69.632						
17	.766	1.701	71.333						
18	.750	1.667	73.000						
19	.724	1.610	74.610						
20	.691	1.536	76.146						
21	.657	1.460	77.606						
22	.644	1.432	79.038						
23	.599	1.331	80.369						
24	.584	1.298	81.667						
25	.561	1.246	82.913						
26	.555	1.234	84.148						
27	.527	1.171	85.319						
28	.513	1.139	86.458						
29	.489	1.086	87.544						
30	.483	1.074	88.618						
31	.465	1.033	89.651						
32	.439	.976	90.627						
33	.428	.950	91.577						
34	.402	.893	92.470						
35	.389	.865	93.335						
36	.372	.827	94.162						
37	.356	.791	94.953						
38	.347	.772	95.724						
39	.325	.723	96.448						
40	.311	.692	97.139						
41	.307	.683	97.822						
42	.275	.612	98.434						
43	.261	.579	99.014						
44	.236	.525	99.539						
45	.207	.461	100.000						

Extraction Method: Principal Component Analysis.

Table B6: Rotated Component Matrix

	Component											
	1	2	3	4	5	6	7	8	9	10	11	
B49	.698											
B48	.663											
B50	.620											
B47	.568											
B38	.450											
B46	.418											
B1		.753										
B2		.746										
B4		.567										
B5		.552										
B3		.549										
B6		.532										
B18			.644									
B21			.627									
B19			.623									
B17			.598									
B22			.550									
B20			.511									
B36				.750								
B37				.606								
B44				.511								
B42				.503								
B45				.477								
B12					.781							
B11					.773							
B13					.546							
B41					.510							
B8						.791						
B7						.781						
B9						.594						
B10						.538						
B30							.739					
B29							.636					
B32							.618					
B33							.462					
B25								.698				
B24								.574				
B23								.554				
B26								.467				
B14									.832			
B15									.798			
B27										.795		
B28										.747		
B34											.640	
B35												.600

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 Rotation converged in 9 iterations.

Appendix C: Network Relationships

Appendix C.1 Types of Relationships Maintained by SMEs with Various Sources of Networking

Types of Relations Maintained		Central Government Agencies	Regional Government Agencies	Business Association/ Chambers	University/ Research Institutes	Private Companies /SOEs	Business Partners/ Associates	Family/ Relatives	Indonesian Emigrant Communities	Total Counts
A	Regular participant in all supporting programmes for SMEs	68	65	55	9	33	0	0	0	230
B	Irregular participant in all supporting programmes for SMEs	38	56	44	17	29	0	0	0	184
C	Regular contact through formal/ official discussions/seminars	19	27	25	8	8	0	0	0	87
D	Irregular contact through formal/ official discussions/seminars	16	30	28	7	9	0	0	0	90
E	Member of forum set up by agencies/associations/ institutes	26	37	79	4	16	0	0	0	162
F	Strategic partnership(s)	10	10	31	3	23	122	63	4	266
G	Joint project(s)	8	10	33	3	18	98	37	3	210
H	Personal relation with key persons	39	46	64	11	37	100	30	6	333
I	Indirect contact through other party	14	19	42	17	24	108	41	11	276
Total Count by the Sources of Networking		238	300	401	79	197	428	171	24	

Source: Author's calculation based on survey data

Appendix C.2 Export Assistance for Various Export Tasks/Functions and Their Perceived Helpfulness

Export Tasks/Functions	Frequency of assistance received by SMEs from:								Assistance Counts	Assistance's Helpfulness Score
	Central Government Agencies	Regional Government Agencies	Family/Relatives	Business Partners/Associates	Business Association/Chambers	Private Companies/SOE Services	Universities/Research Institutes	Indonesian Emigrant Communities		
A INFORMATION: Obtaining information on foreign markets' data and analysis, business opportunities and potential customers	87	101	95	221	75	22	9	26	636	2.47
B HUMAN RESOURCES: Increase the capacity/capability of managerial team & personnel for internationalisation	39	47	32	81	39	8	10	3	259	2.39
C FINANCE: Working capital or investment funds for internationalisation or credit facilities for foreign customers	22	32	72	45	19	76	3	4	273	2.48
D PRODUCT: Developing new products & adapting product design/style for foreign market	15	20	28	101	27	5	4	8	208	2.39
E PRODUCT: Meeting foreign markets' product quality/standards/specifications or health, safety and technical standards in foreign markets	26	13	6	63	19	2	3	4	136	2.38
F PROCEDURE: Understanding export procedures/paperwork, both in Indonesia or cross borders	53	44	11	53	23	7	5	2	198	2.39
G PROCEDURE: Export guarantee or insurance for both products and assets abroad	16	6	7	23	9	8	1	1	71	2.38
H DISTRIBUTION: Obtaining reliable foreign representations/contacts (who are communicative, reputable and have solid operating networks)	19	10	14	78	25	4	2	11	163	2.42
I DISTRIBUTION: Supplying inventory and spare-part abroad on time, provide warehouse/inventory facilities and offer technical/after-sales service abroad	11	8	13	52	18	16	2	2	122	2.38

Export Tasks/Functions	Frequency of assistance received by SMEs from:									Assistance Counts	Assistance's Helpfulness Score
	Central Government Agencies	Regional Government Agencies	Family/Relatives	Business Partners/Associates	Business Association/Chambers	Private Companies/SOE Services	Universities/Research Institutes	Indonesian Emigrant Communities			
J	MARKETING: Designing promotional activities and competition strategy in target markets	71	32	27	91	44	16	10	8	299	2.46
K	MARKETING: Countering negative image of Indonesian products	50	14	9	35	26	8	2	9	153	2.34
L	BUSINESS ENVIRONMENTS: Understanding foreign business practices, different socio-cultural traits and verbal/nonverbal language differences, communicating with overseas customers & understanding their habits/attitudes	15	9	17	47	23	5	2	6	124	2.28
M	BUSINESS ENVIRONMENT: Ensuring fair & equal treatment with other firms in target markets in terms of taxation, eligibility to affiliate, asset ownership, and movement of people	11	9	8	19	14	3	3	2	69	2.27
M	BUSINESS ENVIRONMENT: Understanding regulation in foreign countries regarding tariff classification, quota and intellectual property rights	30	12	10	32	17	2	2	5	110	2.29
O	BUSINESS ENVIRONMENT: Anticipating target markets' change in economic conditions, exchange rate risks and political instability	19	4	7	32	18	7	1	5	93	2.40
P	BUSINESS ENVIRONMENT: Enforcing contracts/resolving disputes in foreign markets and collecting payment from foreign customers	15	4	11	43	14	1	0	2	90	2.41
	Network Sources Counts	499	365	367	1016	410	190	59	98		
	Proportional Network Helpfulness	2.402	2.416	2.423	2.408	2.401	2.433	2.404	2.405		

Source: Author's calculation based on survey data

Appendix D: Government Policy on SME internationalization

Appendix D1: Government's Perception of Export Barriers

Table D 1: Export Barrier Ranks based on Likert Score Results (Government Survey)

	Export Barriers	N	Mean	Std. Dev.
B29	Restriction of asset ownership in target markets	36	2.500	0.5606
B46	Health, safety & technical standards in target markets	36	2.444	0.5578
B30	Unequal treatment in tax/eligibility to affiliate in target markets	36	2.417	0.6036
B8	Shortage of investment capital	36	2.389	0.6449
B32	Unequal treatment in business competition law in target markets	36	2.361	0.6393
B21	Offering technical/after-sales service in target markets	36	2.333	0.5345
B48	Quotas and/or embargoes imposed by target markets	36	2.333	0.5345
B50	Preferential tariff for exporters from other countries	36	2.333	0.5855
B37	High risks of foreign currency	36	2.306	0.5248
B33	Sophisticated target markets' laws/ regulations	36	2.278	0.6595
B45	(Intellectual) property rights protection in target markets	36	2.278	0.5133
B26	Enforcing contracts/resolving disputes in target markets	36	2.250	0.5000
B44	High tariff costs in target markets	36	2.222	0.5909
B13	Meeting foreign product quality/standards/specifications	36	2.194	0.4672
B3	Identifying business opportunities in target markets	36	2.167	0.6969
B35	Stiff competition in target markets	36	2.167	0.4472
B36	Economic fluctuations in target markets	36	2.167	0.5606
B42	Political instability in target markets	36	2.167	0.5606
B10	Granting credit facilities or payment delay to foreign customers	36	2.139	0.6393
B16	Lack of excess production capacity for exports	36	2.139	0.6825
B19	Supplying inventory abroad	36	2.139	0.4871
B7	Shortage of working capital	36	2.139	0.6825
B17	Establishing/using distribution channels in target markets	36	2.111	0.6667
B18	Obtaining reliable foreign representation	36	2.111	0.6667
B49	Customs administration cost in target markets	36	2.083	0.7319
B9	Shortage of export insurance	36	2.056	0.7149
B6	Inadequate quantity and capability of personnel	36	2.000	0.6761
B47	Tariff classification & reclassification in target markets	36	1.972	0.5599
B38	Unfamiliar business practices in target markets	36	1.917	0.5000
B4	Contacting potential customers in target markets	36	1.917	0.6492
B20	Excessive export transportation/insurance costs	36	1.806	0.5248
B22	Adjusting promotional activities to the target markets	36	1.806	0.5767
B25	Slow collection of payments from abroad	36	1.806	0.4672
B43	Negative image of Indonesia or Indonesian products	36	1.806	0.5767
B11	Developing new products for foreign markets	36	1.750	0.6036
B34	Different foreign customer habits/attitudes	36	1.750	0.5000
B5	Devoting managerial time to deal with internationalization	36	1.750	0.6036
B1	Obtaining information about potential markets	36	1.722	0.7015
B14	Offering satisfactory prices to foreign customers	36	1.722	0.6146
B40	Verbal/nonverbal language differences	36	1.722	0.6146
B15	Matching competitors' prices in target markets	36	1.694	0.5248
B2	Obtaining reliable data on target markets' economy	36	1.694	0.7099
B23	Unfamiliar exporting procedures/paperwork	36	1.694	0.6684
B31	Restriction for the movement of people in target markets	36	1.639	0.6825
B39	Different socio-cultural traits	36	1.639	0.5426
B12	Adapting product design/style demanded by foreign customers	36	1.528	0.5599
B24	Communicating with overseas customers	36	1.500	0.6094
B27	Lack of home government export assistance/incentives	36	1.500	0.6094
B41	Lack of e-commerce infrastructure in target markets	36	1.444	0.5578
B28	Unfavourable home country's export rules and regulations	36	1.361	0.5929

Source: Author's calculation based on survey data

Appendix E: Export Process and Strategy

Appendix E.1: Initial Export Markets (by sub-continent)

Initial Export Market	Counts	
	Exporters (Actual Export)	Aspiring Exporters (Planned Export)
Bordering ASEAN Countries	53	40
Non-bordering ASEAN Countries	8	8
East Asia	65	20
Middle East	9	3
Oceania & Australia	36	16
South Asia	4	0
North America	21	14
Western Europe	75	17
Eastern Europe	1	1
CIS	2	1
Africa	6	1
South America	3	0

Source: Author's calculation based on survey data

Appendix E.2: Market Expansion after Initial Exports (by sub-continent)

Regions	First Export Market	Expand After First Export	Export Expansion Destination											
			Bordering ASEAN	ASEAN Other	East Asia	Middle East	Oceania	South Asia	North America	Western Europe	Eastern Europe	CIS	Africa	South America
Western Europe	75	71 (94.7%)	36	20	38	19	30	12	37	64	17	13	13	16
East Asia	65	62 (95.4%)	39	20	44	14	18	9	19	21	4	3	4	7
ASEAN Border	53	45 (84.9%)	30	23	12	14	12	5	12	13	0	1	3	7
Oceania	36	34 (94.4%)	26	8	22	13	23	5	12	19	6	4	9	7
North America	21	20 (95.2%)	5	5	11	3	9	2	11	11	5	2	2	2
Middle East	9	7 (77.8%)	5	2	3	7	5	3	1	2	1	0	1	1
ASEAN Other	8	8 (100%)	6	5	5	3	4	3	1	1	0	0	1	0
Africa	6	5 (83.3%)	4	4	2	2	2	1	1	3	1	1	4	2
South Asia	4	4 (100%)	3	1	2	1	2	1	0	1	0	0	0	0
South America	3	3 (100%)	1	1	1	1	2	0	2	3	1	1	0	1
CIS	2	2 (100%)	0	0	1	1	0	0	0	2	1	1	0	0
Eastern Europe	1	1 (100%)	1	0	1	1	0	0	1	1	1	1	0	1

Source: Author's calculation based on survey data

Appendix E.3: Mean Differences in the Time Taken to Become Exporters in 7 Provinces (years)

Provinces	Banten	DKI Jakarta	Jawa Barat	Jawa Tengah	DI Yogyakarta	Jawa Timur	Bali
Banten		-0.869	-2.689	2.287	-3.089	4.153	-4.660
DKI Jakarta	.869		-1.820	3.155	-2.221	5.022*	-3.791*
Jawa Barat	2.689	1.820		4.976	-.400	6.842*	-1.971
Jawa Tengah	-2.287	-3.155	-4.976		-5.376	1.866	-6.946
DI Yogyakarta	3.089	2.221	.400	5.376		7.242*	-1.570
Jawa Timur	-4.153	-5.022*	-6.842*	-1.866	-7.242*		-8.813*
Bali	4.660	3.791*	1.971	6.946	1.570	8.813*	

Note: The mean differences are between the provinces in columns – the provinces in rows

The Games-Howell method is used because the equal variance was not satisfied

(*) represent 5% significant level

Source: Author's calculation based on survey data

Appendix E.4: Mean Differences in the Time Taken to Become Exporters across Products (years)

Products	Furniture	Handicrafts	Garment	Household Utensil	Leather Product & Fashion Accessories	Food & Beverage	Agro Product	Machinery Component	Other Product	Multi Products
Furniture		2.690	2.808	3.366	2.166	7.350	5.798	2.518	4.010	.253
Handicrafts	-2.690		.118	.676	-.524	4.660	3.108	-.172	1.320	-2.438
Garments	-2.808	-.118		.558	-.642	4.542	2.989	-.290	1.202	-2.556
Household Utensils	-3.366	-.676	-.558		-1.200	3.984	2.432	-.848	.644	-3.113
Leather Products & Fashion Accessories	-2.166	.524	.642	1.200		5.184	3.632	.352	1.844	-1.913
Food & Beverages	-7.350	-4.660	-4.542	-3.984	-5.184		-1.552	-4.832	-3.340	-7.098
Agro Products	-5.798	-3.108	-2.989	-2.432	-3.632	1.552		-3.280	-1.787	-5.545
Machinery Components	-2.518	.172	.290	.848	-.352	4.832	3.280		1.492	-2.266
Other Products	-4.010	-1.320	-1.202	-.644	-1.844	3.340	1.787	-1.492		-3.758
Multi products	-.253	2.438	2.556	3.113	1.913	7.098	5.545	2.266	3.758	

Note: The mean differences are between the products in columns – the products in rows

The Games-Howell method is used because the equal variance was not satisfied

Source: Author's calculation based on survey data

Appendix F: Export Engagement Probability

Appendix F1: SPSS Output of Binary Logit Regression (Exporters-Non-Exporters Model)

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	311.130	25	.000
	Block	311.130	25	.000
	Model	311.130	25	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	372.200 ^a	.466	.623

a. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	5.305	8	.725

Classification Table^a

	Observed	Predicted		
		Category		Percentage Correct
		Non-exporter	Exporter	
Step 1	Category Non-exporter	175	50	77.8
	Category Exporter	38	233	86.0
	Overall Percentage			82.3

a. The cut value is .500

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Step 1 ^a								
<i>OwnerStudyAbroad</i>	-.587	.679	.746	1	.388	.556	.147	2.105
<i>OwnerTrainAbroad</i>	.848	.876	.937	1	.333	2.336	.419	13.015
<i>OwnerWorkAbroad</i>	1.632	.869	3.527	1	.060	5.114	.931	28.080
<i>OwnerWorkMNC</i>	.510	.501	1.035	1	.309	1.665	.623	4.446
<i>ProdXNational</i>	4.224	2.129	3.934	1	.047	68.291	1.051	4435.729
<i>ProvinceXNational</i>	-.319	.087	13.589	1	.000	.727	.614	.861
<i>GovCentral_Assist</i>	1.148	.309	13.831	1	.000	3.151	1.721	5.768
<i>GovtLocal_Assist</i>	-.105	.306	.118	1	.731	.900	.494	1.640
<i>NonGovt_Assist</i>	2.504	.357	49.248	1	.000	12.236	6.080	24.626
<i>Barr_Tariff</i>	-.479	.142	11.474	1	.001	.619	.469	.817
<i>Barr_Human</i>	-.624	.140	19.726	1	.000	.536	.407	.706
<i>Barr_Distribution</i>	-.326	.145	5.028	1	.025	.722	.543	.960
<i>Barr_ForeignEnvi</i>	-.250	.148	2.877	1	.090	.779	.583	1.040
<i>Barr_Product</i>	.073	.150	.237	1	.627	1.076	.802	1.443
<i>Barr_Financial</i>	-.087	.150	.336	1	.562	.917	.684	1.230
<i>Barr_ForeignGovt</i>	-.211	.137	2.394	1	.122	.809	.619	1.058
<i>Barr_Procedur</i>	-.345	.155	4.926	1	.026	.708	.522	.960
<i>Barr_Price</i>	-.227	.139	2.679	1	.102	.797	.607	1.046
<i>Barr_HomGovt</i>	.134	.142	.888	1	.346	1.143	.865	1.510
<i>Barr_Customer</i>	-.307	.140	4.826	1	.028	.735	.559	.967
<i>FirmAge</i>	.036	.014	6.761	1	.009	1.036	1.009	1.065
<i>EmployTot</i>	.017	.005	9.095	1	.003	1.017	1.006	1.028
<i>OwnerGender</i>	.136	.315	.185	1	.667	1.145	.618	2.123
<i>OwnerAge</i>	.011	.014	.585	1	.444	1.011	.983	1.040
<i>OwnerEduc</i>	.016	.122	.016	1	.898	1.016	.799	1.291
<i>Constant</i>	-2.558	.858	8.878	1	.003	.077		

a. Variable(s) entered on step 1: OwnerStudyAbroad, OwnerTrainAbroad, OwnerWorkAbroad, OwnerWorkMNC, ProdXNational, ProvinceXNational, GovCentral_Assist, GovtLocal_Assist, NonGovt_Assist, Barr_Tariff, Barr_Human, Barr_Distribution, Barr_ForeignEnvi, Barr_Product, Barr_Financial, Barr_ForeignGovt, Barr_Procedur, Barr_Price, Barr_HomGovt, Barr_Customer, FirmAge, EmployTot, OwnerGender, OwnerAge, OwnerEduc.

Appendix F2: SPSS Output of Binary Logit Regression (Exporters-Aspiring-Exporter Model)

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	155.797	25	.000
	Block	155.797	25	.000
	Model	155.797	25	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	311.999 ^a	.333	.473

a. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	14.244	8	.076

Classification Table^a

		Predicted			
		Category		Percentage Correct	
		Aspiring-exporter	Exporter		
Step 1	Category	Aspiring-exporter	69	45	60.5
		Exporter	24	247	91.1
	Overall Percentage				82.1

a. The cut value is .500

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Step 1 ^a <i>OwnerStudyAbroad</i>	-.657	.693	.898	1	.343	.518	.133	2.018
<i>OwnerTrainAbroad</i>	.654	.934	.491	1	.484	1.924	.308	12.004
<i>OwnerWorkAbroad</i>	1.644	.935	3.095	1	.079	5.178	.829	32.345
<i>OwnerWorkMNC</i>	1.016	.589	2.980	1	.084	2.762	.872	8.754
<i>ProdXNational</i>	6.132	2.474	6.141	1	.013	460.198	3.604	58764.225
<i>ProvinceXNational</i>	-.297	.092	10.305	1	.001	.743	.620	.891
<i>GovCentral_Assist</i>	.701	.331	4.486	1	.034	2.017	1.054	3.860
<i>GovtLocal_Assist</i>	-.132	.335	.156	1	.693	.876	.454	1.690
<i>NonGovt_Assist</i>	.900	.420	4.588	1	.032	2.460	1.080	5.605
<i>Barr_Tariff</i>	-.531	.163	10.617	1	.001	.588	.427	.809
<i>Barr_Human</i>	-.822	.163	25.370	1	.000	.440	.319	.605
<i>Barr_Distribution</i>	-.286	.154	3.471	1	.062	.751	.556	1.015
<i>Barr_ForeignEnvi</i>	-.319	.164	3.757	1	.053	.727	.527	1.004
<i>Barr_Product</i>	.118	.170	.477	1	.490	1.125	.806	1.571
<i>Barr_Financial</i>	-.119	.170	.491	1	.483	.887	.635	1.239
<i>Barr_ForeignGovt</i>	-.236	.152	2.405	1	.121	.790	.587	1.064
<i>Barr_Procedur</i>	-.412	.172	5.762	1	.016	.662	.473	.927
<i>Barr_Price</i>	-.208	.149	1.942	1	.163	.813	.607	1.088
<i>Barr_HomGovt</i>	.197	.156	1.594	1	.207	1.218	.897	1.655
<i>Barr_Customer</i>	-.220	.153	2.080	1	.149	.802	.595	1.082
<i>FirmAge</i>	.061	.019	10.481	1	.001	1.063	1.025	1.104
<i>EmployTot</i>	.018	.006	7.651	1	.006	1.018	1.005	1.031
<i>OwnerGender</i>	.001	.344	.000	1	.998	1.001	.510	1.965
<i>OwnerAge</i>	.017	.015	1.141	1	.285	1.017	.986	1.048
<i>OwnerEduc</i>	.031	.139	.050	1	.823	1.032	.786	1.354
<i>Constant</i>	-1.591	.939	2.872	1	.090	.204		

a. Variable(s) entered on step 1: OwnerStudyAbroad, OwnerTrainAbroad, OwnerWorkAbroad, OwnerWorkMNC, ProdXNational, ProvinceXNational, GovCentral_Assist, GovtLocal_Assist, NonGovt_Assist, Barr_Tariff, Barr_Human, Barr_Distribution, Barr_ForeignEnvi, Barr_Product, Barr_Financial, Barr_ForeignGovt, Barr_Procedur, Barr_Price, Barr_HomGovt, Barr_Customer, FirmAge, EmployTot, OwnerGender, OwnerAge, OwnerEduc.

Appendix G: Export Intensity (SPSS Output for OLS Estimation)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.744 ^a	.554	.528	.21459	.554	21.529	27	468	.000

a. Predictors: (Constant), OwnerEduc, OwnerGender, Barr_Price, Barr_HomGovt, Barr_Product, Barr_Distribution, Barr_Tariff, Barr_ForeignEnvi, Barr_Financial, Barr_Human, Barr_ForeignGovt, ProdXNational, Barr_Procedur, Barr_Customer, FirmAge, OwnerWorkAbroad, OwnerAge, OwnerWorkMNC, GovtLocal_Assist, XASEAN, OwnerTrainAbroad, GovCentral_Assist, EmployTot, ProvinceXNational, NonGovt_Assist, OwnerStudyAbroad, YearsExporting

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.768	27	.991	21.529	.000 ^b
	Residual	21.551	468	.046		
	Total	48.320	495			

a. Dependent Variable: Xintensity

b. Predictors: (Constant), OwnerEduc, OwnerGender, Barr_Price, Barr_HomGovt, Barr_Product, Barr_Distribution, Barr_Tariff, Barr_ForeignEnvi, Barr_Financial, Barr_Human, Barr_ForeignGovt, ProdXNational, Barr_Procedur, Barr_Customer, FirmAge, OwnerWorkAbroad, OwnerAge, OwnerWorkMNC, GovtLocal_Assist, XASEAN, OwnerTrainAbroad, GovCentral_Assist, EmployTot, ProvinceXNational, NonGovt_Assist, OwnerStudyAbroad, YearsExporting

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	.222	.062		3.564	.000	.100	.344		
	<i>OwnerStudyAbroad</i>	.021	.044	.019	.468	.640	-.066	.107	.589	1.697
	<i>OwnerTrainAbroad</i>	-.072	.047	-.054	-1.537	.125	-.165	.020	.760	1.315
	<i>OwnerWorkAbroad</i>	.113	.045	.096	2.508	.012	.024	.201	.653	1.531
	<i>OwnerWorkMNC</i>	.078	.034	.080	2.327	.020	.012	.144	.797	1.255
	<i>GovCentral_Assist</i>	.033	.022	.053	1.486	.138	-.011	.078	.747	1.339
	<i>GovtLocal_Assist</i>	-.023	.022	-.037	-1.044	.297	-.067	.020	.779	1.284
	<i>NonGovt_Assist</i>	.049	.027	.074	1.839	.066	-.003	.102	.594	1.684
	<i>XASEAN</i>	.037	.025	.057	1.462	.144	-.013	.086	.624	1.602
	<i>YearsExporting</i>	.011	.002	.314	6.546	.000	.007	.014	.413	2.421
	<i>ProdXNational</i>	-.053	.151	-.011	-.350	.727	-.349	.244	.896	1.116
	<i>ProvinceXNational</i>	-.038	.006	-.253	-6.638	.000	-.050	-.027	.657	1.523
	<i>Barr_Tariff</i>	-.013	.010	-.043	-1.324	.186	-.033	.007	.901	1.110
	<i>Barr_Human</i>	-.048	.011	-.155	-4.583	.000	-.069	-.028	.835	1.197
	<i>Barr_Distribution</i>	-.042	.010	-.135	-4.072	.000	-.063	-.022	.868	1.153
	<i>Barr_ForeignEnvi</i>	-.015	.010	-.048	-1.478	.140	-.035	.005	.891	1.122
	<i>Barr_Product</i>	-.009	.010	-.029	-.857	.392	-.029	.012	.857	1.167
	<i>Barr_Financial</i>	-.023	.010	-.072	-2.201	.028	-.043	-.002	.882	1.133
	<i>Barr_ForeignGovt</i>	-.018	.010	-.057	-1.774	.077	-.038	.002	.912	1.096
	<i>Barr_Procedur</i>	-.035	.011	-.111	-3.060	.002	-.057	-.012	.730	1.370
	<i>Barr_Price</i>	-.028	.010	-.090	-2.844	.005	-.048	-.009	.952	1.051
	<i>Barr_HomGovt</i>	.008	.010	.025	.750	.454	-.012	.028	.889	1.125
	<i>Barr_Customer</i>	.003	.010	.008	.247	.805	-.018	.023	.873	1.145
	<i>FirmAge</i>	-.005	.001	-.189	-4.669	.000	-.007	-.003	.582	1.717
	<i>EmployTot</i>	.001	.000	.084	2.351	.019	.000	.002	.746	1.340
	<i>OwnerGender</i>	.015	.023	.021	.643	.521	-.030	.060	.892	1.121
	<i>OwnerAge</i>	.002	.001	.063	1.855	.064	.000	.004	.818	1.223
	<i>OwnerEduc</i>	.003	.009	.014	.387	.699	-.014	.021	.698	1.432

a. Dependent Variable: Xintensity

Appendix H: Impacts of Exporting on SMEs' Performances (SPSS Output for OLS Estimation)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	<i>(Constant)</i>	1.702	.155		10.975	.000
	<i>FirmSize</i>	.125	.051	.146	2.433	.016
	<i>FirmAge</i>	-.001	.003	-.028	-.306	.760
	<i>OwnerGender</i>	-.053	.056	-.055	-.939	.348
	<i>OwnerEduc2</i>	.094	.052	.106	1.817	.070
	<i>OwnerAge</i>	.001	.002	.031	.510	.610
	<i>Xintensity</i>	1.224	.269	.953	4.544	.000
	<i>XIntensitySq</i>	-1.090	.270	-.841	-4.034	.000
	<i>XExperience</i>	-.008	.004	-.163	-1.859	.064
	<i>ForeignInv</i>	.214	.097	.127	2.210	.028
	<i>GovCentral_Assist</i>	.120	.050	.145	2.394	.017
	<i>GovtLocal_Assist</i>	-.003	.050	-.003	-.057	.955
	<i>NonGovt_Assist</i>	-.068	.086	-.045	-.786	.432

a. Dependent Variable: ImpactIndex7

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.452 ^a	.204	.167	.37541

a. Predictors: (Constant), NonGovt_Assist, FirmSize, Xintensity, ForeignInv, OwnerAge, GovtLocal_Assist, OwnerEduc2, OwnerGender, GovCentral_Assist, XExperience, FirmAge, XIntensitySq

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.244	12	.770	5.466	.000 ^b
	Residual	36.079	256	.141		
	Total	45.323	268			

a. Dependent Variable: ImpactIndex7

b. Predictors: (Constant), NonGovt_Assist, FirmSize, Xintensity, ForeignInv, OwnerAge, GovtLocal_Assist, OwnerEduc2, OwnerGender, GovCentral_Assist, XExperience, FirmAge, XIntensitySq

Appendix I: Survey Questionnaires

Appendix I1: Survey Questionnaire for SMEs

Internationalisation of Indonesian SMEs Survey

Instructions: For each question with brackets provided, please tick your answer(s); otherwise, please follow the instructions given to answer the questions. Only summary measures and conclusions from this survey will be reported. Your participation is voluntary and all of your answers will be kept confidential.

Questionnaire Number:	_ _ _ _ _ _ _
Name of company	
Location	Province: _____
Interviewee	Position: _____

Section 1. General Information about SME

1.1. When was your company established (year)? _____

1.2. Indicate the current number of employees in your company:

Managerial employees : _____

Non-managerial employees : _____

1.3. What are your main products? (You can tick more than one)

- | | | |
|---|---|---|
| a. Furniture | [|] |
| b. Handicrafts | [|] |
| c. Garments | [|] |
| d. Household utensils & husbandries | [|] |
| e. Leather products (example: purses & shoes) | [|] |
| f. Fashion accessories | [|] |
| g. Food & beverages | [|] |
| h. Agriculture products | [|] |
| i. Machinery components | [|] |
| j. Other(s) please specify _____ | [|] |

1.4. Is your company a sole proprietorship?

a. Yes [] Go to **Question 1.10**

b. No [] Go to **Question 1.5**

1.5. What is the current legal form of your company?

- | | | |
|----------------------------------|---|---|
| a. Partnership | [|] |
| b. Private limited company | [|] |
| c. Public limited company | [|] |
| d. Others (please specify) _____ | [|] |

1.6. When did your company establish this legal form (year)? _____

1.7. Please indicate the ownership structure of your company.

- a. Less than 10% owned by other investor(s) []
- b. Between 10% and less than 50% owned by other investor(s) []
- c. 50% or more owned by other investor(s) []
- d. Wholly owned by other investor(s) []

1.8. Does your company have foreign shareholder(s)?

- a. Yes [] Go to **Question 1.9**
- b. No [] Go to **Question 1.10**

1.9. What is the ownership of foreign shareholders?

- a. Less than 10% owned by foreign investor(s) []
- b. Between 10% and 50% owned by foreign investor(s) []
- c. 50% or more owned by foreign investor(s) []
- d. Wholly owned by foreign investor(s) []

1.10. Do you have **direct** export experience? (Sell directly to target customer in foreign market or use sales representatives, distributors, or retailers who are located outside Indonesia)

- a. Yes [] Go to **SECTION 2**
- b. No [] Go to **SECTION 3**

Section 2. SMEs' Export Intention and Process

2.1 When did you start exporting (year)? _____

2.2 Where did you obtain the information about the opportunity in target markets? (You may tick more than one)

- a. Newspapers, television and internet media []
- b. Business association []
- c. Business partners/associates []
- d. Central government agencies []
- e. Regional government agencies []
- f. Family/relatives []
- g. Indonesian emigrant societies in target markets []
- h. Contact made by buyer []
- i. Others (please specify) _____ []

- 2.3 Below is a series of statements related to the motives to export. Indicate the motives that drive/drove you to export. Please TICK how significant each of the following motives is on a scale of 1 to 3, **where 1-not motivating, 2-motivating and 3-very motivating**.

Types of Motives		Not Motivating 1	Motivating 2	Very Motivating 3
M1	Exploit or exercise new markets			
M2	Large size of destination markets			
M3	Stability of destination markets			
M4	Gain "first mover advantage" in destination markets			
M5	Follow peers/competitors' action			
M6	Owner/manager's international experience & exposure			
M7	Owner/manager's awareness of global opportunity			
M8	Firm's size, age and experience			
M9	Introduce new products from R&D activities			
M10	Confidence in the uniqueness/quality of the product			
M11	(Expected) weak domestic (Rupiah) exchange rate			
M12	Availability & accessibility of business networks			
M13	Advice & referral trust from social networks			
M14	Indonesian emigrant communities in target markets			
M15	Enquiries/demand from foreign customers			
M16	Limited home market for company's products			
M17	Stiff competition in home market			
M18	Encouragement/incentives from home government			
M19	Home country's good image in destination markets			
M20	Close location to country's borders			
M21	Decreasing transportation & communication cost			
M22	Simplified domestic export procedure			

2.4 Which country did you export to for the first time? _____

2.5 Since the first export (in Question 2.4), did you export to another country (countries)?

a. Yes [] Go to **Question 2.6**

b. No [] Go to **Question 2.7**

2.6 Indicate the region(s) where you have been exporting to since the first export. (You can tick more than one)

Destination Markets (Regions)		Exports
a	Neighbouring ASEAN Countries (Malaysia, Singapore, Philippines)	
b	Other ASEAN Countries (Thailand, Vietnam, Cambodia, Lao, Myanmar, Brunei Darussalam)	
c	East Asia (Japan, China, Taiwan, South Korea, North Korea, Mongolia)	
d	Middle East (Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates, Yemen)	

Destination Markets (Regions)		Exports
e	Australia, New Zealand, PNG, East Timor & Pacific	
f	Southern Asia (India, Pakistan, Bangladesh, Sri Lanka, Nepal, Bhutan, Maldives, Afghanistan)	
g	North America (USA & Canada)	
h	Western Europe	
i	Eastern Europe	
j	Russia & Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan)	
k	Africa	
l	South & Central America	

- 2.7 Are you still exporting currently?
- Yes [] Go to **Question 2.8**
 - No [] Go to **Question 2.9**

- 2.8 Indicate your current market share (domestic vs. export) of your products, both in terms of the amount of products as well as total value sales.

	Amount of Products	Value of Sales
Domestic	_____ %	_____ %
Export	_____ %	_____ %
	100%	100%

Next go directly to **SECTION 4** (Barriers to export)

- 2.9 Why did you stop exporting? (You may tick more than one)
- Price of the exported goods was no longer competitive []
 - Difficulty in finding buyers/customers []
 - Difficulty in managing buyers/customers/foreign partners []
 - Bankruptcy of main buyers/customers []
 - Potential in the growth of domestic (Indonesian) market []
 - Political/social uncertainty in target markets []
 - Change of business strategy of company []
 - Lack of funds to finance exporting activities []
 - Other (please specify) _____ []

- 2.10 Do you have plans to re-start exporting activities in the future?
- Yes []
 - No []

Next go to **SECTION 4** (Barriers to export)

Section 3. Non Exporting SMEs' Export Intention

- 3.1 Do you have plans to export in the future?
- a. Yes [] Go to **Question 3.3**
- b. No [] Go to **Question 3.2**
- 3.2 Indicate the reason(s) you are not interested in exporting in the future (You can tick more than one)
- a. No clue of how to initiate export []
- b. Confidence in prospects/demands in domestic market []
- c. Insufficient human resources []
- d. Insufficient financial resources []
- e. No confidence in the competitiveness of the products []
- f. Do not understand how international market operates []
- g. No knowledge/information of potential target markets []
- h. Others (please specify) _____ []
- Next go to **SECTION 4** (Barriers to export)
- 3.3 Which country were you interested in for your first export? _____
- 3.4 What effort(s) have you made to export? (You may tick more than one)
- a. No concrete effort yet []
- b. Collecting information on business opportunity []
- c. Verify/cross check information to other sources []
- d. Made contact with potential foreign customers []
- e. Made contact with foreign/domestic partners []
- f. Look for government supporting programmes []
- g. Drafting the export contract []
- h. Producing the ordered goods []
- i. Others (please specify)_____ []
- 3.5 Where did you obtain the information on the opportunity of your target markets? (You may tick more than one)
- a. Newspapers, television and internet media []
- b. Business association []
- c. Business partners/associates []
- d. Central government agencies []
- e. Regional government agencies []
- f. Family/relatives []
- g. Indonesian emigrant societies in target markets []
- h. Contact made by buyer []
- i. Others (please specify) _____ []

3.6. Below is a series of statements related to the motives to export. Indicate the motives that drive you to attempt to export. Please TICK how significant each of the following motives is on a scale of 1 to 3, where 1-not motivating, 2-motivating and 3-very motivating.

Types of Motives		Not motivating 1	Motivating 2	Very Motivating 3
M1	Exploit or exercise new markets			
M2	Large size of destination markets			
M3	Stability of destination markets			
M4	Gain "first mover advantage" in destination markets			
M5	Follow peers/competitors' action			
M6	Owner/manager's international experience & exposure			
M7	Owner/manager's awareness of global opportunity			
M8	Firm's size, age and experience			
M9	Introduce new products from R&D activities			
M10	Confidence in the uniqueness/quality of the product			
M11	(Expected) weak domestic (Rupiah) exchange rate			
M12	Availability & accessibility of business networks			
M13	Advice & referral trust from social networks			
M14	Indonesian emigrant communities in target markets			
M15	Enquiries/demand from foreign customers			
M16	Limited home market for company's products			
M17	Stiff competition in home market			
M18	Encouragement/incentives from home government			
M19	Home country's good image in destination markets			
M20	Close location to country's borders			
M21	Decreasing transportation & communication cost			
M22	Simplified domestic export procedure			

Section 4. Barriers to Export (For ALL Respondents)

Below is a series of barriers to export. Indicate how detrimental each barrier you face (or you perceive) in exporting. Please TICK how significant each of the following barriers on a scale of 1 to 3, where 1-not difficult, 2-difficult and 3-very difficult.

4.1. Internal barriers to export

No	Type of Barriers	Not difficult 1	Difficult 2	Very difficult 3
B1	Limited information to locate/analyse potential markets			
B2	Unreliability, inaccessibility and high cost of data regarding target markets			
B3	Difficulty in identifying business opportunities in target markets			
B4	Inability to contact potential customers in target markets			

No	Type of Barriers	Not difficult 1	Difficult 2	Very difficult 3
B5	Lack of managerial time to deal with export activities			
B6	Inadequate quantity or untrained personnel for export activities			
B7	Shortage of funds to finance working capital for internationalisation (such as for production, research & travelling)			
B8	Shortage of funds to finance investment needed for Internationalisation			
B9	Shortage of insurance for internationalisation (including export products and assets abroad)			
B10	Difficulty in granting credit facilities to foreign customers			
B11	Difficulty in developing new products for foreign markets			
B12	Difficulty in adapting product design/style demanded by foreign markets			
B13	Difficulty in meeting foreign product quality/standards/specifications			
B14	Difficulty in offering satisfactory prices to foreign customers			
B15	Difficulty in matching competitors' prices in foreign markets			
B16	Lack of excess production capacity for exports			
B17	Difficulty in establishing/using distribution channels in foreign markets			
B18	Difficulty in obtaining reliable representation in foreign markets			
B19	Difficulty in supplying inventory abroad			
B20	Excessive export transportation/insurance costs			
B21	Difficulty in offering technical/after-sales service abroad			
B22	Difficulty in adjusting promotional activities to the target markets			

4.2. External barriers to export

No	Type of barriers	Not difficult 1	Difficult 2	Very difficult 3
B23	Unfamiliar exporting procedures and paperwork			
B24	Difficulties in communicating with foreign customers			
B25	Slow collection of payments from abroad			
B26	Difficulties in enforcing contracts/resolving disputes in foreign countries			
B27	Lack of home government export assistance and incentives			
B28	Unfavourable home rules and regulations related to exports (such as no diplomatic relations, export restriction, etc)			
B29	Foreign governments' restriction on foreign ownership & on the movement of business persons (e.g. problems obtaining visas, duration of stay, etc.)			

No	Type of barriers	Not difficult 1	Difficult 2	Very difficult 3
B30	Foreign governments' unequal treatment compared to domestic firms in taxation or eligibility to affiliate			
B31	Foreign governments' unequal treatment compared to domestic firms in public procurement			
B32	Foreign governments' unequal treatment compared to domestic firms in business competition regulation			
B33	Laws and regulations are sophisticated or not transparent in foreign countries			
B34	Different foreign customer attitudes/habits			
B35	Stiff competition in overseas markets			
B36	Poor/declining economic conditions in target markets			
B37	Foreign currency exchange risks			
B38	Unfamiliar formal and informal foreign business practices			
B39	Different socio-cultural traits			
B40	Verbal/nonverbal language differences			
B41	Inadequacy e-commerce infrastructure			
B42	Political instability in foreign markets			
B43	Negative image of Indonesia or Indonesian products abroad			
B44	High tariff barriers in host countries			
B45	Inadequate protection of property rights (e.g. intellectual property) in host countries			
B46	Restrictive health, safety and technical standards in host countries (e.g. sanitary requirements)			
B47	Arbitrary tariff classification and reclassification in host countries			
B48	Unfavourable quotas and/or embargoes imposed by host countries			
B49	High costs in customs administration in host countries			
B50	Stiff competition with exporters from other countries with preferential tariff from regional trade agreement with host countries			

4.3. Please identify the **Top 5** barriers that are the most important for your decision to export, with 1 (most important) to 5 (least important).

Export Barriers	
1	
2	
3	
4	
5	

Section 5. Government Support Programmes (for ALL respondents)

5.0 Indicate the assistance that you have received from local government agencies and indicate its helpfulness for your export activities:

No	Types of Assistance	Level		Helpfulness		
		Province	Regency/ Municipal	1 Not helpful	2 Helpful	3 Very helpful
1.	Technical training (production process, packaging or machinery operation, etc.)	[]	[]			
2.	Managerial training (financial management, online trading, foreign languages, marketing, export procedure, etc.)	[]	[]			
3.	Grants of equipment	[]	[]			
4.	Grants of capital	[]	[]			
5.	Trade fairs	[]	[]			
6.	Others (specify) _____	[]	[]			

<p>5.1 Support Programme: International trade fairs (shows/exhibition/expo) organised by the Ministry of Cooperatives and SMEs/Ministry of Trade/Ministry of Agriculture/Ministry of Industry.</p> <p>5.1.1. Have you participated in this support programme in the last 3 years?</p> <p>a. Yes (year) _____ [] Go to Question 5.1.2</p> <p>b. No _____ [] Go to Question 5.1.5</p>										
<p>5.1.2 How did you know about the support programme?</p> <p>a. Publicly announced []</p> <p>b. Contacted by the agency []</p> <p>c. Business association []</p> <p>d. Business partners/associates []</p> <p>e. Others (specify) _____ []</p>	<p>5.1.3 How helpful is the support programme for your exporting activities?</p> <table border="1"> <tr> <td>1</td> <td>Not Helpful</td> <td></td> </tr> <tr> <td>2</td> <td>Helpful</td> <td></td> </tr> <tr> <td>3</td> <td>Very Helpful</td> <td></td> </tr> </table>	1	Not Helpful		2	Helpful		3	Very Helpful	
1	Not Helpful									
2	Helpful									
3	Very Helpful									
<p>5.1.4 In what aspects can the support programmes be improved? (You can tick more than one)</p> <p>a. Regularity/continuity []</p> <p>b. More option of destination countries []</p> <p>c. Longer fair duration []</p> <p>d. More promotion about the fair in destination countries []</p> <p>e. Easy application process []</p> <p>f. Wider publication of the programme []</p> <p>g. Others (specify) _____ []</p> <p>Next go to Question 5.2</p>	<p>5.1.5 Why have you not participated in this programme?</p> <p>a. Not aware of the programme []</p> <p>b. Applied but not granted []</p> <p>c. Not interested in exporting []</p> <p>b. Not convinced of the programme's benefit []</p> <p>c. Difficult procedure/ requirements to apply []</p> <p>d. Others (specify) _____ []</p> <p>Next go to Question 5.2</p>									

5.2 Support Programme: Publication of SME Catalogue by Ministry of Cooperatives & SMEs.										
5.2.2 Have you participated in this support programme in the last 3 years?										
a. Yes (year)_____ []	Go to Question 5.2.2									
b. No []	Go to Question 5.2.5									
5.2.3 How did you know about the support programme?	5.2.4 How helpful is the support programme for your exporting activities?									
a. Publicly announced []	<table border="1"> <tr> <td>1</td> <td>Not Helpful</td> <td></td> </tr> <tr> <td>2</td> <td>Helpful</td> <td></td> </tr> <tr> <td>3</td> <td>Very Helpful</td> <td></td> </tr> </table>	1	Not Helpful		2	Helpful		3	Very Helpful	
1		Not Helpful								
2		Helpful								
3		Very Helpful								
b. Contacted by the agency []										
c. Business association []										
d. Business partners/associates []										
e. Others (specify)_____ []										
5.2.5 In what aspect can the support programmes be improved? (You can tick more than one)	5.2.6 Why have you not participated in this programme?									
a. Broader distribution of the catalogue []	a. Not aware of the programme []									
b. More spaces for pictures of products []	b. Applied but not granted []									
c. Add more languages []	c. Not interested in exporting []									
d. Complement it with online catalogue []	d. Not convinced of the benefit []									
e. Easy application process []	e. Difficult procedure/ requirements to apply []									
f. Wider publication of the programme []	f. Others (specify)_____ []									
g. Others (specify)_____ []										
Next go to Question 5.3	Next go to Question 5.3									

5.3 Support Programme: Managerial training organised by central government agencies/ministries in the following areas: business planning, marketing, cultural differences awareness, language skills and knowledge of export procedures.										
5.3.2 Have you participated in this support programme in the last 3 years?										
a. Yes (year)_____ []	Go to Question 5.3.2									
b. No []	Go to Question 5.3.5									
5.3.3 How did you know about the support programme?	5.3.4 How helpful is the support programme for your exporting activities?									
a. Publicly announced []	<table border="1"> <tr> <td>1</td> <td>Not Helpful</td> <td></td> </tr> <tr> <td>2</td> <td>Helpful</td> <td></td> </tr> <tr> <td>3</td> <td>Very Helpful</td> <td></td> </tr> </table>	1	Not Helpful		2	Helpful		3	Very Helpful	
1		Not Helpful								
2		Helpful								
3		Very Helpful								
b. Contacted by the agency []										
c. Business association []										
d. Business partners/associates []										
e. Others (specify)_____ []										
5.3.5 In what aspects can the support programmes be improved? (You can tick more than one)	5.3.6 Why have you not participated in this programme?									
a. Regularity/continuity []	a. Not aware of the programme []									
b. Broader/deeper contents []	b. Applied but not granted []									
c. Longer duration []	c. Not interested in exporting []									
d. More exporting practical aspects []	d. Not convinced of the benefit []									
e. Easy application process []	e. Difficult procedure/requirements []									
f. Wider publication of the programme []	f. Others (specify)_____ []									
g. Others (specify)_____ []										
Next go to Question 5.4	Next go to Question 5.4									

5.4 Support Programme: Export financing from Indonesia Eximbank in the forms of buyer's credit/export investment loan/export working capital loan.										
5.4.2 Have you participated in this support programme in the last 3 years? a. Yes (year)_____ [] Go to Question 5.4.2 b. No [] Go to Question 5.4.5										
5.4.3 How did you know about the support programme? a. Publicly announced [] b. Contacted by the agency [] c. Business association [] d. Business partners/associates [] e. Others (specify)_____ []	5.4.4 How helpful is the support programme for your exporting activities? <table border="1"> <tr> <td>1</td> <td>Not Helpful</td> <td></td> </tr> <tr> <td>2</td> <td>Helpful</td> <td></td> </tr> <tr> <td>3</td> <td>Very Helpful</td> <td></td> </tr> </table>	1	Not Helpful		2	Helpful		3	Very Helpful	
1	Not Helpful									
2	Helpful									
3	Very Helpful									
5.4.5 In what aspects can the support programmes be improved? (You can tick more than one) a. Simple requirements [] b. Shorter processing time [] c. Larger scheme (in monetary value) [] d. Wider publication of the programme [] e. Others (specify)_____ [] Next go to Question 5.5	5.4.6 Why have you not participated in this programme? a. Not aware of the programme [] b. Applied but not granted [] c. Not interested in exporting [] d. Not convinced of the benefit [] e. Difficult procedure/requirements [] f. Others (specify)_____ [] Next go to Question 5.5									

5.5 Support Programme: Export insurance from Indonesia Eximbank in the forms of insurance for the risk of export failure, for the risk of payment failure, for investment made by Indonesian companies overseas and for any political risk in a country of destination for exports.										
5.5.2 Have you participated in this support programme in the last 3 years? a. Yes (year)_____ [] Go to Question 5.5.2 b. No [] Go to Question 5.5.5										
5.5.3 How did you know about the support programme? a. Publicly announced [] b. Contacted by the agency [] c. Business association [] d. Business partners/associates [] e. Others (specify)_____ []	5.5.4 How helpful is the support programme for your exporting activities? <table border="1"> <tr> <td>1</td> <td>Not Helpful</td> <td></td> </tr> <tr> <td>2</td> <td>Helpful</td> <td></td> </tr> <tr> <td>3</td> <td>Very Helpful</td> <td></td> </tr> </table>	1	Not Helpful		2	Helpful		3	Very Helpful	
1	Not Helpful									
2	Helpful									
3	Very Helpful									
5.5.5 In what aspects can the support programmes be improved? (You can tick more than one) a. Simple requirements [] b. Shorter processing time [] c. Larger scheme (in monetary value) [] d. Wider publication of the programme [] e. Others (specify)_____ [] Next go to Question 5.6	5.5.6 Why have you not participated in this programme? a. Not aware of the programme [] b. Applied but not granted [] c. Not interested in exporting [] d. Not convinced of the benefit [] e. Difficult procedure/requirements [] f. Others (specify)_____ [] Next go to Question 5.6									

5.6 Support Programme: Export Guarantee from the Indonesia Eximbank in the forms of export working capital credit guarantee and import L/C guarantee for exporters needing imported raw materials/spare parts.										
5.6.2 Have you participated in this support programme in the last 3 years? a. Yes (year)_____ [] Go to Question 5.6.2 b. No _____ [] Go to Question 5.6.5										
5.6.3 How did you know about the support programme? a. Publicly announced [] b. Contacted by the agency [] c. Business association [] d. Business partners/associates [] e. Others (specify)_____ []	5.6.4 How helpful is the support programme for your exporting activities? <table border="1"> <tr> <td>1</td> <td>Not Helpful</td> <td></td> </tr> <tr> <td>2</td> <td>Helpful</td> <td></td> </tr> <tr> <td>3</td> <td>Very Helpful</td> <td></td> </tr> </table>	1	Not Helpful		2	Helpful		3	Very Helpful	
1	Not Helpful									
2	Helpful									
3	Very Helpful									
5.6.5 In what aspects can the support programmes be improved? (You can tick more than one) a. Simple application process [] b. Shorter processing time [] c. Wider publication of the programme [] d. Others (specify)_____ [] Next go to Question 5.7	5.6.6 Why have you not participated in this programme? a. Not aware of the programme [] b. Applied but not granted [] c. Not interested in exporting [] d. Not convinced of the benefit [] e. Difficult procedure/requirements [] f. Others (specify)_____ [] Next go to Question 5.7									

5.7 Support Programme: Technical training provided by central government agencies/ministries in specific production processes, packaging, logistics or machinery aimed at specific markets.										
5.7.2 Have you participated in this support programme in the last 3 years? a. Yes (year)_____ [] Go to Question 5.7.2 b. No _____ [] Go to Question 5.7.5										
5.7.3 How did you know about the support programme? a. Publicly announced [] b. Contacted by the agency [] c. Business association [] d. Business partners/associates [] e. Others (specify)_____ []	5.7.4 How helpful is the support programme for your exporting activities? <table border="1"> <tr> <td>1</td> <td>Not Helpful</td> <td></td> </tr> <tr> <td>2</td> <td>Helpful</td> <td></td> </tr> <tr> <td>3</td> <td>Very Helpful</td> <td></td> </tr> </table>	1	Not Helpful		2	Helpful		3	Very Helpful	
1	Not Helpful									
2	Helpful									
3	Very Helpful									
5.7.5 In what aspects can the support programmes be improved? (You can tick more than one) a. Easy application process [] b. Wider publication of the programme [] c. Regularity/continuity [] d. Broader/deeper content [] e. Longer duration [] f. More practical aspects [] g. Others (specify)_____ []	5.7.6 Why have you not participated in this programme? a. Not aware of the programme [] b. Applied but not granted [] c. Not interested in exporting [] d. Not convinced of the benefit [] e. Difficult procedure/requirements [] f. Others (specify)_____ []									

Current, former and aspiring SME exporters, go to **SECTION 6 Question 1**

Non-exporting SMEs with no intention to export, go to **SECTION 6 Question 2**

Section 6. SMEs' Network Relationships for Internationalisation

6.1 Indicate the source of assistance(s) you use for each of export functions below. Indicate how helpful the assistance are for your export activities/attempt. Leave blank for functions for which you do not receive any assistance. **(For current, former and aspiring exporters only)**

Assistance/Functions	Source of Assistance (You may tick more than one)								Overall Helpfulness		
	Central Government Agencies	Regional Government Agencies	Family/Relatives	Business Partners/Associates	Business Association/Chambers	Private Companies/SOE Services	Universities/Research Institutes	Indonesian Emigrants Community	Not helpful 1	helpful 2	Very helpful 3
a Obtaining information on foreign markets' data and analysis, business opportunities and potential customers											
b Increase the capacity/capability of personnel for internationalisation											
c Working capital or investment funds for internationalisation											
d Export guarantee or insurance											
e Credit facilities for foreign customers											
f Developing new products & adapting product design/style for foreign market											
g Meeting foreign markets' product quality/standards/specifications											
h Establishing/using distribution channels in the target markets											
i Obtaining reliable foreign representations/contacts											
j Supplying inventory abroad											
k Offering technical/after-sales service abroad											
l Promotional activities in the target markets											
m Understanding home rules and regulations with regard to export											
n Understanding export procedures/paperwork											
o Communicating with overseas customers & understanding their habits/attitudes											
p Collection of payments from abroad											
q Enforcing contracts/resolving disputes in foreign markets											

Assistance/Functions	Source of Assistance (You may tick more than one)								Overall Helpfulness		
	Central Government Agencies	Regional Government Agencies	Family/Relatives	Business Partners/Associates	Business Association/Chambers	Private Companies/SOE Services	Universities/Research Institutes	Indonesian Emigrants Community	Not helpful 1	helpful 2	Very helpful 3
r Ensuring equality with other firms in target markets in terms of asset ownership, movement of people, tax, eligibility to affiliate, public procurement and competition regulation											
s Defining competition strategy in target markets											
t Understanding property rights protection in foreign markets											
u Meeting health, safety and technical standards in foreign markets											
v Understanding tariff classification in foreign markets											
w Obtaining quota allocation in target markets											
x Understanding foreign business practices, different socio-cultural traits and verbal/nonverbal language differences											
y Forecasts on target markets' economic conditions, exchange rate risks and political instability											
z Countering negative image of Indonesian products											

Go to Question 6.2

6.2 Indicate the type of relationship you maintain with each networking source (you may tick more than one) (**For ALL Respondents**)

Types of Relations Maintained by SMEs		Networking Sources							
		Central Government Agencies	Regional Government Agencies	Business Association/ Chambers	Universities/ Research Institutes	Private Companies/ SOE Services	Business Partners/ Associates	Family/ Relatives	Indonesian Emigrants Community
Formal relations									
a	Regular participant in all supporting programmes for SMEs								
b	Irregular participant in all supporting programmes for SMEs								
c	Regular contact through formal/official discussions/seminars								
d	Irregular contact through formal/official discussions/seminars								
e	Member of forum set up by agencies/associations/institutes								
f	Strategic partnership(s)								
g	Joint project(s)								
Informal relations									
h	Personal relation with key persons								
i	Indirect contact through other party								
j	Others (please specify) _____								

Exporting SMEs, go to SECTION 7

Non-exporting SMEs, go directly to SECTION 8

Section 7. Impact and Performance (for Current and Former Exporters Only)

7.1 Indicate your satisfaction with regard to your exporting activities in the last 5 years on a scale of 1 to 3, where 1 = not satisfied, 2 = satisfied and 3 = very satisfied.

How satisfied are you with:		Not Satisfied 1	Satisfied 2	Very Satisfied 3
a	Export sales			
b	Growth in export sales			
c	Profit from export			
d	Growth in export profit			

7.2 Indicate the improvement made by your company after exporting, on a scale of 1 to 3, where 1 = not improved, 2 = moderately improved and 3 = significantly improved.

After exporting, do you find the improvement in the following aspects?		Not Improved 1	Moderately Improved 2	Significantly Improved 3
a	Total profit			
b	Total sales			
c	Domestic sales			
d	Worker productivity			
e	Product quality			
f	Production technique/technology			
g	Efficiency (per unit cost of production)			
h	Marketing & networking techniques			

**Section 8. Demographic and Socio-Economic Characteristics of SME's Owner
(for All Respondents)**

8.1	What is your gender?	Male [] Female []
8.2	Which age group do you belong to (year)?	Under 18 [] 18 – 25 [] 26 – 35 [] 36 – 45 [] 46 – 55 [] 56 – 65 [] Over 66 []
8.3	What is your highest educational or professional qualification?	No formal education [] Primary school [] Junior high school [] Senior high school [] Three-year college [] Bachelor degree [] Postgraduate []

8.4	How long have you been in business?	_____ years	
8.5	Have you studied abroad (high school or higher education)?	Yes	[]
		No	[]
8.6	Did you participate in any short courses/trainings abroad?	Yes	[]
		No	[]
8.7	Did you work overseas?	Yes	[]
		No	[]
8.8	Did you work for domestic-based MNC or exporting company?	Yes	[]
		No	[]

Your participation in this survey is greatly appreciated. Thank you for your time and if you have further comments, please feel free to comment in the space provided below. Once again, we assure you that your identity will remain **STRICTLY CONFIDENTIAL AND ANONYMOUS.**

- 1.4. Why do you think the government should focus on strengthening SMEs' position in the domestic market? (You may tick more than one)
- a. Large and growing domestic (Indonesian) market []
 - b. To better compete with imported goods due to trade liberalisation []
 - c. SMEs' products cannot compete in global market []
 - d. SMEs do not have the capacity & capability to overcome the trade barriers []
 - e. Others (please specify) _____ []

Next go to **SECTION 2**

- 1.5. As your institution seek to foster SMEs export, what export mode does your institution endorse for SMEs? (Tick the most appropriate answer)
- a. Direct individual export []
 - b. Indirect export through supply chain & trading companies []
 - c. Collective export through cooperatives/cluster/group []
 - d. Others (please specify) _____ []

- 1.6. To foster SMEs' direct export, do you think the government export support programme should focus on certain product(s)?
- a. Yes [] Go to **Question 1.7**
 - b. No [] Go to **Question 1.9**

- 1.7. If SMEs' direct exports are to focus on certain product(s), what SMEs' products should the government export support programmes assist? (You can tick more than one)
- a. Furniture []
 - b. Handicrafts []
 - c. Garments []
 - d. Household utensils & husbandry []
 - e. Leather products (example: purse & shoes) []
 - f. Fashion accessories []
 - g. Food & beverages []
 - h. Agriculture products []
 - i. Machinery components []
 - j. Other(s) please specify _____ []

- 1.8. What reason(s) did you use to choose the main product(s) in Question 1.7? (you can tick more than one)
- a. The product(s) have already reached the global market []
 - b. High demand in the global market for the product(s) []
 - c. Few competitors in the global market for the product(s) []
 - d. Indonesian SMEs can produce it cheaply []
 - e. Indonesian SMEs can produce it uniquely []
 - f. Indonesian SMEs already have solid sales in the domestic market for the product(s) []
 - g. Others (please specify) _____ []

Next go to **Question 1.11**

- 1.9. Why do you think SMEs' export products should be diversified? (You can tick more than one)
- a. More resilience against changes in global demand []
 - b. More resilience against domestic sectoral crisis []
 - c. More suited diverse nature of domestic SMEs products []
 - d. Others (please specify) _____ []

- 1.10. If SMEs' exports are to be diversified, what SMEs product(s) do you think they have potential in the global market but are underperforming and therefore need government support programmes? (You can tick more than one)
- a. Furniture []
 - b. Handicrafts []
 - c. Garments []
 - d. Household utensils & husbandry []
 - e. Leather products (example: purse & shoes) []
 - f. Fashion accessories []
 - g. Food & beverages []
 - h. Agriculture products []
 - i. Machinery components []
 - j. Other(s) please specify _____ []

- 1.11. To foster SMEs' direct export, do you think the government export support programmes should focus on certain export market destinations?
- a. Yes [] Go to **Question 1.12**
 - b. No [] Go to **Question 1.14**

- 1.12. Below is a series of possible destinations for SMEs exports. Please rank the destination on the priority on which SMEs' exports should focus, with 1 (top priority) to 10 (low priority).

	Destination Market (Regions)	Rank
a	Neighbouring ASEAN Countries (Malaysia, Singapore, Philippines)	
b	Other ASEAN Countries (Thailand, Vietnam, Cambodia, Lao, Myanmar, Brunei Darussalam)	
c	East Asia (Japan, China, Taiwan, South Korea, North Korea, Mongolia)	
d	Middle East (Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates, Yemen)	
e	Australia, New Zealand, PNG, East Timor & Pacific	
f	Southern Asia (India, Pakistan, Bangladesh, Sri Lanka, Nepal, Bhutan, Maldives, Afghanistan)	
g	North America (USA & Canada)	
h	Western Europe	
i	Eastern Europe	
j	Russia & Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan)	
k	Africa	

- 1.13. What reasons did you use to rank the priority regions in question 1.12? (you may tick more than one)
- a. Close physical distance []
 - b. Free trade agreement []
 - c. Economic size []
 - d. Less competition from local products []
 - e. Current/existing close trade ties []
 - f. Others (please specify)_____ []

Next go to **SECTION 2**

- 1.14. Below is a series of possible destinations for SMEs exports. To diversify SMEs' exports destination, please identify potential regions with low market penetration and low export sales to which SMEs need government support programmes. (You can tick more than one).
- a. Neighbouring ASEAN Countries (Malaysia, Singapore, Philippines) []
 - b. Other ASEAN Countries (Thailand, Vietnam, Cambodia, Lao, Myanmar, Brunei Darussalam) []
 - c. East Asia (Japan, China, Taiwan, South Korea, North Korea, Mongolia) []
 - d. Middle East (Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates, Yemen) []
 - e. Australia, New Zealand, PNG, East Timor & Pacific []
 - f. Southern Asia (India, Pakistan, Bangladesh, Sri Lanka, Nepal, Bhutan, Maldives, Afghanistan) []
 - g. North America (USA & Canada) []
 - h. Western Europe []
 - i. Africa []
 - j. Others (please specify)_____ []

- 1.15. What reasons did you use to choose the regions in question 1.14? (you may tick more than one)
- a. Less competition from local products []
 - b. Less competition from other exporting countries []
 - c. Economic size []
 - d. Socio-cultural similarities []
 - e. Others (please specify)_____ []

Section 2. Barriers to Direct Exporting Faced by Indonesian SMEs

Below is a series of barriers to export. Indicate how difficult each barrier you perceive Indonesian SMEs face in exporting is. Please TICK how significant each of the following barriers on a scale of 1 to 3, where 1-not difficult, 2-difficult and 3-very difficult.

2.1. *Internal barriers to export*

No	Type of Barriers	Not difficult 1	Difficult 2	Very difficult 3
B1	Limited information to locate/analyse potential markets			
B2	Unreliability, inaccessibility and high cost of data regarding target markets			
B3	Difficulty in identifying business opportunities in target markets			
B4	Inability to contact potential customers in foreign markets			
B5	Lack of managerial time to deal with export activities			
B6	Inadequate quantity and untrained personnel for export activities			
B7	Shortage of funds to finance working capital for internationalisation (such as for production, research & travelling)			
B8	Shortage of funds to finance investment needed for Internationalisation			
B9	Shortage of insurance for internationalisation (including export products and assets abroad)			
B10	Difficulty in granting credit facilities to foreign customers			
B11	Difficulty in developing new products for foreign markets			
B12	Difficulty in adapting product design/style demanded by foreign markets			
B13	Difficulty in meeting foreign product quality/standards/specifications			
B14	Difficulty in offering satisfactory prices to foreign customers			
B15	Difficulty in matching competitors' prices in foreign markets			
B16	Lack of excess production capacity for exports			
B17	Difficulty in establishing or using distribution channels in target markets			
B18	Difficulty in obtaining reliable representation in foreign markets			
B19	Difficulty in supplying inventory abroad			
B20	Excessive export transportation/insurance costs			
B21	Difficulty in offering technical/after-sales service abroad			
B22	Difficulty in adjusting promotional activities to the target markets			

2.2 External barriers to export

No	Type of barriers	Not Difficult 1	Difficult 2	Very Difficult 3
B23	Unfamiliar exporting procedures and paperwork			
B24	Difficulties in communicating with foreign customers			
B25	Slow collection of payments from abroad			
B26	Difficulties in enforcing contracts/resolving disputes in foreign countries			
B27	Lack of home government export assistance and incentives			
B28	Unfavourable home rules and regulations related to exports (such as no diplomatic relations, export restriction, etc)			
B29	Foreign governments' restriction on foreign ownership & on the movement of business persons (e.g. problems obtaining visas, duration of stay, etc.)			
B30	Foreign governments' unequal treatment compared to domestic firms in taxation or eligibility to affiliate			
B31	Foreign governments' unequal treatment compared to domestic firms in public procurement			
B32	Foreign governments' unequal treatment compared to domestic firms in business competition regulation			
B33	Laws and regulations are sophisticated or not transparent in foreign countries			
B34	Different foreign customer attitudes/habits			
B35	Stiff competition in overseas markets			
B36	Poor/deteriorating economic conditions in target markets			
B37	Foreign currency exchange risks			
B38	Unfamiliar formal and informal foreign business practices			
B39	Different socio-cultural traits			
B40	Verbal/nonverbal language differences			
B41	Inadequacy of e-commerce infrastructure			
B42	Political instability in foreign markets			
B43	Negative image of Indonesia or Indonesian products abroad			
B44	High tariff barriers in host countries			
B45	Inadequate protection of property rights (e.g. intellectual property) in host countries			
B46	Restrictive health, safety and technical standards in host countries (e.g. sanitary requirements)			
B47	Arbitrary tariff classification and reclassification in host countries			
B48	Unfavourable quotas and/or embargoes imposed by host countries			
B49	High costs of customs administration in host countries			
B50	Stiff competition with exporters from other countries with preferential tariff from regional trade agreement with host countries			

2.3 Please identify the Top 5 barriers that you perceive are most detrimental to SMEs' decision to export, with 1 (most important) to 5 (least important).

Export Barriers	
1	
2	
3	
4	
5	

Section 3. Government Export Supporting Programmes to Overcome the Export Barriers

Please provide details of the export support programme(s) provided by your institution.

3.1 PROGRAMME 1

3.1.1 Name and short description of the programme: _____ _____		
3.1.2 When was this programme launched (year)? _____		
Planning & Publication		
3.1.3 What initial information did you use as base to develop the programme? a. Internal study [] b. Independent study [] c. Direction from Minister/ President [] d. Feedback from the business [] e. Others (specify) _____ []	3.1.4 What means do you use to publicize the programme? (You can tick more than one) a. Web/internet [] b. Through business associations [] c. Through regional government agencies [] d. Advertise in Newspapers [] e. Electronic media (TV/Radio) [] f. Direct contact from the agency's list [] g. Others (specify) _____ []	
Intended participants		
3.1.5 What is the coverage level of the programme? a. National [] b. Regional (specify) _____ [] c. Sectoral (specify) _____ [] d. Others (specify) _____ []	3.1.6 Is the programme targeting SMEs specifically? a. Yes [] Go to Question 3.1.7 b. No [] Go to Question 3.1.8	3.1.7 What is the targeted number of participants? _____ Go to Question 3.1.10
3.1.8 Are SME applicants prioritised for this programme? a. Yes [] b. No []	3.1.9 Do you set a minimum number of SME participants? a. Yes (number/%) _____ [] b. No []	3.1.10 In case there are more applicants than allocated, how do you then select the participants? a. Priority for early registrars [] b. Priority for SMEs with export experience [] c. Priority for SMEs without export experience [] d. Priority given to SMEs with less training experience [] e. Others (specify) _____ []
Monitoring & Evaluation		
3.1.11 Do you have a programme monitoring mechanism? a. Yes [] b. No []	3.1.12 Have you ever conducted programme evaluations? a. Yes [] b. No []	3.1.13 What are the main findings of monitoring and/or evaluation programme? a. Need of wider publication [] b. Need of an easier application process [] c. Others (please specify) _____ []

3.2 PROGRAMME 2 (leave this section blank if irrelevant)

3.2.1 Name and short description of the programme: _____ _____		
3.2.2 When was this programme launched (year)? _____		
Planning & Publication		
3.2.3 What initial information did you use as a base to develop the programme? a. Internal study [] b. Independent study [] c. Direction from Minister/President [] d. Feedback from the business [] e. Others (specify) _____ []	3.2.4 What means do you use to publicize the programme? (You can tick more than one) a. Web/internet [] b. Through business associations [] c. Through regional government agencies [] d. Advertise in Newspapers [] e. Electronic media (TV/Radio) [] f. Direct contact from the agency's list [] g. Others (specify) _____ []	
Intended participants		
3.2.5 What is the coverage level of the programme? a. National [] b. Regional (specify) _____ [] c. Sectoral (specify) _____ [] d. Others (specify) _____ []	3.2.6 Does the programme targeting SMEs specifically? a. Yes [] Go to Question 3.2.7 b. No [] Go to Question 3.2.8	3.2.7 What is the targeted number of participants? _____ Go to Question 3.2.10
3.2.8 Are SME applicants prioritised for this programme? a. Yes [] b. No []	3.2.9 Do you set a minimum number of SME participants? a. Yes (number/%) _____ [] b. No []	3.2.10 In case there are more applicants than allocated, how do you select the participants then? a. Priority for early registrars [] b. Priority for SMEs with export experience [] c. Priority for SMEs without export experience [] d. Priority for SMEs with less training experience [] e. Others (specify) _____ []
Monitoring & Evaluation		
3.2.11 Do you have any monitoring mechanism? a. Yes [] b. No []	3.2.12 Have you ever conducted programme evaluation? a. Yes [] b. No []	3.2.13 What are the main findings of monitoring and/or evaluation of the programme? a. Need of wider publication [] b. Need of an easier application process [] c. Others (please specify) _____ []

Section 4. Overcoming the Barriers to Foster SMEs Direct Export

Below is a series of export barriers faced by SMEs. Please indicate on the right hand column how the export support programme provided by your institution assists SMEs to overcome the export barriers. Please match your agency's the programme(s) (**PROGRAMME 1 or/and PROGRAMME 2**) with the relevant barriers which SMEs are assisted to overcome. Match only with relevant barriers and leave the irrelevant barriers blank. One support programme may be helpful to remove more than one barriers and across the government focus/groups of barriers.

Government Focus	Barriers to be Overcome by SMEs			Government Export Support Programme
	Groups of Barriers	Specific Barriers		
Market Access	Informational barriers	B1	Limited information to locate/analyse potential markets	
		B2	Unreliability, inaccessibility and high cost of data regarding target markets	
		B3	Difficulty in identifying business opportunities in target markets	
		B4	Inability to contact potential overseas customers	
	Distribution, logistics and promotion barriers	B17	Difficulty in establishing/using distribution channels in target markets	
		B18	Difficulty in obtaining reliable representation in foreign markets	
		B19	Difficulty in supplying inventory abroad	
		B20	Excessive export transportation/insurance costs	
		B21	Difficulty in offering technical/after-sales service abroad	
		B22	Difficulty in adjusting promotional activities to the target markets	
Capability	Human resource barriers	B5	Lack of managerial time to deal with export activities	
		B6	Inadequate quantity and untrained personnel for export activities	
	Product and price barriers	B11	Difficulty in developing new products for foreign markets	
		B12	Difficulty in adapting product design/style demanded by foreign markets	
		B13	Difficulty in meeting foreign product quality/standards/ specifications	

Government Focus	Barriers to be Overcome by SMEs			Government Export Support Programme
	Groups of Barriers	Specific Barriers		
		B14	Difficulty in offering satisfactory prices to foreign customers	
		B15	Difficulty in matching competitors' prices in foreign markets	
		B16	Lack of excess production capacity for exports	
Finance	Financial barriers	B7	Shortage of funds to finance working capital for internationalisation (such as for production, research & travelling)	
		B8	Shortage of funds to finance investment needed for Internationalisation	
		B9	Shortage of insurance for internationalisation (including export products and assets abroad)	
		B10	Difficulty in granting credit facilities to foreign customers/distributors	
Business Environment	Procedural barriers	B23	Unfamiliar exporting procedures/paperwork	
		B24	Difficulties in communicating with overseas customers	
		B25	Slow collection of payments from abroad	
		B26	Difficulties in enforcing contracts/resolving disputes in foreign countries	
	Home Governmental barriers	B27	Lack of home government export assistance/incentives	
		B28	Unfavourable home rules and regulations related to exports (such as no diplomatic relations, export restriction, etc.)	
	Foreign Governmental barriers	B29	Foreign governments' restriction on foreign ownership & on the movement of people/business persons (e.g. problems obtaining visas, duration of stay, etc.)	
		B30	Foreign governments' unequal treatment compared to domestic firms in tax/eligibility to affiliate	
		B31	Foreign governments' unequal treatment compared to domestic firms in public procurement	

Government Focus	Barriers to be Overcome by SMEs			Government Export Support Programme
	Groups of Barriers	Specific Barriers		
		B32	Foreign governments' unequal treatment compared to domestic firms in business competition regulation	
		B33	Laws and regulations are sophisticated or not transparent in foreign countries	
	Customer and foreign competitor barriers	B34	Different foreign customer habits/attitudes	
		B35	Stiff competition in overseas markets	
	Business Environment	Business environment barriers	B36	Poor/deteriorating economic conditions in target markets
B37			Foreign currency exchange risks	
B38			Unfamiliar formal and informal foreign business practices	
B39			Different socio-cultural traits	
B40			Verbal/nonverbal language differences	
B41			Inadequacy of e-commerce infrastructure	
B42			Political instability in foreign markets	
Tariff and non-tariff barriers		B43	Negative image of Indonesia or Indonesian products abroad	
		B44	High tariff barriers in host countries	
		B45	Inadequate protection of property rights (e.g. intellectual property) in host countries	
		B46	Restrictive health, safety and technical standards in host countries (e.g. sanitary requirements)	
		B47	Arbitrary tariff classification and reclassification in host countries	
		B48	Unfavourable quotas and/or embargoes imposed by host countries	
		B49	High costs of customs administration in host countries	
B50	Stiff competition with exporters from other countries with preferential tariff from regional trade agreement with host countries			

Section 5. Policy Coordination & Implementation

5.1 Do you think the government should develop and support several SME incubator centres or industrial parks particularly dedicated to the export-oriented SMEs?

- a. Yes Go to **Question 5.2**
b. No Go to **Question 5.3**

5.2 Why do you think particular incubator centres/industrial parks for export-oriented SMEs will be beneficial? (You can tick more than one)

- a. Easier to deliver government export support programme
b. Share various costs (transportation, waste management, etc)
c. Positive externalities (share knowledge, information, etc)
d. Others (please specify) _____

Next go to **Question 5.4**

5.3 Why do you think particular incubator centres/industrial parks for export-oriented SMEs are not necessary? (You can tick more than one)

- a. SMEs are better clustered by products/sectors regardless of their export orientation
b. SMEs may lose social/private networking from their original base/location
c. Others (Please specify) _____

5.4 Do you expect regional governments to also provide their own export supporting programmes for SMEs?

- a. Yes Go to **Question 5.5**
b. No Go to **Question 5.7**

5.5 Why do you think regional governments should provide their own export supporting programme? (You may tick more than one)

- a. Central government programmes may not reach all SMEs in all regions
b. Regional governments have better understanding on local SMEs' characteristics
c. Others (please specify) _____

5.6 What types of SMEs' export supporting programmes should the regional government provide? (You can tick more than one)

- a. Financial support
b. Managerial skills training
c. Information on foreign market & business opportunities
d. Production and packaging techniques
e. Marketing, promotion and pricing
f. Information on export procedures and paper works
g. Business linkage and meeting
h. Others (please specify) _____

5.7 What indirect roles do you expect regional governments to play with regard to SMEs' export? (You may tick more than one)

- a. Provide accurate and actual data regarding local SMEs to central government []
- b. Spreading information about central government export supporting programmes []
- c. Select/recommend participants for central agencies' export supporting programmes []
- d. Simplify their own local procedures and regulation regarding export []
- e. Improve export-related infrastructures (harbour, airport, internet hotspot, etc) []
- f. Assist SMEs with regard to legal and formal structure of business establishment []
- g. Others (please specify) _____ []

5.8 Have you make contact with Indonesian Embassies/Consulates/*Attache* abroad regarding SMEs export?

- a. Yes [] Go to **Question 5.9**
- b. No [] Go to **Question 5.10**

5.9 What enquiry did you make to Indonesian Embassies/Consulates/*Attache*? (You can tick more than one)

- a. Information on foreign business opportunities []
- b. Access to foreign countries' data and market analysis []
- c. Information on foreign business practices []
- d. Contact with foreign countries' policy makers []
- e. Information on foreign business law and regulation []
- f. Others (please specify) _____ []

5.10 Please indicate how you involve other related stakeholders with regard to SMEs exports.

Types of Involvement Maintained by Central Government Agencies		Stakeholders		
		Business Association/ Chambers	Universities/ Research Institutes	Non-Government Organisation
a	Regular contact by inviting them to discussion/seminars related to exports			
b	Set-up a regular communication forum dedicated to foster export			
c	Strategic partnership(s)			
d	Joint project(s) to support SMEs' export			
e	Personal relation with key persons			
f	Others (please specify) _____			

Your participation in this survey is greatly appreciated. Thank you for your time and if you have further comments, please feel free to comment in the space provided below. Once again, we assure you that your identity will remain STRICTLY CONFIDENTIAL AND ANONYMOUS.